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Allegany College of Maryland

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities
Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Allegany College of Maryland's vision is to embrace the dynamic spirit of learning for life. This is done by establishing a lifelong learning community dedicated to excellence in education and responsive to the changing needs of the communities it serves. It focuses on preparing individuals in mind, body, and spirit for lives of fulfillment, leadership, and service in a diverse and global society. It is committed to engaging students in rich and challenging learning opportunities within a small college atmosphere that is known for its personal touch.

ACM's values include integrity, respect, opportunity, wellness, and quality which are ensured through assessment. The purpose of Student Learning Assessment (SLA) is to engage the campus community in a systematic, continuing process to create shared learning goals and to enhance and improve learning. By assessing student learning, the institution is demonstrating that its students have the knowledge, skills, and competencies consistent with the institutional goals of the college and that they have achieved appropriate higher education goals. Student Learning Assessment at Allegany College of Maryland is a way to improve the way we teach and the way students learn by asking two questions:

What do our students need to learn?
How do we know they've learned it?

Student Learning Assessment is a faculty-driven process where faculty determine the student learning goals, the assessment methods used, and the benchmarks against which the results are measured. They collect and report the results and use those results to improve the way they teach and the way students learn. Assessment results are reported at the course level and also at the program level. Whether at the course or program level, the assessment process is an ongoing process repeated each academic year with the results used to make improvements to the teaching and learning processes. The power of assessment as a tool for improvement comes from using results to identify and build on strengths while addressing weaknesses.

Though assessment has been a priority of the college's for several years, no one position was charged with managing it until 2005 when a new position, Associate Dean of Instructional Affairs who reports to the Vice-President of Academic Affairs, was created in part to address this need. In 2009, a faculty committee was formed to evaluate the assessment process and make recommendations to improve it. In order to ensure that the assessment process continues to improve with faculty playing a larger role in its administration, a faculty member will be given release time to coordinate the assessment efforts starting in fall 2011. This faculty member will work closely with the Associate Dean of Instructional Affairs and faculty to determine the needs of faculty and to ensure that the assessment process continues to evolve. He/she will be responsible for the following:

- Work with faculty to create a plan for systematic course and program assessment to be used by all programs/departments.
- Determine effective and appropriate ways to share assessment results with stakeholders.
- Coordinate and provide professional development opportunities for faculty in area of assessment.
- Work with Associate Dean of Instructional Affairs to ensure that assessment results are collected and archived.
- Update academic assessment website as necessary.
- Assist faculty in the development of overall assessment strategies, development of surveys, rubric development, and any other assessment needs.
- Support campus strategic planning, including institutional benchmarking.
- Work with the Associate Dean of Instructional Affairs, the Institutional Research Director, the Vice President of Administrative Services, and Computer Services to aggregate and analyze assessment data and disseminate the information to decision-makers.
- Prepare reports on institutional progress toward meeting stated goals, such as accreditation, campus-wide strategic planning, and academic program review.
- Conduct presentations for the college community related to student learning assessment.

In addition to the Student Learning Assessment process, ACM's Curriculum Committee helps ensure the quality of academic instruction. The Curriculum Committee reviews and evaluates all proposals for new curricula and courses and for changes in existing curricula and courses. In addition, it makes recommendations for changes to the college curricula and course offerings after careful review. The committee consists of twelve (12) faculty/staff members recommended by the ACM Faculty Senate, five (5) ex-officio voting staff members, and one student appointed by the Student Government Association.

Allegany College of Maryland's assessment activities align with the Middle States Commission on Higher Education's expectations and Standards 7 (Institutional Assessment), 12 (General Education), and 14 (Assessment of Student Learning). The college is committed to providing the resources and support necessary to sustain the assessment process ensuring that it results in continual improvements to the teaching and learning processes.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. ACM's written and oral communicationcompetency include the following:

   COMMUNICATION SKILLS [reading, writing, speaking, listening]
   - Organize and articulate ideas for a arrange of audiences and purposes using written, spoken, and symbolic forms;
   - Understand, synthesize, and respond to written, spoken, and symbolic messages;
   - Use technology to gather, process, and communicate information;
   - Plan, monitor, problem solve, and evaluate communication experiences in a variety of situations.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

   The written and oral communication competency is being assessed at the department, program, and course levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

   Various methods are used to evaluate the written and oral communication competency. English courses are using pre and post-testing to measure English mechanics. Both direct and indirect methods of measurement are used including research and other projects using rubrics for assessment, written work, student portfolios, presentations, course evaluations, and employer surveys.

   Other examples include an allied health program that evaluates presentations given to professional organizations outside the classroom that require communications skills.The Office Technologies program uses rubrics, written and practical examinations/assignments, research and case studies, classroom assignments, and site evaluations to evaluate written and oral communications skills.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

   The use of pre- and post-testing in English classes has shown an increase in the knowledge of English grammar and mechanics for the past few years despite an initial decrease during the first year of administration. During the 2008-09 academic year,

scores on the post-test reflected significant improvement in students' acquisition and/or increase in mechanical skills as a result of completing English 101 over the previous year during which the tests were administered. During the fall 2008 semester, the percentage of students who showed improvement in their mechanical skills by the end of the course exceeded the established goal. The percentage of students who scored 70% or higher on the post-test increased to an average of 55% which is 24% higher than the result during the previous year. The English faculty concluded that the pre- and post-testing process should continue as an ongoing effort.

Another area where this competency was effectively assessed was in ACM's Speech Communications class (101). The Speech Department determined the following benchmark for communication outcomes:

80% of students sampled will demonstrate proficiency in:

1. Creating an informative speech.
2. Developing an effective introduction
3. Constructing a logically developed body with appropriate transitions.
4. Creating a suitable conclusion.
5. Delivering with competent delivery skills.
6. Identifying creditable and valid sources.
7. Citing and referencing sources.
8. Develop a greater confidence in public speaking skills.

Results:

Students achieved competency in each area except for oral citation of sources (70% competency) and adequate use of visual aids (58%).

Key Recommendations:

The oral citation of sources is a concern since information literacy is a General Education Outcome. Faculty have recommended in-class solutions including showing recorded speeches of successful student and professional deliveries, spending more time emphasizing the significance in class, developing a handout with language suggestions for students to blend the citations more naturally in the language of the speech.

In addition to the instruction in English classes, the libraryhas a very active informationliteracy program.   Worksheets have been developedwhich are evaluated and given to faculty. The worksheets are inchanged and updated based on how students' progress.   When the library staff are correcting the papers and see many students having problems in the same area,theymake changes to clarify instruction in that area, change the questions asked, or both.   In 2009, after the library renovation, an instructional computer lab was added in the library which has proven helpful for teaching students. The librarians can give the instruction and then walk around helping the students as they complete the worksheets. Analyzing the questions students ask in that environment allows the library staff to improve their instruction.

II. Scientific and Quantitative Reasoning

A. ACM'sscientific and quantitative reasoningcompetency includes the following:

SCIENTIFIC REASONING SKILLS [nature, practice, communication, and application science]

- Comprehend and describe science as a process of generating knowledge that relies on testing hypotheses, verifying data, and evolving theories that explain natural phenomena;
- Know and apply fundamental concepts in the biological and/or physical sciences, allowing informed decision-making based on science and technology

COMPUTATIONAL SKILLS [understanding and applying mathematical concepts and reasoning, analyzing and using numerical data]

- Perform numerical and algebraic skills necessary for the student's field of study without the use of a calculator;
- Analyze numerical data relevant to the student's field of study

A. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The scientific and quantitative reasoning competency is being assessed at the department, program, and course levels.

B. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The Science Department adopted a pre- and post-test method of evaluating competencies. The assessment consists of a pre-test given early in the semester, and a post-test given about one month before the end of the semester with the goal being to measure the change in the students' abilities to read, understand, and interpret a written report that is based on the stated goals of teaching the Scientific Method.

The Math Department uses longitudinal data to track student success in sequential math courses. In addition, it has identified student learning goals for developmental and college-level courses.

C. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

During the fall 2009, the Science Department pre-test yielded a mean of 6.10 with the post-test resulting in a mean of 6.45. During spring 2010, the pre-test yielded 5.91 while the post-test yielded 5.29. These results indicated that the Scientific Method was not being taught or that the instructional strategies used do not emphasize the stated goals of teaching the Scientific Method. As a result of the assessment data, the Science Department has decided to shift from assessing the scientific method to assessing separate content assessments for biology, chemistry, and physics. The General Biology assessment strategy will employ pre-tests and post-tests. The pretest will be administered during the first two weeks of the term and the posttest will be administered during the final week and half of the term. The instrument will be available to all students enrolled in Biology 101. The results of the pre-test and the post-test will be statistically compared. The chemistry assessment is based upon students' written laboratory report, which will be prepared and assessed in mid-November during the fall semesters. The laboratory report will be scored based on a rubric designed to assess the students' understanding and use of the concepts of the scientific method. A third pre- and post-test will be preparedalong with a laboratory report in physical science. A scoring rubric for the laboratory reports will be used.

In an effort to increase completion at ACM, and because a large majority of students enroll in at least one developmental math course, the math department has focused on the skills necessary to be successful in developmental math courses. Assessment results have led to the implementation of several recommendations including increased use of electronic testing methods to allow students to test multiple times, and creation of videos for students to view online to help prepare them for testing and summarize course content.

III. Critical Analysis and Reasoning

A. ACM's critical analysis and reasoningcompetency includes the following:

CRITICAL THINKING AND PROBLEM SOLVING SKILLS [analysis, synthesis, evaluation, decision making, creative thinking]
- Think creatively, critically, and strategically using problem-solving strategies;
- Demonstrate an ability to make effective decisions, solve real-life problems relevant to the student's field of study, and achieve goals in a variety of situations.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
The critical analysis and reasoning competency is being assessed at the department, program, and course levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Programs are free to choose their own assessment measures and choose a variety of processes to evaluate competency. For example, the Radiologic Technology program uses exams, practicum evaluations, and final project evaluations to assess critical thinking skills. The Medical Assistant program uses case study assignments, presentations, role play situations, research projects, and written examinations to assess critical thinking and problem solving skills. Some assessment methods are virtual. The Occupational Therapist Assistant program uses the evaluation of case study assignments and fieldwork evaluations to evaluate this competency.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

   The Radiologic Technology program met all of its benchmark goals in the most recent assessment of critical thinking and problem solving skills. However, results indicated a slight decrease in some areas. The department addressed this by obtaining new equipment which allows students to have more individualized instruction outside the clinical setting.

   The Occupational Therapist Assistant program exceeded its benchmarks in the critical thinking areas with 95% of students demonstrating the ability to utilize critical thinking skills and 94% of fieldwork supervisors reporting that students were able to use those types of skills in a treatment setting. The program will continue to provide opportunities for students to demonstrate the ability to utilize critical thinking skills by incorporating case-based learning opportunities into all practice courses.

IV. Technological Competency

A. Institution's definition of competency

   TECHNOLOGY SKILLS [computer literacy; Internet skills, retrieving and managing information via technology]
   - o Use available technology effectively and efficiently to locate, retrieve, and manage information relevant to the student's field of study;
   - o Learn new strategies as technology evolves.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

   The critical analysis and reasoning competency is being assessed at the department, program, and course levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The computer science department uses evaluation of hands-on assignments, competency checklists, case study assignments, and written and practical exams to evaluate technological competency.The Hotel/Restaurant Management program uses a series of cost-cutting exercises to assess technological competency in the area of financial management. Additionally, technology skills are critical in many career programs where accreditation bodies require specific skill levels for continuing accreditation. Examples of such programs are allied health, forest technology, and automotive technology degrees and certificates.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The computer science department was able to increase success rates in "Computer Logic" by 6% (75% to 81%) over the previous year because of steps taken as a result of assessment results. A new teaching/learning product was implemented at the suggestion of a university colleague and advisory committee member with whom department faculty consulted. The results of the previous year's assessment were shared with all computer science faculty and the low performance rating was an item in need of improvement. "Computer Logic" instructors were reminded that retention in the program is contingent upon student success in that course. Instructional methods and materials were evaluated and instructors were encouraged to implement changes to enable students to achieve success in the course. Subsequent assessment results indicate those activities were significant in an increase in success and will be continued in the future. Student success/retention will be monitored in sequential computer science courses to determine if the success of the students completing the "Logic" course affects the success rates in subsequent courses.

The Hotel/Restaurant Management program uses real-world technology applications to ensure students can practice effective cost management. They are evaluated on their ability to complete skill exercises aimed at entering and analyzing data in the practice of effective cost management. In 2009-10, all but 2 students reached a benchmark of 85%. The department is determining whether adjustments should be made in the teaching process.

As referenced in section I (Written and Oral Communication), the library plays an active role in teaching students how to use technology to obtain information from a variety of sources including electronic databases and books. Their assessment methods are described in section I.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

History of Assessment at Allegany College of Maryland

Allegany College of Maryland's (ACM) general education programs have been designed to meet standards set by external agencies (Maryland Higher Education Commission, Middle States Association and other accrediting bodies, depending on the program, as well as the College's institutional goals. The initial General Education framework (Appendix A, *General Education and Other Essential Core Skills Goals Framework*) was developed in 2002. It depicts how COMAR's goals, Allegany College of Maryland's institutional goals, the College's general education and other essential core skills goals, and individual program goals and course outcomes are all being addressed and integrated.

Nine College-wide skills goals are included in the general education framework. These goals align with MiddleState competencies. Individual general education courses, those that fall into one of the five distribution areas as defined by COMAR (i.e., arts and humanities, biological and physical sciences, English composition, mathematics, social and behavioral science), are intended to provide the "foundation" for further study and a "coherent intellectual experience," and each degree program builds on that general education foundation in a unique way. A separate document, the *Student Learning Assessment Framework*, defines assessment and specifies four (4) guiding principles of learner-centered assessment.

With these two frameworks, a matrix was developed for the general education program. This matrix ensures that all graduating students have proficient skills in the nine essential core skills goals identified by the College (communication, computation, community, critical thinking and problem solving, scientific reasoning, information literacy, technology, and interpersonal and personal skills). The matrix also ensures common standards, outcomes, and measures of assessment in the specific general education courses irrespective of the instructor or mode of delivery.

In the 2005 spring semester, a Middle States visiting accreditation team reviewed the *General Education Framework* and made several recommendations that impacted how the college was conducting General Education assessment. As a result of these recommendations, the college made several changes to its General Education assessment process which involved integrating it into a more comprehensive student learning outcomes assessment process. During the summer of 2005, an Associate Dean of Instructional Services was hired to administer and coordinate student learning assessment, including general education assessment. Also, a Student Learning Assessment sub-committee was created to formalize the Learning Outcome Assessment process in a way that would embed the existing General Education Framework.

The committee recommended a new template which would flow from the academic program areas. The template allows for a consistent reporting format, but also provides flexibility for each department faculty to determine proper student learning goals (as identified in appropriate

syllabi), benchmarks, and evaluation measures, to accurately reflect and document the results of learning. Multiple student learning goals (learning outcomes), related to appropriate program and general education goals, were developed by each program with department faculty determining student learning benchmarks and evaluation measures for each student learning goal. For General Education courses, the Nine College-wide skills goals included in the general education framework and general education matrices described earlier were modified to fit into the new template. A sample of assessment results is included in Appendix B.

It is the prerogative of the faculty to determine the evaluation instruments that are authentic, valid, and reliable. The evaluation tools are not mandated by the institution or any accrediting body or state agency, but rather developed and utilized by faculty members. The student learning evaluations need to be objective evaluations of learning, and programs can utilize external measures such as student surveys, opinion surveys of alumni, job placement statistics, and industry licensure pass rates as supplemental student learning assessment measures. Assessment results are maintained electronically and in hard copy by the Associate Dean of Instructional Affairs.

The 2006-07 academic year was one of transition at Allegany College of Maryland. The position of Associate Dean of Instructional Affairs is responsible for managing the Student Learning Assessment effort ensuring that faculty have the support and information they need to complete the task. That position was vacant for one year as retirements and re-assignments resulted in personnel changes. The position was filled in July 2007 and the 2007-08 academic year was spent collecting and evaluating results for 2006-07 as well as starting a new assessment cycle for 2007-08. At the end of the 2006-2007 academic year, all programs had developed student learning goals along with the appropriate evaluation measurements.

During the 2007-08 academic year, the newly appointed Associate Dean of Instructional Affairs met individually with each academic department leader to review previous student learning assessment results and discuss continuation of the assessment cycle. A timeframe was developed for departments to follow and progress was monitored to ensure collection of 2006-07 results. This process was not without difficulties. Some results proved too difficult to obtain because of inappropriate assessment methods or failure to document results within a certain timeframe. Many faculty were unsure how to construct meaningful student learning outcomes that could be assessed effectively. Consequently, some results could not be collected using the assessment methods identified. Some student learning goals were actually department goals that did not apply directly to student learning. These problems were noted and considered when evaluating the assessment process itself.

Approximately 126 benchmarks were set by division/department chairs and program directors with 99 of those being met during that academic year. All assessment results were studied and used to modify future student learning goals and evaluation methods and to improve the teaching and learning experience. The 2006-07 results were used to create/modify student learning outcomes for 2007-08.

In spring 2008, the Associate Dean created a web page along with a newsletter where information about the College's Student Learning Assessment process could be found. The web page also contained various assessment resources to help faculty understand and navigate the assessment process including timeframes, training opportunities, etc. A graphic logo was created for Student Learning Assessment in an attempt to connect an appealing and memorable picture with the process to create "brand recognition" helping to identify and reinforce the idea of

assessment. Ongoing guidance was provided to faculty in the areas of writing effective student learning goals and proper assessment methods.

The 2008-09 academic year was a second year of transition with a new college president and a new Vice President of Instructional Affairs in these key positions. The commitment to student learning assessment continued.

For the past three years, (2007-2010), assessment results have been collected, documented, reviewed, and analyzed by the faculty in all departments. They were submitted to the Associate Dean of Instructional Affairs along with a summary detailing specific ways in which results would be used to "close the loop" of assessment, i.e. use results to improve teaching and learning.

Recommendations made as a result of assessment data generally fell into one of two categories:

1. Creation and/or use of certain teaching and learning tools
2. Changes made to the structure of the course or program

Creation and/or Use of Certain Teaching and Learning Tools

Many assessment results indicated a need for more guidance and a better way to evaluate subjective assignments. Rubrics were most commonly considered as a tool to help students understand these types of assignments. One employer survey of former graduates of an allied health program cited the need for improvement in students' communication skills. A rubric was developed with emphasis on communication skills. In one case, faculty realized the need for a new clinical student evaluation instrument and one was developed. With the increased use of technology in classes, one group of faculty determined it was valuable to make lecture information available on the course management system being used by the college (Blackboard). This enabled students to review material repeatedly if necessary. Some faculty determined that an increased use of the tutoring services available to students would be to their advantage and made new efforts to promote it in coordination with the Student Success Center which provides tutoring. An increased use of the Writing Center was seen by many faculty as an effective way to help students deficient in communication skills. One allied health program started requiring some sort of intervention such as tutoring if students test below a certain level during the semester. In one program, it was necessary to add a faculty position to improve overall retention in the program. One set of results pointed to the need for career advising to make certain that students enrolled in that program have made an informed decision about pursuing that degree.

Many assessment results indicated a need for more guidance and a better way to evaluate subjective assignments. Rubrics were most commonly considered as a tool to help students understand these types of assignments. In one program, didactic course evaluation was changed to a rubric to address good communication skills and professionalism. One career program implemented procedures that resulted in the improved use of safety devices by students as a result of assessment results. Two faculty members from the Learning Support Team offered in-service presentations to some classes informing students of the services available to students who were struggling academically. Success rates for these classes improved 7% over the previous year. These improved results were replicated in other courses as well. One department created videos to accompany online content to help reinforce information presented in developmental

classes. Some assessment results indicated a slight decrease in meeting student learning objectives. These results will be studied carefully to determine reasons for the decline.

Not all assessment results were easy to understand and address. One department developed pre- and post-tests to determine proficiency in its general education subject given at the beginning and end of the semester. Naturally, they expected increases in proficiency at the end of the semester, however that was not the case. Students performed worse than on the post-test than they did on the pre-test. Faculty will work to determine the reasons for these unexpected results and make the necessary changes to future tests.

Changes Made to the Structure of the Course or Program

Some assessment results indicated that changes were necessary to the way a course or program was structured. Faculty from many different areas realized that students needed practical experience demonstrating and explaining what they've learned and changes were made to facilitate that. An increased emphasis in studying actual scenarios and case studies was added to several programs in order to help students in selecting interventions and understanding patient caseloads. Practical experience like developing interviewing skills while performing fieldwork assignments was another program change that was implemented. Assessment results have pointed to the need for more field experiences and the use of guest speakers along with more group work and the opportunity to collaborate with other students.

As a result of a graduate survey, one program added additional training in two areas that graduates felt was necessary. In another program, the progress on certain projects will be monitored more closely with an interim project evaluation added to improve performance on the total project. Faculty teaching one class noted that a change in textbook as the result of a previous assessment is likely to have contributed to improved student performance in the class. One of the college's selective admissions programs reduced the number of students accepted into the program as a result of a graduate survey which indicated that some graduates were unable to find employment.

Some assessment results indicated that changes were necessary to the way a course or program was structured. Faculty from many different areas realized that students needed practical experience demonstrating and explaining what they've learned and changes were made to facilitate that. The value of team work and group activities continued to be stressed with more of these activities added to courses to facilitate the development of collaboration skills. The importance of being part of diverse groups was also emphasized. One program noted that students who were not successful in a certain prerequisite course were generally not successful in that program. This has ramifications for the entire program and advisors will advise accordingly. As a result of the previous year's assessment, one program is strongly recommending that students complete remedial reading courses prior to most courses in that program. This recommendation came from evaluating previous assessment results. One program formalized and clarified its attendance policies as a result of assessment results.

Additional Information

Ongoing guidance has been provided to faculty in the areas of writing effective student learning goals and proper assessment methods. A video of a faculty workshop presentation entitled "Student Learning Outcomes: A First Step in Assessment" by Dr. Georgia Kreiger continues to

be available to faculty. In this workshop, Dr. Kreiger explains different techniques for creating effective student learning outcomes. She also shares several valuable resources available to faculty.

After some discussion with the Associate Dean of Instructional Affairs, the faculty decided that a template is only a guide to provide consistency in reporting, and that a prescriptive method of reporting should not be used as a mandate for student learning outcomes or the evaluation methods utilized. The faculty voiced their commitment to improving teaching and learning, but that as content experts, a college-wide assessment tool should not be utilized. Each faculty unit decided that, as content experts, they are qualified to continue using their classroom evaluation instruments that reflect authentic learning in the classroom, lab, and clinical settings.

Professional development in all areas of student learning assessment is essential if the process is to be a worthwhile endeavor which is hoped to be increased with the faculty assigned coordinator. There is a need for a clearer understanding of effective student learning goals. It is relatively easy to assess students graduating from a career program. What is much more difficult at the community college level is to determine a way to assess the learning that takes place in general education classes. More guidance needs to be provided to leaders of those areas with the possibility of establishing a rotation schedule by which individual classes can be assessed. More emphasis is needed on summarizing the results of assessment and making recommendations based on those results. The importance of "closing the loop" or using assessment results to make changes that will improve the education process cannot be overstated. A continuing emphasis must be placed on the assessment of general education competencies.

Summary

Though student learning assessment continues, the college administration recognizes the need to dedicate more resources to the process. As mentioned earlier, a faculty member will be given release time in 2011-12 to serve as the coordinator for the assessment process. This person will guide and support the faculty in making important decisions regarding assessment as faculty become more experienced with the process. Additionally, this person will be responsible for determining the needs of the faculty regarding assessment and will target general education assessment and establish a method for systematic program assessment for all programs. The faculty coordinator will work with the Associate Dean and the Institutional Research Director to ensure that assessment is tied to institutional planning and goals. As Student Learning Assessment is used to improve teaching, so will the assessment process itself continue to be studied and evaluated for possible areas of improvement.

APPENDIX A

General Education and Other Essential Core Skills Goals:

COMMUNICATION SKILLS [reading, writing, speaking, listening]
- Organize and articulate ideas for a arrange of audiences and purposes using written, spoken, and symbolic forms;
- Understand, synthesize, and respond to written, spoken, and symbolic messages;
- Use technology to gather, process, and communicate information;
- Plan, monitor, problem solve, and evaluate communication experiences in a variety of situations.

COMPUTATIONAL SKILLS [understanding and applying mathematical concepts and reasoning, analyzing and using numerical data]
- Perform numerical and algebraic skills necessary for the student's field of study without the use of a calculator;
- Analyze numerical data relevant to the student's field of study

COMMUNITY SKILLS [citizenship, diversity, and local, community, and global environmental awareness]
- Demonstrate effective ethnical, and responsible interactional strategies that promote cooperation, value diversity, and encourage citizenship in a local, community, and global society.

CRITICAL THINKING AND PROBLEM SOLVING SKILLS [analysis, synthesis, evaluation, decision making, creative thinking]
- Think creatively, critically, and strategically using problem-solving strategies;
- Demonstrate an ability to make effective decisions, solve real-life problems relevant to the student's field of study, and achieve goals in a variety of situations.

SCIENTIFIC REASONING SKILLS [nature, practice, communication, and application science]
- Comprehend and describe science as a process of generating knowledge that relies on testing hypotheses, verifying data, and evolving [evaluating?] theories that explain natural phenomena;
- Know and apply fundamental concepts in the biological and/or physical sciences, allowing informed decision-making based on science and technology

INFORMATION LITERACY SKILLS [collecting, analyzing, and organizing information ethically and legally from a variety of sources]
- Recognize the need for information;
- Locate, evaluate, and use information ethically and legally.

INTERPERSONAL SKILLS [teamwork, relationship management (honesty and trust), conflict management, workplace skills]
- Acquire knowledge of diverse ideas, values, and perspectives;
- Demonstrate empathy, honesty, and responsibility in collaboration with others.

PERSONAL SKILLS [ability to understand and manage self, management of change, learning to learn, personal responsibility, wellness]
- Prioritize and manage personal and professional responsibilities;
- Set realistic goals and take active steps to achieve them;
- Develop and use appropriate learning strategies;
- Enhance lifelong strategies for maintaining personal wellness.

TECHNOLOGY SKILLS [computer literacy; Internet skills, retrieving and managing information via technology]
- Use available technology effectively and efficiently to locate, retrieve, and manage information relevant to the student's field of study;
- Learn new strategies as technology evolves.

Appendix B
Sample General Education Assessment Results

Student Learning
Assessment Results
2008–2009

Program: General Education: Freshman Composition

Institutional Goal: To develop the technical competence and knowledge and other essential skills that prepare students for direct entry into the workforce, for career change and advancement, or for transfer to another college or university.

Student Learning Goal: Students will demonstrate proficiency in the mechanics of American Edited English.

Student Learning Benchmark	*Assessment Method*	Actual Results
70% of students will show improvement in their awareness of the mechanical conventions of American Edited (A. E.) English upon completing English 101.	English Mechanics Pre- and Post-Tests were administered at the beginning and end of the semester among all sections of English 101, including all campuses and early-college venues.	75% (Fall 2008) and 50% (Spring 2009) of students tested showed improvement in their awareness of the mechanical conventions of A. E. English by scoring higher on the post-test than on the pre-test.
70% of students will demonstrate proficiency in the mechanical conventions of American Edited (A. E.) English as an outcome of completing English 101.	English Mechanics Pre- and Post-Tests were administered at the beginning and end of the semester among all sections of English 101, including all campuses and early-college venues.	61% (Fall 2008) and 48% (Spring 2009) of students tested demonstrated proficiency in the mechanical conventions of A. E. English by scoring 70% or higher on the post-test.

Key Recommendations:

1. Pre- and post-testing should be repeated to monitor student performance and evaluate student proficiency in the mechanics of A. E. English.
2. While continuing to measure proficiency in mechanical skill, the committee should proceed with an earlier plan to measure information literacy skills during the 2009-10 year.

Summary of English Department Assessment Project 2008-09

Assessment Committee
The committee consisted of seven full-time instructors: five English instructors from the Cumberland campus and two from the Pennsylvania campuses.

Assessment Goal
After initiating the English mechanics pre- and post-test during the 2007-08 school year, the committee decided to continue administering the test to all students enrolled in English 101. The rationale for continuing this project was that the pre-test could be used by instructors to determine specific needs for grammar instruction in the course. The committee predicted that post-test scores would rise as a result of instructors' increased awareness of students' specific needs.

Assessment Measure
The pre-test was administered at the beginning of the semester, and the results were published and distributed to all English 101 instructors.

A pre-test analysis form was developed to allow instructors to assess each student's need for grammar instruction.

The post-test was administered to measure students' proficiency in mechanics upon completing the course.

Method
The pre- and post-tests are the same as those described in the 2007-08 Assessment Report. A pool of test questions was developed so that the test could be varied from one semester to the next.

Results
Students' scores on the pre- and post-tests over the past three semesters reflect the following.

Goal	Spring 08	Fall 08	Spring 09
Number of students scoring 70% or higher on post-test	**31%**	61%	48%
Number of students who showed improvement in score from pre to post	21%	**75%**	50%
Average improvement in scores from pre to post	-8%	+8%	+12%

Discussion

During the 2008-09 academic year, scores on the post-test reflect significant improvement in students' acquisition and/or increase in mechanical skills as a result of completing English 101 over the previous year during which the tests were administered. During the Fall 2008 semester, for instance, the percentage of students who showed improvement in their mechanical skills by the end of the course exceeded the established goal. The percentage of students who scored 70% or higher on the post-test increased to an average of 55%, which is 24% higher than the result during the previous year.

Conclusion
The committee concluded that the administration of the mechanics pre-test and the publication of its results have thus far had a positive effect on students' acquisition of mechanical skills in English 101. The pre- and post-testing process will be an ongoing effort in the next academic year with the purpose of reaching the skills goals set by the committee.

Concurrently with pre- and post-test administration, the committee decided to conduct an assessment project to measure information literacy skills of English 101 students. During the Spring 2009 semester, a sample of student essays were collected to facilitate this project. An assessment instrument will be developed during the 2009-10 academic year. Results of this project will be reported at the end of the year.

Anne Arundel Community College

**Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011**

*Anne Arundel Community College is a premier learning community
whose students and graduates are among the best-prepared citizens and workers of the world.*

Part One: Summary of Assessment Activities

The central mission of Anne Arundel Community College (AACC) is learning; AACC responds
to the needs of a diverse community by offering high quality, affordable and accessible learning
opportunities and is accountable to its stakeholders. Consistent with the institutional mission and
vision, AACC expects learners to acquire and demonstrate appropriate proficiency in core
competencies which encompass general education and essential life skills. The college is
committed to offering educational experiences that allow learners opportunities to acquire,
develop and demonstrate growth in these competencies. The attainment of these competencies
provides the foundation for lifelong learning.

Assessment at AACC is mission-based, shared learning through the systematic collection,
interpretation and use of information about student learning achievement and institutional
effectiveness as a learning college. The primary goal of learning outcomes assessment at AACC
is to improve student learning and to ensure that more students are more successful in achieving
their academic, professional, and personal enrichment goals. As such, it promotes the
improvement of student learning, teaching, and the educational environment. Thoughtful
interpretation and use of assessment data by faculty and staff enable the college to fulfill its vital
learning commitment to the community.

All members of the college are partners in teaching and learning and play an integral role in
supporting, enhancing, and in evaluating student learning. AACC has fostered a college-wide
culture of assessment by engaging members of the college community in the systematic,
continuous process of creating shared learning goals to enhance student success and
achievement. AACC's strategic plan, Student Success 2020, provides the foundation for student
success initiatives as well as learning outcomes assessment. Student Success 2020 initiatives
center around three strategic issues (access, success, and resources); learning outcomes
assessment is integral to AACC's commitment to optimize student success for all learners.

In 2010, AACC joined *Achieving the Dream: Community Colleges Count*, a national
commitment to student success and institutional improvement, aimed at identifying new
strategies to improve student success, close achievement gaps and increase retention, persistence
and completion rates. Conceived in 2004 by Lumina Foundation for Education and seven
national partner organizations, *Achieving the Dream* is focused on creating a "culture of
evidence" on community college campuses in which data collection and analysis drive efforts to
identify problems that prevent students from succeeding and develop programs to help them stay
in school and receive a certificate or diploma. A systematic collection of direct and indirect

evidence of student learning occurs at various points in time and in various situations throughout students' experiences at AACC. AACC is focused on helping all students identify meaningful educational goals; building systems and programs to track, monitor and support students' progress in achieving their goals; involving faculty and staff in examining current practices; and making changes necessary to increase students' success. AACC priority areas for meeting *Achieving the Dream* goals: 1) increase the course success rates of students placed into Intermediate Algebra (MAT 012) and Composition and Introduction to Literature 1 (ENG 111) and 2) improve administrative infrastructure to support student success.

The Office of Learning Outcomes Assessment (LOA), staffed by a director, facilitates and coordinates the student learning outcomes assessment processes at the college. The college leadership provides oversight and support for learning outcomes assessment. General oversight for the Office of Learning Outcomes is provided by the vice president and the associate vice president for learning, with daily oversight provided by the dean, Virtual Campus. The director, LOA, works closely with the instructional deans and department chairs or directors to provide the leadership for faculty engaged in the assessment process.

The Learning Outcomes Assessment subcommittee, a subset of the college's Teaching and Learning Committee, is comprised of eight faculty, four staff, the director of LOA and a student member who liaises with the Student Association. The LOA subcommittee advises the Office of LOA on matters related to assessment, promotes assessment strategies, provides training for peers, and periodically evaluates the assessment process at the college.

The Educational Policies and Curriculum committee (EPC) chaired by the associate vice president for learning and vice-chaired by a faculty member, plays a central role in shaping the curriculum at the college through its representative faculty membership. EPC processes ensure that learning outcomes for courses and programs are set at the department level and that course offerings display appropriate academic content, coherence and rigor. All new courses or programs, as part of any proposals seeking action for approval by the Academic Forum, must include the intended learning outcomes as displayed on the Worldwide Instructional Design System (WIDS) templates (http://wids.org/Home.aspx) for program and course outcomes. Twenty-two degree programs at AACC had established approved outcomes in 2004; as of May 2011, 51 of 54 (94%) degree programs at AACC have approved learning outcomes. In addition, EPC convenes core competency task forces to recommend revised outcomes for internal general education courses or to reaffirm existing outcomes. Currently, the technology fluency competency is under review.

Processes and procedures at AACC align with the Middle States Commission on Higher Education expectations and Standards 7, 12, and 14. Ten college-wide core competencies are expected of all AACC graduates: communication, technology fluency, information literacy, personal wellness, self management, scientific reasoning, quantitative reasoning, social and civic responsibility. These competencies reflect the mission, goals and objectives of AACC and parallel those related to general education and essential skills identified in Standard 12 of *Characteristics of Excellence.* The college's commitment to and investment in learning outcomes assessment supports the continuation of faculty efforts toward professional accountability to students and to the public vested in the effectiveness of AACC in meeting its central learning mission.

Part Two: Four Major Competency Areas

I. Written and Oral Communication

MHEC Competency	AACC Competency	AACC's Definition
Written and Oral Communication	Communication	Using listening, speaking, reading, writing and visual communication skills effectively.

A. Level(s) at which the competency is assessed (e.g., department, program, course)

The competency is assessed at the department, program, and course levels.

B. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Varied processes are employed to evaluate the competency. The methods, direct and indirect measures, and instruments include but are not limited to: capstone experiences (such as research projects, presentations, and performances) scored using a rubric, performance assessment tasks, written work, portfolios of student work, assignment grades, scores on locally-designed proficiency exams and pre-post tests, formative and summative assessments, items on end-of-course student opinion forms that include questions about the course, course grades, curricular activities aligned with national standards (such as the National Association of Schools of Theatre), and course outcomes by discipline. Transfer rates into four-year institutions, employer ratings of graduates' skills, adjusted cumulative first-year GPAs and adjusted cumulative fourth-year GPAs, credit hours earned (including credit-equivalent hours) four years from enrollment, and measure of completion (including associate degrees, certificates, and letters of recognition) four years from enrollment are also monitored in various programs.

C. Describe the results of the assessment work related to this competency.

Faculty assess writing proficiency by the direct method of evaluating writing samples using the *Maryland Standards for a 'C' Paper* rubric. These standards were developed by Maryland's Statewide English Composition Committee to ensure "rigor at the college level for all general education courses." The standards address content, organization, style/expression, and grammar/mechanics. The *Standards for a 'C' Paper* rubric is utilized in a variety of courses at AACC including: Composition and Introduction to Literature 1 (ENG 111), Composition and Introduction to Literature 2 (ENG 112), Composition and Introduction to Literature 1 for Non-Native Speakers (ENG 115), and Composition and Introduction to Literature 2 for Non-Native Speakers (ENG 116).

Communications courses offer students the opportunity to improve their understanding of oral communications theory and their ability to communicate orally; the opportunity to develop skills in listening, critical thinking, and analysis of verbal communication; the opportunity to explore theoretical specialization within the discipline; and the opportunity to explore the craft of

journalism. In addition, students may satisfy a general education requirement in Arts and Humanities with Fundamental of Oral Communications (COM 111 or COM 116), Introduction to Interpersonal Communications (COM 110), Oral Interpretation (COM 131), Small Group Discussion (COM 141), and Introduction to Mass Media (COM 101). Each Communications course has clear learning objectives. Learning activities such as speech writing and delivery, quizzes on text materials, papers, library research, and small group collaboration, support those learning objectives. The learning objectives for each course have also been linked to the college core competencies, demonstrating how Communications courses help students to achieve the competencies. Faculty assess oral communications proficiency by the direct method of evaluating speaking skills using rubrics; the rubrics have provisions for holistic scoring as well as analytical scoring of the oral presentations. Instructor-created rubrics are also used in a variety of courses at AACC to assess oral communications including Architectural Materials and Methods 2 (ACH 122), Marketing Principles (BPA 125), Leadership (BPA 145), and Web Design 2 (CAT 295).

Visual communications skills are assessed at the course and program levels in various degree and certificate programs. Students in the Communications Arts Technology (CAT) degree program develop the skills to create dynamic digital media and learn how to capture real phenomena through photographs, sound, and digital video. They develop artistic, communication, and interface design skills and apply this range of knowledge to design and produce diverse virtual user experiences using DVDs, games, kiosks, presentations, simulations, and Internet-based projects. In Web Design 2 (CAT 295), for example, students are assessed on their oral, written, and visual communications skills and participate in a peer review assessment. Students create websites that visually communicate information to end users. Students meet with a client to design and develop a project and are assessed on their oral communications skills (including the ability to present the product to the client in order to gain client's approval). Upon completion of the project, students summarize their experiences in a written reflection paper. The Visual Arts department has hosted an Art Portfolio Review Day at AACC for the past eight years; in addition to the fine arts portfolios that are reviewed, a significant number of students present their photography work. Representatives from almost 20 colleges, universities, and art schools attend the event; the event is held in conjunction with the National Portfolio Days at Maryland Institute College of Art and the Corcoran College of Art and Design.

Rubrics are used in COM 111 to assess students' oral communications skills. The informative and persuasive speech rubrics feature well-defined criteria and weights: attention getter (5%), preview (5%), outline (10%), research (10%), attribution of sources (10%), content (10%), summary (5%), ending (5%), eye contact (10%), fluency (5%, smooth delivery), poise (5%; confidence, professionalism), animation (5%), pacing (5%), visual aid (5%), and timing (5%). The two learning outcomes that summarize the major strengths of the architecture option (Architecture and Interior Design program) are "Present visually and orally" and "Assemble building materials and systems." These outcomes are fundamental to the design discipline and are critical for the entry-level work students. Both direct and indirect measures are to used to assess student learning outcomes in the Architecture and Interior Design; these measures include pre- and post-assessments in courses, public student exhibitions, peer juries, outside juries, exams, projects, competitions, community service projects, transfer rates, internships and job placement.

The Paralegal Program implemented a course-level LOA assessment project in Advanced Legal Research and Writing (LGS 144). LGS 144 was selected because it is a critical course in the

education of paralegals and any deficiencies in this course would need to be addressed to ensure that students graduate with the required competencies. In addition, assessment of this course would likely reveal issues related to the feeder courses, Legal Research and Writing (LGS 143) and Introduction to Paralegal Studies (LGS 111). The assessment study for LGS 144 began in fall 2009. A rubric for a complex legal memorandum was developed by the program director and program coordinator. In fall 2009 and spring 2010, the faculty utilized the rubric when evaluating the memorandum assignment. The program director and program coordinator reviewed the results. Students scored less than 70% in 11 of the 33 categories specified on the rubric. LGS 144 faculty were informed of the results and changes in instruction were implemented to address areas of deficiencies. In fall 2010, the rubric was again used to evaluate student learning outcomes and the results were analyzed. Students scored below 70% in only one area; targeted interventions were implemented to address this area.

Instruction offered through the library also support student achievement of the core competency. For example, librarians analyzed student "works cited" pages to assess the impact of library instruction on student success in writing research papers, looking specifically for instances of the use of electronic books and other library database resources. Results demonstrated significant student use of electronic books and a positive correlation between library instruction and student ability to select reliable scholarly sources found in library databases and electronic book collections. A rubric was created to assist faculty with creating effective research assignments and was incorporated into the Part-time Instructor's Manual for the English department. After participation in library instruction classes, students are surveyed to assess the effectiveness of the instruction. Students are asked to rate six points relating to the session on a scale of "strongly disagree" to "strongly agree." Students provide additional feedback through the use of open-ended questions. Faculty members whose students are surveyed also complete a survey at the end of the semester. This survey asks them to assess whether the resources discussed were appropriate for the assignment, if the session was appropriate to the level of the students in the class, and if the students' work reflected an understanding of the resources discussed and the ability to conduct library research.

II. Scientific and Quantitative Reasoning

MHEC Competency	AACC Competency	AACC's Definition
Scientific and Quantitative Reasoning	Scientific Reasoning	Applying logic and the scientific method to interpret observable evidence.
Scientific and Quantitative Reasoning	Quantitative Reasoning	Applying mathematical concepts appropriately to analyze and interpret quantitative information.

A. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The competency is assessed at the institutional, program, and course levels.

B. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Varied processes are employed to evaluate the competency. The methods, direct and indirect measures, and instruments include but are not limited to: capstone experiences (such as research projects and presentations) scored using a rubric, field projects (such as the installation of rain gardens on campus), written work, feedback from computer-simulated tasks, assignment grades, scores on locally-designed proficiency exams and pre-post tests, formative and summative assessments, items on end-of-course student opinion forms that include questions about the course, course grades, and course outcomes by discipline. Transfer rates into four-year institutions and employer ratings of graduates' skills are also monitored in various programs.

C. Describe the results of the assessment work related to this competency.

The Mathematics Department offers three main groups of courses: non-credit developmental courses, general education courses, and advanced courses supporting STEM-related majors including mathematics, sciences, engineering, and secondary mathematics teaching. The developmental math program at AACC consists of a three-course sequence in developmental algebra: Pre-algebra, Beginning Algebra, and Intermediate Algebra. Until 2009, each course was taught primarily in a lecture format. Although each course has well-defined learning outcomes, there have been no common learning activities or common assessments for the courses. Faculty in the Mathematics Department have been developing a mastery-based, technology-enhanced curriculum for its developmental mathematics program since spring 2009. Beginning in the spring semester of 2011, each course in the developmental program is delivered in the traditional format but also in the mastery-based, computer laboratory format. Common learning activities and common assessments have been created to align with defined course outcomes and are being used uniformly across the computer lab sections of Pre-algebra (MAT 010), Beginning Algebra (MAT 011), and Intermediate Algebra (MAT 012).

Since the inception of the mastery-based program in the fall 2009, the faculty have evaluated the alignment of the learning activities, student assessments, and expected course outcomes. At the end of each semester, key mathematics faculty meet for a one- or two-day retreat to discuss the strengths and weaknesses of the components of the program. After collaborating, the learning activities and assessments are adjusted in an attempt to improve student learning and to better assess course outcomes.

The mastery-based program contains opportunities for students to engage in both formative and summative assessments of their learning. On a weekly basis, students complete mandatory practice assignments and meet individually with the instructor to provide the student with regular opportunity to formatively assess his/her learning progress. Weekly module quizzes, unit tests, and the comprehensive final exam provide summative measures of student learning. Beginning in the fall semester of 2010, common final exams were available to all faculty teaching Beginning Algebra (MAT 011) and Intermediate Algebra (MAT 012). The common final exams were given to all students in the mastery-based program and were used on a voluntary basis in lecture sections. In the spring semester of 2011, a common final will also be available for Pre-algebra (MAT 010) students.

The Mathematics Department offers a continuing education course, SKL 328, for students who placed into developmental math to take prior to retaking the placement test. A review of the data showed that those who placed into the two lowest levels of developmental math had a good chance of placing at least one course higher after taking SKL and retesting but students who placed into Math 012, the highest level developmental math course, frequently received the same placement upon retesting. The department has developed an online offering utilizing Aleks for students placed into Intermediate Algebra.

Several departments have established assessment work groups to address LOA efforts. The Physical Sciences (AST/CHE/PHS/PHY) initiated an Assessment Team Committee in FY10. The committee's activities included: the development of Course Outcome Summary (COS) documents for courses in the department, establishment of processes to communicate core competencies and course learning outcomes to students, tracking student learning through assessment data, and promoting conversations among faculty about assessment of student learning in the Physical Sciences. The Biology Outcomes Assessment Committee was established in 2010; the committee's work included the development of an *Expectations, Provisions and Core Competencies* matrix that depicts alignment between assessments (such as writing-to-learn assessments, pre-lab questions, lab reports, scientific article reviews, research projects and oral presentations) and college core competencies.

In addition to department activities, individual instructors develop course-specific LOA projects. The online version of General Chemistry (CHE 111) taught at Anne Arundel Community College utilizes a set of learning outcomes developed by the Chemistry Department. These are listed in the course syllabus for students to use as guidelines. The learning and assessment activities used in the course are listed in the individual modules. Each module is linked to a set of learning outcomes and learning objectives which in turn link to the content of the course. The college-wide core abilities are also listed in the syllabus. There is a formal writing assignment which is used to assess communication skills; the tests and quizzes are measures of scientific reasoning, quantitative reasoning and critical thinking ability. Global perspective is gained through chemistry topics relevant to everyday life. The online course is well suited for assessing technology fluency and information literacy skills of students. Students are engaged in Internet research to complete some of their assignments. After each major test, the instructor provides a test analysis form which lists the learning objectives and related test questions with the percentage of students achieving benchmark scores. This allows the instructor to determine which questions should be modified or if additional reinforcing materials need to be presented.

III. Critical Analysis and Reasoning

MHEC Competency	AACC Competency	AACC's Definition
Critical Analysis and Reasoning	Innovative and Critical Thinking	Integrating knowledge to analyze problems using different modes of thinking (critical, creative and innovative).

A. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The competency is assessed at the institutional, program, and course levels.

B. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Varied processes are employed to evaluate the competency. The methods, direct and indirect measures, and instruments include but are not limited to: capstone experiences (such as research projects and presentations) scored using a rubric, written work, assignment grades, scores on locally-designed proficiency exams and pre-post tests, formative and summative assessments, and the results of the Community College Survey of Student Engagement.

C. Describe the results of the assessment work related to this competency.

MHEC's identified competency, Critical Analysis and Reasoning, is assessed at AACC at the course, program, and institutional levels. Students apply critically thinking skills to support claims, validate reasoning, examine logical fallacies, make sound interpretations, draw conclusions, and justify inferences and opinions.

The Community College Survey of Student Engagement (CCSSE) was administered to AACC students in 2006, 2008 and 2010. All 16 community colleges in Maryland participated in the 2010 CCSSE survey. Student engagement, or the amount of time and energy students invest in meaningful educational practices, is the underlying foundation for the CCSSE's work. Several of the survey items address students' perception of critical thinking applications in the learning environment. The results for AACC students (2006, 2008, and 2010) show that learners are increasingly able to apply higher order critical thinking skills when completing assigned tasks and assignments.

Critical Thinking Indicators *Percent of students indicating agreement or strong agreement	2006	2008	2010
Memorizing facts, ideas, or methods from your courses or readings so that you can pretty much repeat them in the same form.	66%	65%	64%
Using information you have read or heard to perform a new skill.	59%	58%	61%
Applying theories or concepts to practical problems or in new situations.	53%	58%	62%
Making judgments about the soundness of information, arguments, or methods.	49%	48%	55%
Synthesizing and organizing ideas, information, or experiences in new ways.	60%	61%	62%
Analyzing the basic elements of an idea, experience, or theory.	66%	68%	73%

Students in Marketing Principles (BPA 125), as well as students enrolled in selected accounting and small business management courses, participate the Global Giving Market project, an annual shopping event combining both a fair trade market and an alternative gift market to help those in need in developing countries. In order to experience marketing in a real-world scenario, students were organized into teams according to their skills and interest. These teams included Social Media/Web, Creative Design, Public Relations, Mass Media/Advertising and Sales. Each team was charged with creating marketing tactics to be used to accomplish the established objectives for the event: 1) increase student awareness of the event; 2) increase global awareness among students and faculty; and 3) raise approximately $4000 to support fair trade in developing countries. Throughout fall 2010, marketing students in BPA 125 developed communication plans, created sales pitches, designed flyers and promotional materials, enhanced the Face Book presence, created a video for future promotion and assisted with a sales event.

The outcomes of the Global Giving Market align with college core competencies: innovative and critical thinking, communication, global perspective, and social/civic responsibility. As part of this project, students integrate knowledge to analyze problems using different models of thinking (critical, creative, and innovative). Students worked in teams to create unique marketing strategies to meet the objectives of the project. They analyzed their options and selected the best strategies to implement. A variety of assessment methods and instruments were used to evaluate the achievement of the competencies. Two written assignments, one reflection journal and three oral presentations with PowerPoint, and observations were utilized to assess student learning outcomes. A grading rubric was distributed with project assignments.

Existing or aspiring entrepreneurs receive training in the steps, background and skills it takes to start and operate their own business with credit and/or noncredit courses offered by the Entrepreneurial Studies Institute. Instruction includes writing a business plan, funding the business, financial and managerial accounting, sales and marketing, strategic planning, business law, ethics, business management, leadership, business communications and networking.

The objectives of the Entrepreneurial Studies Institute (ESI) are to enable students to develop a comprehensive understanding of entrepreneurship and the steps and background required to start a business, such as writing a business plan, funding the business, financial and managerial accounting, sales and marketing, strategic planning, business law, ethics, business management, leadership, business communications and networking. A program-level outcomes assessment plan has been developed; course-level outcomes are mapped to program outcomes, college competencies, and assessments (such as capstone projects and scenarios-based activities) as well as standards outlined by the National Business Education Association.

Course- and program-level assessments are ongoing in the Physician Assistant program. The creation of the History and Physical Examination (PHA 105) HX DVD assessment, revision of grading rubrics, and the creation of the Mrs. Lee Lab were direct results of a review of simulation assessments and standardized patient performance measured from 2005 to 2007. During a curriculum review meeting in May 2007, data was shared with the faculty that expressed concern regarding history taking and physical exam skill performance and the disparity between faculty and preceptor expectations and grading. A goal was articulated for an 85% mean pass rate for future classes using standardized patient assessment to evaluate HX and PX exam skills and professionalism. By the end of the didactic year and after outpatient clinical experience, students from the graduating class of 2009 had not met program expectations despite deliberate increased attention to History and Physical skill instruction and early clinical

experience. In addition, lab resources were being underutilized and student opinion forms had demonstrated dissatisfaction for the exclusive lecture format that had been used in Clinical Medicine 1 and 2 (PHA 112 and PHA 118). In 2008 a history-taking DVD experience was incorporated into the History and Physical Examination (PHA 105) course to assure this competency was attained, and a work group was created to examine the lab component of the Clinical Medicine 2 course (PHA 118) for the graduating class of 2010.

After a faculty development seminar with the program director occurred to discuss course development, planning and design, the work group created a student-centered, interactive lab. The lab experience focused on an individual virtual patient; the focus was mission driven and situated in a primary care office setting. The laboratory experience addresses multiple graduate outcomes and course competencies. The weekly exercises are vertically aligned to the clinical medicine topics covered each week and complement the pathophysiology and pharmacology topics as well. This lab provides an opportunity for principal faculty to evaluate and correct students' HX and PX exam skills, while increasing their critical thinking skills. Standardized Patient (SP) performance after this course change was measured and went from a class average of 68% to 85%. Retrospective analysis revealed that three out of four organ system areas discussed in the Ms. Lee Lab with the graduating class of 2010 performed at 75% or higher on PANCE assessment, while all other organ systems performed below 75%.

The Chesapeake Area Consortium for Higher Education (CACHE) Physical Therapist Assistant (PTA) program, a three-college consortium, promotes excellence in education that includes evidence-based knowledge and clinical skills essential to the physical therapist assistant. The PTA curriculum incorporates general education courses, physical therapy content courses, laboratory instruction, and clinical instruction. Courses are sequenced in the program (with co-requisites and pre-requisites) to ensure the student progresses in a planned sequence of learning experiences and is able to develop competencies and achieve the program's terminal objectives. With respect to the mission, critical thinking and key elements of diversity and cultural competency are threaded throughout the curriculum to help graduates learn these essential skills to become competent practitioners. Foundation courses introduce basic concepts in critical thinking which are enhanced as a student progresses through the academic and clinical courses. The program maintains a very detailed "Program Assessment and Outcomes" reports that is aggregated each academic year. Furthermore, the program submits an annual report to the Commission on Accreditation for Physical Therapy Education which reports outcome data. Examples of the outcome measures tracked by the program and reported annually include: student performance on the national PT license exam (both first-time pass rates and overall pass rates); achievement of program terminal objectives and outcomes; curriculum review (including completion of course outcomes measures); enrollment, graduation and attrition rates; and graduate and employer satisfaction.

The mission of the Paralegal Studies Program is to prepare students for employment in the paralegal field at the entry level or, for those already employed, to meet the requirements for promotion and additional career responsibility. It is also designed to prepare students to transfer to four-year colleges and universities to pursue a degree in paralegal studies, jurisprudence, or other law-related fields. One explicit objective of the program is to ensure that graduates demonstrate critical thinking skills.

The objectives are mapped to the courses in the program and to the core competency; for example:

Innovative and Critical Thinking	Conducts proactive problem solving.	Seeks issues ripe for resolution and solves such issues using available resources (LGS 111, LGS 170, LGS 143, LGS 144, LGS 210, LGS 170, LGS 171, and LGS 253).

The goals and objectives are published in the Paralegal Program brochure and on the Legal Studies Institute website (www.aacc.edu/legalstudies).

The college has a license to the Worldwide Instructional Design System (WIDS). WIDS software provides a framework for the design of measurable concrete learner outcomes and performance indicators for those outcomes; it is the starting point for the design of learning and assessment that produces performance results. WIDS is used to link curriculum to external or college-wide standards. English and Communications faculty have mapped course objectives to the college's core competencies. In the course *An Introduction to Shakespeare* (ENG 221), for example, students develop and demonstrate critical thinking by practicing critical reading of Shakespeare's play and poems. They integrate knowledge to analyze problems using different modes of thinking—critical, creative, and innovative—in order to correlate the relationship of Shakespeare's plays to their intellectual, social, historical, and cultural backgrounds. The students are assessed according to their ability to apply these skills to produce effective, original, formal academic prose. Students writing research papers in Composition and Literature (ENG 121) demonstrate critical thinking by interpreting evidence accurately and thoroughly, analyzing and evaluation information and alternative points of view clearly and precisely; objectively examining beliefs, assumptions, and opinions and weigh them against evidence; recognizing and drawing reasonable conclusions; and justifying inferences and opinions using observations, evidence, and synthesis.

IV. Technological Competency

MHEC Competency	AACC Competency	AACC's Definition
Technological Competency	Technology Fluency	Utilizing technology to enhance productivity in one's academic, professional and personal life.

A. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The competency is assessed at the institutional, program, and course levels.

B. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Varied processes are employed to evaluate the competency. The methods, direct and indirect measures, and instruments include but are not limited to: software-specific assignments and activities, laboratories, capstone experiences (such as research projects and presentations) scored using a rubric, written work, portfolios of student work, assignment grades, scores on locally-designed proficiency exams and pre-post tests, experiential assignments (service learning), internships, formative and summative assessments, items on end-of-course student opinion forms that include questions about the course, course grades, course outcomes by discipline; and employer surveys.

C. Describe the results of the assessment work related to this competency.

The mission of the Computer Technologies Department is to provide the highest quality education using the most current technology so as to prepare students for successful transfer and/or careers in computer technologies professions. In addition, the Computer Technologies Department seeks to provide non-computer degree students with a solid foundation in computer technologies to enable them to be successful in their continued education and career paths. During AY2009, the Computer Technologies Department designed an outcomes assessment plan that focused specifically on student learning outcomes in two highly enrolled general education courses: Computing and Information Technology (CSI 112) and Theories and Applications of Digital Technology (CSI 113). Because the CSI 112 and CSI 113 courses are highly enrolled courses that meet computer technology general education, the computing and information technology competency requirement, and the college-wide technology fluency core-competency requirement, the department decided to create an outcomes assessment pilot to measure a single course objective that is integral to both courses.

A committee, consisting of five faculty members and the Computer Technologies director, designed and participated in the pilot. The committee members sought expertise from the TEACH Institute, the Virtual Campus and the Office of Planning, Research and Institutional Assessment (PRIA) to create valid and reliable pre-and post-test assessment instruments and an assessment process that could be used with the approximately 3000 students enrolled annually in CSI 112 and CSI 113.

The course-specific learning objectives and main topics assessed in the Computer Technologies department pilot assessment project:

Learning Objective (CSI 112): Explain the purpose and functionality of hardware, system software, application software, the Internet, networks, and information systems.
Main Topics: Hardware, Operating Systems & Utility Programs, and Application Software

Learning Objective (CSI 113): Explain the functionality of the hardware and software components of a computer system.
Main Topics: Application Software, Hardware (CPU, I/O, storage), and Operating Systems

The pre- and post-assessments, the data collection, and the scoring of the assessments occurred through the use of the institution's learning management system, Blackboard Learn (ANGEL Edition) in web-based, online, and hybrid courses; all CSI 112 and CSI 113 sections link to a single set of pre-and post-test instruments that reside in a central Learning Object Repository

(LOR). The pre- and post-tests were available in paper and Scantron formats for use in traditional courses.

The data was analyzed to determine achievement of learning outcomes; the results were compared and contrasted based on length of course (2 weeks, 8 weeks, 13 weeks and 15 weeks), delivery methods (traditional, online, and hybrid), time offered (day, evening, and weekends) and student achievement.

CSI 112 comparison of pre and post test

CSI 113 comparison of pre and post test
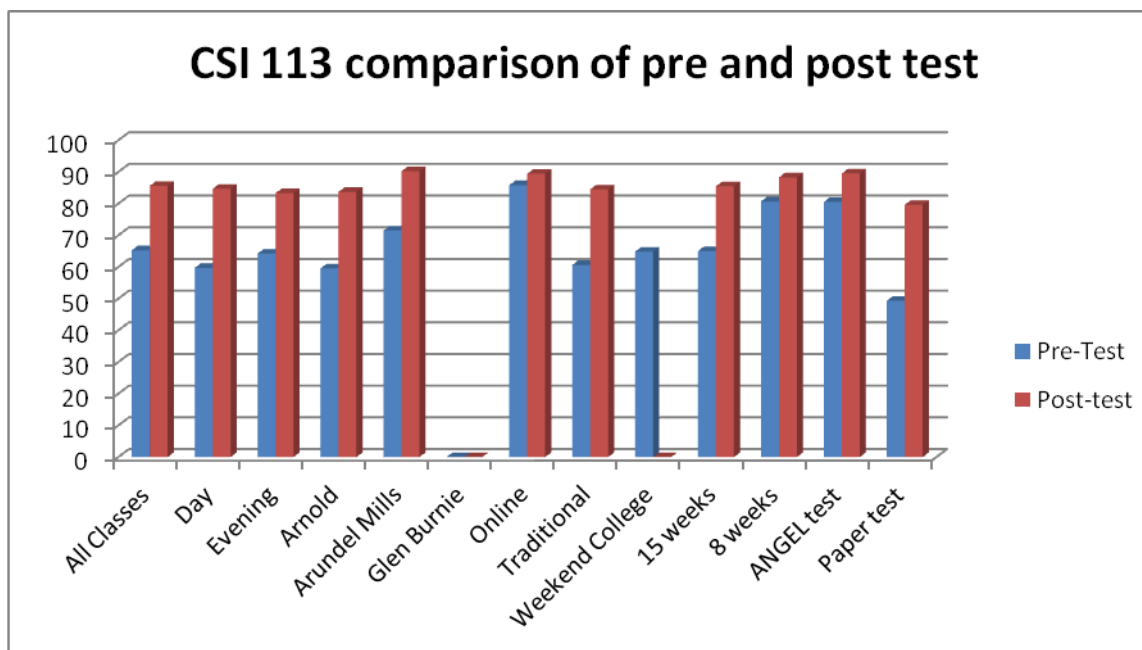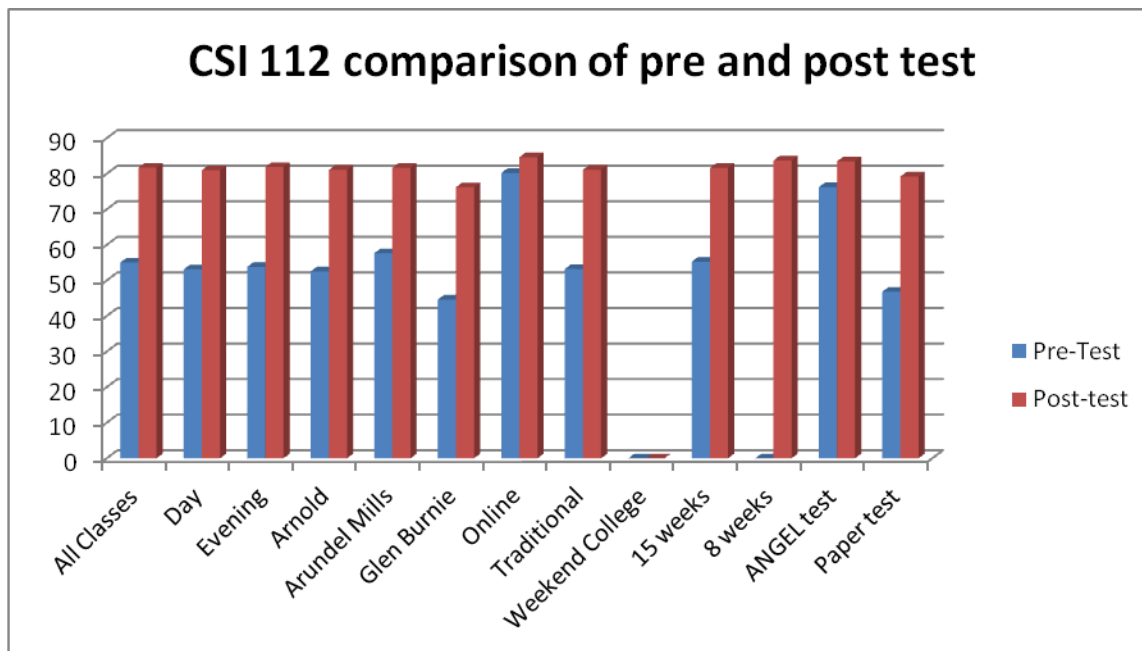
The department plans to use the results of this pilot assessment project to improve the outcomes assessment process and then to apply the approach and the process to other objectives in the two courses and/or to other courses in the department. The Computer Technologies faculty discussed and are considering common assessments and/or department exams especially for those courses

that are part of a sequence of courses in order to establish an outcomes-based level of preparation for subsequent courses.

AACC's Health Information Technology curriculum aligns with expectations developed in accordance with the Commission on Accreditation for Health Informatics and Information Management Education in cooperation with the Council on Accreditation of the American Health Information Management Association. Students participate in a supervised learning experience in a health information management department or health care facility to develop insight, understanding, and skills in the areas of management/supervision. Clearly defined outcomes have been established for the professional practice experience (PPE); upon completion of the PPE, students demonstrate the use of technology to ensure data collection, storage, analysis, and reporting of information; apply confidentiality and security measure to protect electronic health information; use specialized databases to meet specific organization needs and so on. Ninety-five percent of students in the program receive favorable evaluations from the PPE preceptors (a grade of "C" or better).

An institutional focus on student success and concerns about success and attrition rates in online courses led to the purchase of an annual subscription to a commercial learner readiness indicator, SmarterMeasure. The SmarterMeasure readiness indicator (previously called READI) is intended to predict a learner's fit for online learning based on an assessment of a learner's personal attributes, technical knowledge, and technical competencies. The technical competency section assesses a student's ability to perform basic technology-related skills deemed essential in an online course, such as attaching files to an email and conducting an Internet search. The technical knowledge section assesses a student's everyday use of technology (such as frequency of use, familiarity with technology-related vocabulary, access to technology, and information about the student's primary computer and Internet connection). Students receive a detailed summary outlining their level of competency; individual scores are also imported into the college's student information system and are made available to advisors. Scores on the commercial readiness indicator are reported as pass, questionable or fail. Those who earn a score of questionable or fail may not possess the technical competencies and knowledge to be successful in an online course. Of the 1,604 students completed the SmarterMeasure indicator in FY10 and FY 11, 39% passed the technical knowledge section, 44% were questionable and 3% failed. Tutorials and interventions were implemented to address the identified skills deficiencies.

Part Three: Evolution of Assessment Activities

AACC's college community is committed to maintaining a learning-centered environment in which faculty and staff work actively to help students achieve their academic, professional and personal enrichment goals; members of the community recognize that the assessment of student learning is vital to understanding and gauging the success of these efforts. Assessment of student learning is a key part of the college's strategic plan and assessment work is infused into the institution's infrastructure. Assessment strategies are well integrated into all facets of the college including operations (such as student development), professional development, and community outreach.

Infrastructure

The college values and promotes campus-wide collaboration in all phases of the assessment process. In addition, the college has allocated the resources and support necessary to maintain a

concerted focus and emphasis on learning outcomes assessment. The faculty member who directed the LOA office decided to return to the faculty in June 2007. The college took time to study the organization and structure of the Office of Learning Outcomes Assessment. A consultant from the Morgan State University Community College Leadership Doctoral program spent several months examining the office as it existed through June 2007 and sought input regarding a new model from deans and faculty. The resulting "Proposal for the Development of a College-wide Hybrid Model of Learning Outcomes Assessment" was accepted by the deans and Vice President for Learning in July 2008. It provides for centralization of LOA administrative functions, including tracking, reporting, communication, and feedback. Developing and assessing learning outcomes will be decentralized, with deans, department chairs/directors, and faculty members responsible for this part of the process.

The college has implemented processes that facilitate opportunities for discussion and collaboration as well as processes to gather, report, and analyze data. In FY2009, the Office of Vice President for Learning proposed revisions to the template used for academic program reviews. Each program undergoes an annual review, with a comprehensive review conducted every four years. The annual review addresses enrollment data and trends, program strengths, and significant accomplishments and activities that occurred during the year. The comprehensive review discusses meeting community needs, plans for new programs and options, enrollment trends, challenges and opportunities, program changes, relationships with external organizations, program strengths, and recommendations for program improvements. While programs often included a discussion of LOA in their reviews, the revision introduced a mandatory discussion of LOA into the process, beginning in 2010. The comprehensive reviews now include: relevant outcome measures currently in place, a description of student learning outcomes that demonstrate student mastery of content, plan for introducing additional outcomes measures, major strengths of program/institute/courses, summary of learning outcomes that demonstrate the major strengths of program/institute/courses, and summary of the learning outcomes that will be addressed in plans or proposals for program/institute/course modifications.

Program reviews are used to develop plans for modifying or advancing programs and allocating resources to support the achievement of the plans. Curricular enhancements, such as those resulting in changes to course pre-requisites, may occur as a result of the program reviews as well as input from the college community. The work of the Coordinating Council on Developmental Education (CCDE), which began in spring 2004, monitors the success rate of developmental students in required developmental courses and in subsequent credit courses in the disciplines for which they require remediation. The department chairs monitor the results of these studies and implement modifications that impact student learning in targeted courses. Analyses led to new pre-requisites for Reading Your World (RDG 026), Basic English 1 (ENG 001), Critical Thinking (PHL 100), Introduction to Logic (PHL 141), Ethics (PHL 142), Contemporary Moral Problems (PHL 194), Western Religions (PHL 201), and Asian Religions (PHL 202); in addition, a new course Reading and Writing for Success was developed for students who do not meet the pre-requisite for Reading Your World (RDG 026).

The college periodically reviews the core learning competencies for relevance to the current learning environment. Most significantly, dozens of faculty members, instructional staff, administrators, and students served on work teams to review the core learning competencies that were adopted for use at AACC prior to 2009. Two-thirds of the teams' membership was faculty. The teams evaluated the existing competencies and considered new ones. Team members researched the current state of core competencies at other institutions, including schools that are

member of the League for Innovation and other Maryland community colleges, studied the literature related to competencies, and sought input from colleagues at AACC. The Committee on Teaching and Learning coordinated the teams and proposed 10 competencies, with short definitions. The following are AACC's college-wide core competencies:

- Communication: Using listening, speaking, reading, writing and visual communication skills effectively.
- Technology Fluency: Utilizing technology to enhance productivity in one's academic, professional and personal life.
- Information Literacy: Recognizing when information is needed and locating, evaluating, and using information appropriately.
- Personal Wellness: Demonstrating the use of strategies that promote holistic health and wellness.
- Self Management: Displaying accountability and adaptability as a learner.
- Scientific Reasoning: Applying logic and the scientific method to interpret observable evidence.
- Quantitative Reasoning: Applying mathematical concepts appropriately to analyze and interpret quantitative information.
- Social and Civic Responsibility: Participating in communities as an informed, committed and productive individual.
- Global Perspective: Awareness and understanding of the diversity and interdependence among cultures, communities and the environment.
- Innovative and Critical Thinking: Integrating knowledge to analyze problems using different modes of thinking (critical, creative and innovative).

In fall 2011, the Computer Competency Committee, an *ad hoc* committee of the EPC, was convened to review the currency and relevancy of the outcomes now expected for AACC's technology fluency competency. The committee will recommend additions, modifications and/or deletions to the current content and format for making proposals to EPC computer competency-eligible general education courses/sequences of courses for fulfilling the college-wide technology fluency competency and thus meeting the college's internal general education requirement for technology. Recommendations could impact course outcomes; modifications are expected.

Course, Program and Institutional Assessment

The college's infrastructure supports on-going assessment efforts at the course, program, and institutional levels. The Institutional Assessment Team (IAT), a subcommittee of the Strategic Planning Council (SPC), is the representative body that oversees institutional assessment. Staff support for institutional assessment is centered in the Office of Planning, Research, and Institutional Assessment (PRIA).

Learning outcomes assessment continues to be a priority mandate at the course and program level in the Schools of Art and Sciences; Health Professions, Wellness and Physical Education; Business, Computing and Technical Studies; and the School of Continuing and Professional Studies. AACC faculty members have the primary responsibility for facilitating student learning; they determine what students should learn and how they should demonstrate their learning at the course and program levels. They continue to be engaged in systematic assessment of student learning outcomes at the course, program and institutional level. Learning outcomes assessment

activities in the Schools of Art and Sciences; Health Professions, Wellness and Physical Education; and Business, Computing and Technical Studies have been highlighted in Part II of this report.

The School of Continuing and Professional Studies (CAPS) is also actively engaged in learning outcomes assessment at the course, program and division levels. A focus group was established to identify best practices to support student learning and to select an assessment tool that would be used throughout the division to map curriculum to learning outcomes to measure direct and indirect learning. The use of standardized syllabi was implemented in 2006; the syllabi included key goals and objectives, class assignments, and assessments (such as quizzes, written or oral work, capstone projects, and field work). CAPS implemented grading policies standardized with pass/fail for all noncredit courses in 2007.

Continuing Education and Workforce Development (CEWD) has offered workforce courses and/or programs eligible for Continuing Education Certificates of Completion since 2007. A Learning Outcome Assessment Committee--composed of the dean, executive director, directors and staff--developed standardized forms to submit curriculum for approval, identified mechanism to track completers, identified retention strategies, and established completion requirements. Requests for new Continuing Education Certificates of Completion must be submitted on the appropriate forms and include goals and objectives, methods of assessment, course scope and sequence, instructional materials; in addition, the documentation demonstrates the interrelationship between the goals and learning outcomes. Requests are submitted to the director for comments and review, then to Learning Outcome Assessment Committee for review, with final approval from the dean and vice president for learning. The committee has approved 88 Continuing Education Certificates of Completion, many that culminate in a capstone project and/or external industry certification.

The Center for Workforce Solutions (CWS) offers customized and creative strategies to resolve business and workforce challenges; training is developed and/or delivered for clients in various locations and through a variety of delivery modalities. A standardized course outline has been developed for use; the template includes: course information, course materials, course description, learning objectives, content outline, assessments, and extended learning activities. Assessments utilized in the delivery of contract training include: participation, class discussion, individual and/or group activities, role plays, simulations, presentations or demonstration, tests, case study analysis, interviews, peer assessments, reflective journals, and other training-specific assessment techniques.

Professional Development

AACC provides professional development opportunities to enhance and expand the skills and knowledge of faculty and staff. Anne Arundel Community College has developed a focused program for new faculty for improved learning quality. The Learning College protocol is designed to integrate new faculty members into the learning college community. As a cohort, new faculty members in their first year become a learning community within the broader college-wide learning community, but by the end of their first year, they have the tools, including institutional knowledge and self-sufficiency, to become colleagues on equal terms with the most senior faculty members, fully committed to the learning goals of the college. The Learning College sets and supports as a professional standard of conduct continuous learning, resulting in improved learning. The three-part Learning College program includes a summer colloquy on

higher education's transforming power; a year-long workshop series presented by expert faculty and staff colleagues on instructional, curriculum, and success/advancement issues (including learning outcomes assessment); and a spring assessment to facilitate the transition to the second year of teaching.

Faculty are engaged in research, grant-funded study, and other projects involving learning outcomes. Recognizing the essential roles faculty play in all aspects of achieving excellence in learning and student success, AACC created an Academy of Excellence in 2008. The Academy of Excellence brings together faculty in multiple disciplines to serve as faculty mentors in order to establish, implement, and maintain an entity to support faculty through peer mentoring and professional development opportunities. The Academy hosts an annual summer institute for full-time faculty, adjuncts and staff; the 2011 institute focused on student learning assessment. The sessions included: Writing Measurable Objectives; Student Learning Assessment: Making the CIA (Curriculum-Instruction-Assessment) Connection; CATS in the Classroom (Formative Classroom Assessment Techniques); Aligning QM Standards; Assessing Critical Thinking; Assessments that Engage the Learner, and Measuring Success.

Student learning outcomes must be the same regardless of course delivery method. AACC has adopted the Quality Matters (QM) toolset and processes to ensure quality in design of online and hybrid courses. QM (http://www.qmprogram.org) is a nationally recognized, faculty-centered, peer review process based in national standards of best practices and designed to promote student learning; QM processes are integral to continuous quality improvement at AACC. The 40-standard rubric focuses on eight key areas: course overview and introduction, learning objectives (competencies), assessment and measurement, resources and materials, learner engagement, course technology, learner support and accessibility. The processes and toolset promotes alignment between course components (e.g., course objectives, module-level objectives, content, activities, and assessments). The standards include:

Standard 2.1: The course learning objectives describe outcomes that are measurable.
Standard 2.2: The module/unit level objectives describe outcomes that a measurable and consistent with course-level objectives.
Standard 3.1: The types of assessments selected measure the stated learning objectives and are consistent with course activities and resources.
Standard 4.1: The instructional materials contribute to the achievement of the stated course and module/unit learning objectives.

Since 2009, 30 courses have been formally recognized by QM as meeting national standards. An informal review process is also in place at AACC; over 70 courses have been reviewed internally to verify that the courses meet national standards of design. More than 30 faculty are certified peer reviewers.

Operations

LOA is not limited to the areas under the Vice President for Learning. Student services professionals at AACC have been active in developing learning outcomes, methods and tools (such as rubrics) to assess learning outcomes that are linked to one or more of the ten college core competencies.

New students are encouraged to attend an orientation. Offered through the Student Development and Success office, the primary purpose of the student orientation is to facilitate the transition of new students into AACC and prepare them to be successful in achieving their academic, professional, and personal enrichment goals. The new student orientation learning outcomes are mapped to specific college competencies, the National Orientation Directors Association orientation goals, and the National Academic Advising Association's First-year Advising Student Competencies.

Upon completion of the orientation event, learners are able to identify at least three student support resources, verbalize institutional expectations, know how to access college policies and procedures, and understand their responsibilities to the institution and to their own academic success. A survey is used to measure the competencies and an evaluation survey is used to measure student satisfaction with the staff and the process. Typical assessment data indicates that students who attend orientation sessions learn the information presented to them and are able to identify student support resources, institutional expectations, understand steps to be successful and know where to find college policies. Counseling, Advising, and Retention Services assessed students' information literacy and critical thinking skills as they developed educational plans by using surveys, portfolios, field experiences, and other methods. Learning outcomes have also been established for educational programs and workshops hosted by Student Life. In FY11, Student Life hosted five educational programs, including Islamaphobia, Foundations of Leadership, and Tearing down the Myths and Perceptions of the LGBT Community. Attendees completed an evaluation at the end of each event to ascertain if the outcomes were met. Student Life also assesses student leadership skills at the beginning of their leadership experience and after completing at least one semester as a member of a student organization through the use of a Student Leader Learning Outcomes Questionnaire. Students rate their various leadership skills (such as ability to express ideas clearly ability to speak comfortably in front of groups) on a five-point scale (one, little or no experience; three, average skill level; five, highest skill level).

Community Outreach

Input and assessment from advisory board community members is vital to strengthen the work and impact of the college's programs. The purpose for having community members on AACC advisory boards is to ensure that the college listens to the community and that the college is meeting the needs of the community in its programs and activities. Twenty-nine advisory boards with community, student and college representatives support programs and departments at AACC. Board members meet regularly and provide input from diverse perspectives to further the development of college programs and activities. Each board has its own operating structure. In some cases, subcommittees exist to work on specific issues affecting the program or department. Successful outcomes have resulted from effective collaboration between the college and the community. Within the accreditation process, certain departments and disciplines such as medical assisting; human services; teacher education; and hospitality, culinary arts and tourism regularly conduct employer surveys to gather information regarding outcomes, internship and fieldwork partnerships. For programs and departments that conduct employer surveys for accreditation purposes, data is used to comply with the evaluation criteria and guidelines to target areas that require quality improvement, to implement action plans, and to evaluate outcomes.

Summary

The central mission of Anne Arundel Community College is learning. Assessment of student learning is a fundamental part of the ongoing, reflective improvements at the college. AACC has fostered a college-wide culture of assessment by engaging members of the college community in the systematic, continuous process of creating shared learning goals to enhance student success and achievement. Assessment is a shared process whereby departments and programs affirm their strengths and plan improvements that contribute to the institution's overall effectiveness as a learning college and, most importantly, to student success.

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Baltimore City Community College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Institutional assessment of student learning at Baltimore City Community College focuses on three areas: Institutional Learning Goals (Standard 7), General Education (Standard 12), and Student Learning Outcomes Assessment (Standard 14).

1. Institutional Learning Goals (Standard 7). The vice president for academic affairs, academic administrators and faculty are responsible for the academic integrity of the College. The 2010 faculty revision of the General Education Statement and Core Competencies led to the identification of nine Institutional Learning Goals. The nine goals state: "Upon graduation, all BCCC graduates should be able to": 1) think independently; 2) communicate effectively (verbally and in writing); 3) reason abstractly; 4) gather, evaluate and interpret numerical data; 5) gather, evaluate and interpret information; 6) draw conclusions based on evidence; 7) understand and develop an appreciation for social and cultural diversity; 8) understand and develop an appreciation for the arts; and, 9) participate as civic and socially responsible citizens. The College aligned these Institutional Learning Goals with the General Education disciplines and is in the process of identifying the courses where these goals are taught. The assessment of the Institutional Learning Goals will begin in fall 2011.

2. General Education (Standard 12). The 2010 revised General Education statement is as follows:

    BCCC defines general education as educational experiences that enable students to become informed, independent, critical thinkers. Through a diverse curriculum, students acquire the knowledge and skills to communicate effectively; reason abstractly; gather, evaluate, and interpret numerical data and written information; draw conclusions based on evidence; apply knowledge to real-world situations; develop an appreciation for social and cultural diversity; value the arts; and become individuals prepared for the lifelong

journey of learning and responsible citizenship in their communities, the nation and world.

Faculty developed five General Education Core Competencies from the General Education Statement: I) Communication; II) Arts and Humanities; III) Social Sciences and Cultural Awareness; IV) Mathematical and Scientific Reasoning; and V) Personal Development. The College is in the process of integrating these competencies into programs and courses and including them in the student learning outcomes assessment process.   Furthermore, the College requires computer literacy of all its graduates (see Technological Competency section); however, the development of a specific statement addressing this competency will be accomplished during the fall 2011 semester.

3. <u>Student Learning Outcomes Assessment (Standard 14)</u>. Baltimore City Community College conducts an ongoing cyclical process designed to engage the faculty in a sustainable program of assessment with a clearly defined timeline. Courses are assessed on a regular basis by faculty who teach the courses and coordinators who oversee programs. With the help of a Student Learning Outcomes Assessment Matrix (Appendix A), all BCCC academic departments conduct assessment of student learning outcomes by establishing measurable outcomes and identifying tools and criteria for assessment. Additionally, faculty members collect and analyze data and summarize their results. The results lead to modifications (where necessary) to improve teaching and learning. The first complete cycle, using the SLOA Matrix, concluded in 2010, with assessment data aiding faculty in making improvements to teaching and learning.

SLOAs are imbedded in course syllabi. Selection of outcomes for assessment is determined collaboratively by faculty who teach the courses, the program coordinator, and chairperson. SLOAs are submitted to the chair (in electronic form) prior to the end of the semester and reviewed on a regular basis by the chair, the dean, and the vice president for academic affairs. Assessment training is a collaborative process between the chair and/or the coordinator and faculty. It includes faculty workshops at the beginning of each semester and opportunities to attend conferences sponsored by the Middle States Commission on Higher Education, professional conferences in the disciplines, and guest speakers.

One method of ensuring faculty members are continually engaged in the assessment process is the inclusion of assessment in faculty evaluations. The chairpersons are required to rate faculty on three indicators of assessment activities: 1) submits goals of substance consistent with the mission of the College, including Student Learning Outcomes Assessment; 2) assesses Student Learning Outcomes and presents plans to enhance student success; and, 3) participates in the Student Learning Outcomes Assessment process.

At the program level, the Program Review and Evaluation Committee (PREC), a standing committee of the faculty governance board of the Senate Executive Committee (SEC), is responsible for the systematic review of programs for improvement, suspension, or discontinuance. Every program is on a five-year cycle that includes internal and external stakeholders. The PREC process incorporates a report on student learning outcomes

assessment for the five-year period. Program recommendations are sent to the vice president for academic affairs and the president for proper reporting to the board of trustees.

During the spring 2010 semester the SEC established a Student Learning Outcomes and Curriculum Assessment Task Force. The major charge of this group was to work with the president and vice president of academic affairs to prepare an assessment of the current state of the College's Student Learning Outcomes processes and monitor them to ensure a systematically organized, sustainable process promoting a culture of assessment.

As noted in Part One of this report, in 2010, the College developed new Institutional Learning Goals, a General Education Statement, and Core Competencies for General Education. Assessment of outcomes for these will begin in fall 2011.

Additionally, the College appointed a faculty member to serve as Project Director for Accreditation and Assessment. This person is responsible for working with faculty and Academic Affairs administration to maintain a sustainable and organized assessment plan based on best practices. The appointee is also a member of the Maryland Community College Learning Outcomes Affinity Group (MCLOAG), a consortium of the 16 Maryland community colleges devoted to addressing assessment issues by sharing assessment resources.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institutional definition of competency

BCCC's General Education Core Competency I: Communication.

Students will:

a. Speak, read, and write effectively and access, evaluate, utilize and organize information from a variety of sources;
b. Analyze and reflect on complex issues, and synthesize ideas in clearly written and well-organized standard English;
c. Demonstrate basic concepts and practices associated with public speaking; and,
d. Combine aspects of information literacy and research methods, and consider the ethical, legal and economic implications of information use.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

This competency is assessed at the institutional, program, and course level. The College assesses the competency through Institutional Learning Goals. At the program level, it is assessed through General Education Core Competencies and at the course level, through specific outcomes developed for the course that address written and oral communication. The Student Learning Outcomes Assessment Matrix is adapted for each of these levels. This allows the College to determine the continuity of assessment of this competency between the institutional, program, and course levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The following tools are used to evaluate this competency by a variety of instructors across the College: Faculty-designed <u>rubrics</u> identifying specific behaviors students must demonstrate to show they have met the competency. Students receive these rubrics to inform them of the range of behaviors deemed acceptable or unacceptable. The use of <u>online discussion boards</u> requires instructors to identify specific requirements for posting (i.e., the etiquette of the Internet) including use of proper grammar and spelling. Instructors provide style guides for <u>research papers</u> (APA, MLA, etc.) that instruct students on how to format papers, tables or graphs, in-text citations, and bibliographies. Instructors provide specific guidelines for <u>oral and PowerPoint presentations</u> including specific types of oral presentations, length of presentations (for timing), PowerPoint formats, and (especially) the use of proper spelling and grammar. <u>Portfolios</u> may be used to collect student writing samples over a semester, allowing both students and instructors to observe the progression of writing skills.

With each of these assessment tools, the instructor establishes acceptable criteria at which the competency must be met by students. If a particular criterion is set at 80%, for example, and the data shows 85% of students have met the criterion, the instructor can then determine if the criterion should be raised. If the need exists to change teaching methods to increase the percentage of students who meet a particular criterion—or if they accept the results and identify another outcome to be assessed—they can similarly make adjustments.

D. Describe the results of the assessment work related to this competency.

Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The English, Humanities, Visual and Performing Arts department:

1. Redesigned the Developmental Reading and Writing curriculum. The new curriculum reduced three levels of reading and writing to two distinct levels that integrate both reading and writing, which will allow students to matriculate faster through the developmental education program into credit-level courses. A modular approach for student completion of these levels will also address the various paces at which students attain competencies and are prepared to proceed to the next level including a move to credit courses.

2. More research projects have been integrated into core courses to emphasize the importance of critical thinking/analysis, research, <u>and</u> writing competencies.

II. Scientific and Quantitative Reasoning

A. Institutionalefinition of competency

This competency is BCCC's General Education Core Competency IV: Mathematical and Scientific Reasoning.

Students will:

1. Analyze and evaluate information from mathematical and scientific perspectives, and develop reasoned solutions to real-world problems;
2. Demonstrate knowledge of the scientific method; and,
3. Gain competence in mathematical literacy and reasoning along with the critical thinking skills necessary for making informed judgments.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

This competency is assessed at the institutional, program and course level. The College assesses this competency through its Institutional Learning Goals. At the program level, the competency is assessed through the General Education Core Competencies and at the course level, specific outcomes developed for the course addressing mathematical and scientific reasoning. The Student Learning Outcomes Assessment Matrix is adapted for each of these levels. This allows the College to determine the continuity of assessment of this competency between the institutional, program, and course levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The following tools are used to evaluate this competency by a variety of instructors across the College: Faculty-designed <u>rubrics</u> identifying specific behaviors students must demonstrate to show they have met the competency. Students receive these rubrics to inform them of the range of behaviors deemed acceptable or unacceptable.

In the science disciplines, students may be required to complete <u>hands-on or paper-and-pencil demonstrations</u> indicating their competency levels, such as using models to identify the physical characteristics of humans, animals, or plants. In mathematics, students may be instructed to select a mathematical formula to <u>complete a set of problems or outline the steps for solving mathematical problems</u>. The use of these types of assessment tools are not limited to science and mathematics courses, but are included in other disciplines such as the social and behavioral sciences, business, or construction.

In courses requiring <u>research papers</u>, students are required to complete literature reviews, formulate hypotheses, collect data, report the results, and formulate conclusions. Some

research papers require students to use and interpret rudimentary statistics. Students demonstrate their ability to use the scientific method for exploration of issues of interest to them. Instructors provide specific guidelines for <u>oral and PowerPoint presentations</u> including specific types of oral presentations, length of presentations (for timing), and PowerPoint formats.

With each of these assessment tools, the instructor establishes acceptable criteria at which the competency must be met by students. If a particular criterion is set at 80%, for example, and the data shows 85% of students have met the criterion, the instructor can then determine if the criterion should be raised. If the need exists to change teaching methods to increase the percentage of students who meet a particular criterion—or if they accept the results and identify another outcome to be assessed—they can similarly make adjustments.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

<u>Sample from BIO 111 (Anatomy and Physiology)</u>:

<u>Outcome:</u> Students will be expected to identify and describe the major gross and microscopic anatomical components of the integumentary system and describe the functions of the system. <u>Method and criteria of assessment</u>: Students will identify layers and structures of the integumentary system in slides on skin models. The criteria stated a grade of 70% will be expected for 70% of the class.
<u>Summary and analysis of data</u>: 65% of traditional students and 42% of online students earned a grade of "C" or better.
<u>Use of results and modifications</u>: In order to increase the percentage of "Cs in traditional classes to 70% and online classes to 50%, specific assignments for both classes will be included from two online tools: video explanations from *MY A and P* and interactive tutorials from *Anatomy and Physiology Connect.* Assessment of results will be analyzed during the fall 2011 semester.

III. Critical Analysis and Reasoning

A. Institutional definition of competency

This competency is BCCC's General Education Core Competency II: Arts and Humanities.

Students will:

1. Develop an aesthetic sensibility and the intellectual skills of critical analysis;
2. Form artistic judgments by exposure to the rich history and diversity of human knowledge and thought; and,

3. Understand the achievements of diverse cultures as they are expressed in the arts, literature, religions, philosophy, foreign languages, and linguistics.

B. Levels at which the competency is assessed.

This competency is assessed at the institutional, program, and course level. The College assesses the competency through Institutional Learning Goals. At the program level, it is assessed through General Education Core Competencies and at the course level, through specific outcomes developed for the course that address written and oral communication. The Student Learning Outcomes Assessment Matrix is adapted for each of these levels. This allows the College to determine the continuity of assessment of this competency between the institutional, program, and course levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The following tools are used to evaluate this competency by a variety of Instructors across the College: Faculty-designed rubrics identifying specific behaviors students must demonstrate to show they have met the competency. Students receive these rubrics to inform them of the range of behaviors deemed acceptable or unacceptable. Instructors use case studies giving students the opportunity to engage in decision-making based on moral, cultural, and economic theories. Instructors provide specific guidelines for oral and PowerPoint presentations. In the Arts, portfolios may be used to collect student assignments over a semester allowing both the student and the instructor to observe the development of these competencies. Additionally, musical presentations at the end of the semester exhibit the achievement of similar competencies.

With each of these assessment tools, the instructor establishes acceptable criteria at which the competency must be met by students. If a particular criterion is set at 80%, for example, and the data shows 85% of students have met the criterion, the instructor can then determine if the criterion should be raised. If the need exists to change teaching methods to increase the percentage of students who meet a particular criterion—or if they accept the results and identify another outcome to be assessed—they can similarly make adjustments.

D. Describe the results of the assessment work related to this competency.

Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Art 101

Outcome; Students will be able to demonstrate a satisfactory skill of drawing from direct observation using a variety of drawing media including, but not

limited to: pencil, charcoal pencil, charcoal, white charcoal pencil and possibly, ink.

Method of Assessment:
1. Making drawings in class, and for homework, that are presented for class critique.
2. Writing about work process using relevant vocabulary and concepts.

Summary and Analysis of Data: Students performed across the board from A to F. Attendance is an issue in performance as students need to spend TIME on their work.

Use of Results: Students are not allowed to make up work after an absence, unless there is a legitimate reason. Late work is down-graded.

HUM 202

Outcome: Students will identify, comprehend, and discuss, in written form, historically significant works in the field of visual, performing, and literary arts including techniques, media themes, symbols, aesthetic philosophies, influences and innovations.

Method of Assessment:
1. Students will respond to the chapter reading selections via the format of well-developed short reflective summary papers.
2. Students will research and draw reasonable conclusions from information found in various sources including, print, media, and interviews, and rationally defend the conclusions.

Summary and Analysis of Data: 95% of the 20 students were able to respond to reading selections without any challenges. However, the remaining 5% displayed difficulty due to not being exposed to the online learning community.

Use of Results: Based upon the results, the instructor will meet with the English department to create a monthly Distance Learning Training for first time online learners.

IV.   Technological Competency

A. Institutional definition of competency

BCCC is in the process of developing a formal definition of technological competency as a specific General Education Core Competency. However, a section of the current definition of Core Competency I, Communication, states: Students will combine aspects of information literacy and research methods, and consider the ethical, legal, and economic implications of information use.

Additionally, the College requires computer literacy of all its graduates, stating: All BCCC students must meet the College's Computer Literacy requirement in order to receive a degree or a certificate (2010-2011 BCCC Catalog). Students can meet this requirement in three ways: 1) By enrolling in one of the majors listed below, 2) by taking

one of the computer courses listed below and passing the course with a "C" or better, or
3) by passing the College's Computer Literacy Test with a minimum grade of 70%.

The student learning outcomes for CLT 100 state students will:

1. Demonstrate knowledge of computers and the Internet
2. Demonstrate a working knowledge of Microsoft Office (Word, Excel, PowerPoint, and Access).

B. Level(s) at which competency is assessed

This competency is currently assessed at the program and course levels. The future assessment of this competency will depend upon the development of this specific competency and its associated learning outcomes.

Majors that satisfy the Computer Literacy Requirement include Accounting, Administrative Assistant, Business Administration, Computer-Aided Drafting and Design, Computer Information Systems, Computer Science, Fashion Design, Health Information Technology, PC Applications Specialist, and Word and Information Processing.

Courses that satisfy the Computer Literacy Requirement include BUAD 112: Computers for Business Management, BCA 104: Introduction to Operating Systems, BCA 155: Word Processing for Business Applications, CADD 101: Introduction to CADD, CISS 109: Principles of Computer Information Systems, CLT 100: Computer Literacy, CSC108: Programming in C, FASH 202: Computer-Aided Pattern Design, HIT 232: Computer Applications in Healthcare, HIT 251: Healthcare Management and Supervision, and OFAD 119: Word Processing Applications I.

C. Processes used to evaluate competency (i. e., methods, measures, instruments)

The process used to evaluate the competency at the institutional level is measured by the successful completion of the requirements for graduation. The process used at the program level is the successful completion of the program requirements for graduation. The processes used for evaluation at the course level are dependent upon the outcomes developed within the various courses.

D. Describe the results of the assessment work related to this competency.

When this competency has been defined and learning outcomes developed, it will be included in the assessment processes for the other General Education Core Competencies.

Additional Competencies:

The College has chosen not to report on additional competencies.

> **Part Three: Evolution of Assessment Activities**
> Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

Assessment since 2007

In January 2007, the College appointed a faculty member to revitalize the Student Learning Outcomes Assessment Committee (SLOAC) established in 2005. By November 2007, a full time coordinator was hired to support continued implementation of the student learning outcomes assessment plan for the Academic Affairs division. A Student Learning Outcomes Assessment plan for programs and courses was implemented in 2008.

During the early fall of 2008, the SLOA coordinator informed the deans and chairs of the SLOA process and a plan for the 2008-2009 academic year. Other items discussed included programs and courses in each division targeted for assessment in the 2008-2009 and 2009-2010 academic years, and timelines for completion of SLOAs for targeted programs and courses. The College sponsored and facilitated more than 30 workshops and webinars for faculty and staff on such topics as *Getting Started with Student Learning Assessment, Developing Tools & Strategies to Assess Student Learning, and Assessment in Student Affairs.*

Faculty Academies for full-time and adjunct faculty were conducted with presentations from Dr. Virginia Anderson of Towson University and MSCHE, who addressed both groups on the topic, *The Role of Faculty in Creating a Culture of Assessment.* Dr. Kathryn Doherty, assistant vice president of academic affairs for Assessment and Operations at Morgan State University, addressed *Assessment and the Middle States Self-Study Process at BCCC: Faculty Roles and Expectations.* Beyond this, presentations were conducted on student learning outcomes and assessment for all staff and administrators in the Student Affairs division, and the College purchased a math-anxiety program which also addressed outcomes and assessment.

During the first year, expected learning outcomes, standards these outcomes met, and methods of assessment and measurement criteria were submitted by faculty. The following year, collection and analyses of data and reports of how faculty used the analyses to modify teaching and learning completed the initial assessment of the process. In spring 2010, the official Course Syllabus template was revised to incorporate student learning outcomes.

In January 2009, the assessment coordinator resigned and responsibilities for assessment were reassigned to a faculty member currently serving as the project director for accreditation and assessment. During spring 2010, the faculty governing body established the Student Learning Outcomes and Curriculum Assessment Task Force charged with preparing an assessment of the current state of the College's student learning outcomes processes and monitoring them to ensure that a systematically organized and sustainable process promotes a culture of assessment. At present, the College is searching for a director of curriculum and assessment who will focus on

working with faculty, chairs, deans and the vice president for academic affairs to continue defining processes that ensure continued assessment of student learning and improved teaching.

The current academic assessment process is based on objectives identified by faculty for specific programs and courses. The process may use a variety of measurements to determine if objectives are being achieved. The primary purpose of the assessment is to produce feedback to the department, division and College on student performance via the curriculum and learning process, which in turn allows each department to improve teaching and learning in its programs.

Over the past year, the Developmental Education Task Force analyzed assessment data to support its recommendations for changes in developmental courses in both the credit and continuing education programs. This was a collaboration between faculty teaching mathematics, English, Adult Basic Education, the English Language Institute and English as a Second Language.
During fall 2010, faculty further engaged in the assessment process by 1) completing the development of student learning outcomes for courses and programs, 2) establishing data to be collected during the fall 2010 and/or spring 2011 semesters, 3) analyzing data collected through fall 2010, and 4) reporting modifications made or expected to be made as a result of the data analyses.

How BCCC's assessment activities have impacted teaching and learning

The College has devoted most of the past year to updating student learning outcomes assessment for its programs and courses. Departmental reports exhibit a variety of assessment methodologies, analyses, and modifications for teaching and learning. Each department was asked to select one of its best assessments and boast about what was done. They were then asked to select their poorest assessment and talk about how they would modify that to improve teaching and learning.

Developmental Education Task Force:

BCCC students enroll in at least one remedial course based on their ACCUPLACER placement test scores; as a result, the percentage of students enrolled in at least one developmental course approached 84 percent in fall 2010. A Developmental Education Task Force was established in spring 2009to examine current best practices in developmental education and make recommendations that could be implemented to improve student success in both credit and non-credit developmental courses.

With collaboration between the English, mathematics and ESL/ELI faculty and staff, the College:

- Redesigned the Developmental Reading and Writing curricula. The new program has two distinct levels that integrate both reading and writing, which will allow students to matriculate much faster through the developmental education program into credit-level courses.

- Reduced the billable hours of developmental courses from 32 to 16 by reducing and combining English, reading and writing from 3 levels each to two levels combined; and mathematics from 3 levels to two.
- Created The Promise Academy to build a bridge between students at the lowest level of developmental education and the College's well-established adult basic education (ABE) program.
- Made it a goal to help these students preserve their financial aid and academic standing while working to develop their skills. In this context, the College was able to provide a more intensive learning program including basic life skills instruction, in order to meet the intellectual and skills deficits challenging many developmental education students.

English, Humanities, Visual and Performing Arts

The English, Humanities, Visual and Performing Arts department has incorporated more technology to facilitate instruction in ENG 101: *English Writing* and more research projects have been integrated into core courses to emphasize competencies in critical thinking/analysis, research, and writing. In many instances, faculty have collaborated with the Center for Student Success to provide more specific instructions for tutors on specific concepts, and required students to attend tutoring sessions.

After an assessment of the ENG 101: *English Writing* syllabus, the faculty designed a common rubric for students to acquire the ability to plan and write an essay using a clear thesis and adequate and appropriate support.

Fashion Design faculty introduced a practical skills assessment by having students manipulate garments using full-scale patterns to create other styles within a given period. As a result, 87 percent of the students demonstrated mastery of the concept.

Public Service, Education, and Social Sciences

Psychology faculty discovered from assessment data gathered in the PSY 101: *Introduction to Psychology* course that only 48% of students were able to accurately respond to questions related to key concepts underlying major psychological theories and only 51% were able to recognize these concepts as they played out in real life. In response, the department decided to modify the way these concepts were being taught. To assist students to apply these concepts to real-life situations, additional exercises were added to both instructional and out-of-class assignments. Also, a decision was made to hold regular reviews of psychological concepts throughout the semester to help students recall material learned previously. A Research Methods course was added to make transferability of all of psychology courses consistent with the needs of students transferring to four-year institutions. One other result was a half-day training session in November 2010 on summary and analysis of data and using the results and modifications sections of the SLOA Matrix. This creditable professional development training has made Psychology adjuncts direct stakeholders in the assessment process.

Full-time and adjunct History faculty discovered two of their courses contained outcomes duplicated in other courses. H103, *History of Western Civilization I*, and H104, *History of Western Civilization II* focused on the same concepts as H151: *World History I* and H152: *World History II*. The courses were submitted for deletion and removed from the course catalog.

On a similar note, Human Services faculty discovered 70% of students taking AHS 100: *Introduction to Human Services* completed the required 30-hour internship to pass the course. The implied 30% failure rate of the other students was not considered acceptable. In this case, however, no modification was needed. The course itself was not found to need modification; the various ways in which fieldwork assignments were being monitored by instructors (both full- and part-time) revealed a fundamental flaw in the plan because not everyone monitored the students the same way. As a result, Human Services faculty in collaboration with the department chair decided the best approach would be to make one person responsible for tracking all fieldwork. The modification has been in place for only a single semester; however, data collection and analysis will determine if this modification was effective.

Computer, Engineering, Mathematics and Sciences (CEMS) Department

The Computer, Engineering, Mathematics and Sciences (CEMS) department reported its faculty improved the academic experience of students and enhance improve the modalities of all course offerings by appointing faculty facilitators for each course:

- The process is cyclical and structured to engage faculty of all disciplines directly in assessment activity;
- Course facilitators and program coordinators are responsible for ensuring consistency through common outcomes, assessment instruments and scoring.
- At least three outcomes are assessed each semester and the results are used to improve the course/program during the following semester. This schedule allows for assessment of all outcomes in all courses in two years.

Nursing and Allied Health

A summary and analysis of data from the fall 2009 DH 130: *Dental Materials* course found several students were not successful on early exams and that overall grades were not as good as expected. Based on this data, a review was conducted before exams in the fall 2010 course and more individualized attention was given to students, with a particular focus on learning styles. Analysis of the data for fall 2010 indicate exam and test scores improved.

Assessment of data from a spring 2010 Health Information Technology class found some students were not able to complete in-class assignments in the allotted timeframe. As a result, more time was built into the class when it was offered in fall 2010 which led to a 100% success rate for in-class assignments.

Faculty in NUR 120: *Introduction to Nursing Practice* have the opportunity to see the results of course changes more frequently as nursing courses are offered twice per year. Consequently, they noted students did not perform well on exam questions covering patient care planning, an important part of nursing.   The next semester, faculty engaged the students in writing a care plan as part of a class activity. As a result, test scores on the nursing care plan increased

Nursing faculty in NUR 220: *Medical-Surgical Nursing of Adults II* (focusing on situations involving cardiopulmonary anatomy) consistently found students were failing or barely passing the course. Students were reporting they did not remember or retain previously learned material from their anatomy and physiology courses. Therefore, it was difficult for them to apply it to the new material. In fall 2010 the students were presented a framework for systematic integration of all content to improve true student understanding. As a result, test scores increased.

Nursing faculty in the 2009-2010 academic year offered 83 courses that completed one assessment cycle. Full-time faculty consulted with adjuncts and the department chair to decide they would have to modify the way in which some nursing concepts were taught. Across all programs, a variety of technologies and testing strategies were developed to increase the number of students who successfully passed their respective course. Among consistent findings: those students who attended tutoring sessions or sought additional help from faculty tended to be more successful.

Department of Business, Management, and Technology (BM&T)

Full-time faculty implemented a *Capstone* project as an assessment tool for BUAD 112, *Computers for Business Management*, creating a more realistic learning environment for students. The department adapted this project to all related sections to ensure a level of quality instruction in the program.

Business and Accounting courses included assignments that had close correlation to industry practices. BUAD 207: *Business Law* included preparing legal briefs and accounting courses included an internship with a local tax company.

Measurable outcomes led to greater student success in professional examinations: Students in the construction program successfully completed the certification exam for *Leadership in Energy and Environmental Design [LEED]).*

Introductory courses within the BMT Department (i.e., BUAD 100: *Introduction to Business*, ACCT 201: *Accounting Principles I* and ECO 201: *The American Economy I: Macroeconomics*) had become "high risk" courses for our students. Therefore, multiple modalities were introduced to deliver instruction. In addition to face-to-face instruction, online tools were utilized to maintain continuity of instructional delivery after class, visual imagery with slides for visual learners, and embedded tutors.

How assessment of major competency areas has been integrated into the structure of the institution

The College has engaged in more collaborative efforts between departments:

1. The English and Mathematics faculty collaborated with the Business and Continuing Education Division to revise developmental education for both credit and non-credit programs.
2. Education faculty provided guidance for development of student learning outcomes and assessment tools for other faculty in their division.
3. The Academic Affairs, Student Affairs, and Academic Support Services divisions worked together to coordinate tutoring, counseling, and advising efforts to promote student retention, graduation and completion rates.
4. Faculty and administrators in Academic Affairs engaged in the development of assessment planning and training for all in the division for the purpose of developing an organized and sustainable culture of assessment.

APPENDIX A

2009-2010 Baltimore City Community College SLOA Template

Division:	Contact Person:		Ext.:	Date of Submission:
Level Choose institutional, program, or course	□ **Institutional** (select one)	□ Division	□ Developmental Courses	Program Title:
	□ **Name of Program** (select one)	□ Name of Program	□ Certificate	Degree: AA/AS/AAS (choose one)
	□ **Course**	Course ID and Title:		
GOAL STATEMENT:				
Complete the first three columns in fall _____ Complete the last two columns in spring _____				
Expected Student Learning Outcomes	**Standard**	**Methods of Assessment And Measurement Criteria**	**Summary and Analysis of Data**	**Use of Results and Modifications**
Select at least three outcomes	MHEC, MSCHE, Other	Identify two methods for each outcome. Identify the criterion for each method.		
SLOA 1				
SLOA 2				
SLOA 3				

Carroll Community College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

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Part One: Summary of Assessment Activities
Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

</div>

After the adoption of the new seven GE Learning Goals in 2008, and as evidence of the integration of these goals within courses, faculty undertook a major alignment initiative in 2009. Under the guidance of the College's academic leaders, faculty examined each credit course's objectives in relationship to both department program goals and the new seven General Education Learning Goals, regardless of whether designated as a GE core requirement or not. In order to make the connection between course objectives and program and general education goals more obvious to students, all syllabi now reference the program goals (PG) and/or general education learning goals (GE) intended to be met by each course objective. These goals are also posted on the college website.

Following an established five year plan, each year one or two of the program goals are discussed within academic departments, which include General Education Learning Goals. For example, during academic year 2008-09, the English Department measured students' ability to construct thesis-driven essays and support assertions with relevant information, while the Science Department in the same time period measured students' ability to manipulate data scientifically, both of which specifically address GE Learning Goals 1 and 3 respectively.

Over a five year period, then, all goals will be assessed. The periodic program review enables a broader assessment of the program as a whole by using the outcomes data gathered over the prior five year period. The aim is to systematically evaluate programs to determine

whether or not student learning outcomes are being met and to inform any changes or improvements.

Each academic discipline developed its individual program goals in the context of what, at the time, were the college's core competencies. So, departmental assessment plans include program goals which are now reflective of General Education Learning Goals 1 through 4. New goals have been added for the competencies of creativity, global awareness, and personal development and social responsibility. Assessments were added in 2010-11 and will be included in the updated five year assessment plans.

While significant attempts to address GE goals have been made through the departmental program reviews and other periodic assessments, to better address the College's need for a systematic and regular assessment of general education, the GE core course requirements are now recognized as a distinct program, As such, the General Education Program will have a periodic review using the same guidelines as are used for other academic programs. Prior to the end of the five year review cycle, each of the seven General Education Learning Goals will have been systemically assessed using a performance-based model of assessment.

The college is currently developing evaluation rubrics for each Learning Goal using cross-disciplinary faculty teams. In a blind analysis, random samples of artifacts are being collected from those courses that assess the selected General Education Learning Goal, and a separate evaluation team is using the scoring rubric to assess the artifacts. In the fifth year, the General Education Committee will review all the results for a complete picture and offer suggestions for improvement as needed.

It is also important to note that assessment activities include work being evaluated within the Library department as they offer sessions to support information literacy knowledge; learning within Student Affairs as they measure learning outcomes in several departments; and Distance Learning, which not only utilizes data from evaluation of course outcomes but also evaluates learning within the distinctive format of distance education.

After commendation from the Middles States visit, our college is confident the General Education Learning Goals are being met through evaluation of learning outcomes at the course and program level. The results in Part II of this report indicate how well the college meets its mission and goals, which is part of institutional effectiveness as measured in Standard 7. For Standard 12, our additional activities described in Part III demonstrate how, by looking across the college, we expect to find areas of improvement that would strengthen student learning and could be instrumental in our continuous improvement journey. Finally, our program review

process helps to meet Standard 14, where the results of the assessment of learning outcomes leads to improvement, as needed, and confirms our graduates have the knowledge and skills the faculty, under the direction of Dr. James Ball, Vice President of Academic and Student Affairs, deem necessary for completion.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

Students will communicate effectively in writing and in speech, and interpret the written and oral expression of others. Toward attaining this goal, students will:
- Assess and address a specific audience to accomplish a goal
- Craft an arguable thesis statement and support it with evidence
- Explore and respond to differing perspectives
- Use standard English in academic and professional setting

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Essay questions, comprehensive take-home exams, papers, group presentations, written responses to on-line discussion questions, portfolio assessments, tests, research projects, article summaries, posters, vocal presentations, and interviews.

Many of these include rubrics for their measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in communication, written and oral, the results indicate 85.68 % of the students successfully achieved the benchmarks set by the program/department.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Students will apply mathematical and scientific concepts and theories to identify and analyze problem solving situations. Toward attaining this goal, students will:

- Apply models and methods to define, represent, and solve mathematical and scientific problems
- Make observations, identify problems, formulate questions and hypotheses
- Collect and interpret data in order to draw valid conclusions and identify logical relationships
- Distinguish scientific arguments from non-scientific arguments

Many of these include rubrics for their measures.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Open-ended graded questions on the final exam, group PowerPoint presentations, final paper, conversion problems on lab assignments and quizzes, lab practical final exams, skill assignments.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in scientific and quantitative reasoning, the results indicate 74.5 % of the students successfully achieved the benchmarks set by the program/department.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Students will practice analytical and evaluative thinking with a view toward continuous improvement. Toward attaining this goal, students will:

- Independently identify problems and pose questions
- Gather, read, evaluate, and integrate relevant information
- Explore alternative perspectives and their implications
- Draw well-reasoned conclusions
-

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

PowerPoint presentations by groups, common exam questions, essay or discussion

Assignments, final exams, problem-solving exercises, comprehensive take-home exams, papers, group presentations, written assignments, essay questions on exams, case studies, lab assignments and quizzes, skill assignments, poster and vocal presentations, research projects.

Many of these include rubrics for their measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in critical analysis and reasoning, the results indicate 82.28 % of the students successfully achieved the benchmarks set by the program/department.

IV. Technological Competency

A. Institution's definition of competency

Students will research, create, and communicate information through appropriate technology or media. Toward attaining this goal, students will:
- Select appropriate search methods for gathering information
- Evaluate the authority, reliability, accuracy, and currency of information sources
- Demonstrate an awareness of the ethical, legal, and cultural issues and responsibilities in the uses of information and technology
- Design, develop, and produce media that effectively communicate information and ideas

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Writing assignments, class presentations, research projects, writing projects, PowerPoint presentations, article summaries, poster and vocal presentations,

Many of these include rubrics for their measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in information and technology literacy, the results indicate 83.4 % of the students successfully achieved the benchmarks set by the program/department.

Additional Competencies

Because institutional mission and goals differ, institutions may wish to report on assessment activities beyond the four major competency areas. However, this is not mandatory; institutions may report on up to three additional competencies.

V. *Creativity*

A. Institution's definition of competency

Students will explore and appreciate the creative processes that shape the human experience. Toward attaining this goal, students will:
- Appreciate creative expression as a reflection of culture and history
- Identify how creative processes lead to discovery and innovation
- Define and analyze stylistic nuances in artistic forms
- Examine a significant work of art or great idea and its cultural influence

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Assessment efforts within the Arts and Humanities areas indicate that creativity has been indirectly measured through assessment of specific program goals. For instance, the Theater Program goals include a goal that the student will create artistic projects, performance-based or design-based, that demonstrate comprehension of dramatic structures and a goal that the student will accurately identify historical periods/genres through projects and assessments. Students will explore and appreciate the creative processes that shape the human experience

Processes planned for evaluation of the competency include multiple choice and/or short answer questions or essay questions, comprehensive take-home exams, papers, group presentations, projects, portfolios.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in creativity, the results indicate 85.8 % of the students successfully achieved the benchmarks set by the program/department.

VI. *Global Awareness*

A. Institution's definition of competency

Students will acknowledge and comprehend the beliefs, behaviors, and values of diverse populations within a global environment. Toward attaining this goal, students will:

- Analyze and evaluate the significance of cultures and societies from a variety of perspectives

- Explain the impact of economic, political, and technological changes on diverse cultures
- Examine the interdependence of humanity
- Appreciate the commonalities and the differences among world cultures

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Assessment efforts within the Arts and Humanities areas indicate that global awareness has been indirectly measured through assessment of specific program goals. For example, in Anthropology 101, the student will illustrate his/her ability to synthesize and analyze all components of culture presented throughout the course with an emphasis on how and why cultures change. Cultural relativism must be maintained throughout the paper.

Similarly, Humanities area program goals align with GE Learning Goal 6, Global Awareness, and are being assessed within that program's periodic assessment cycle. The 2009 adoption of the College's Diversity Plan and the establishment of Diversity as an Emerging Issue   in the GE

curriculum are positive indicators of the College's commitment to the importance of these two learning goals.

Processes planned for evaluation of the competency include comprehensive take-home exams, papers, group presentations, written essays, multiple choice or short-answer questions on exams, and interviews.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in global awareness, the results indicate 87.33 % of the students successfully achieved the benchmarks set by the program/department.

VII. *Personal Development and Social Responsibility*

A. Institution's definition of competency

Students will recognize and engage in personal and social behaviors responsible for the wellness of self and community. Toward attaining this goal, students will:
- Develop a framework for ethical decision making and personal responsibility
- Examine how personal behaviors affect self and others
- Collaborate with others to achieve a common goal
- Participate in and reflect on personal learning experiences

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Course, program/department, and college-wide.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Comprehensive take-home exam essay, papers, group presentations.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Reviewing the annual reports from programs/departments measuring achievement of outcomes in personal development and social responsibility, the results from three courses assessing it indicate 94.3 % of the students successfully achieved the benchmarks set by the program/department.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

One of the best examples of how assessment activities improved teaching and learning came through the English Department and its assessment of the writing curriculum. First they use a department-wide writing portfolio assessment at the end of every semester and second, they directly assess of student learning in writing seminars in which particular skills such as grammar and punctuation rules are taught. Additionally, in 2006, the English Department surveyed all English 101 and 102 students to determine the effectiveness of the Expression Workshop component of both composition courses.

The most recent change in the writing curriculum was made in response to portfolio assessment findings, which revealed that students in both courses make progress in learning to follow the standard conventions of grammar and punctuation, although student performance in this area lags behind their performance in other areas (such as "Constructing thesis-driven Academic Essays"). While 80% of English 101 students and 93% of English 102 students repeatedly demonstrate an ability to write thesis-driven essays, only 62-63% of students in both courses consistently follow grammar and punctuation rules, and only 27-28% of those students demonstrated an increase in stylistic control by the end of their composition courses.

This finding helped the English Department rethink course objectives for both English 101 and 102, and faculty decided to de-emphasize "stylistic control" as a goal of English 101 and

102 and increase the emphasis on "avoiding mistakes in grammar, punctuation, and spelling that impede intended meaning" (*English Assessment Report: October 2009*).

From a survey of English 101 and 102 students conducted in Spring 2006, the English Department determined that the most effective practices for helping students with expression-level growth are (1) individual conferences with composition faculty and (2) writing skills seminars that focus on specific sentence-level skills and errors such as overcoming run-on sentences and comma splices. Direct assessment in writing seminars suggests dramatic improvement in the attendees' ability to identify and correct sentence-level errors. For example, pre-testing in seminars devoted to comma splices revealed that 27% of students coming into the seminar could identify a comma splice, and by the end of the seminar, 80% of the attendees could identify and fix comma splices. (*Fell Promotion Project, 2008).*

Another assessment instrument, the American College Health Association – National College Health Assessment, was conducted in the wellness general education courses, PHED-101 and HLTH-101, to identify priority health issues among college students. Learning activities and health-risk analyses were then incorporated into the PHED-101 and HLTH-101 courses after survey results revealed specific problematic behaviors, anxiety and depression, sleep difficulty, relationship difficulty, and physical violence that had an academic impact. On-campus wellness events were also provided to address the whole student population with regard to these priority health issues. These activities are being assessed as part of the annual report of student learning outcomes for this area.

Finally, the Nursing department has made curricular changes based upon outcome assessment of the first-time student pass rate. To increase first-time pass rate percentages, Carroll invested in the PARSCORE system to check reliability of exam questions, and faculty implemented supplemental instruction strategies. In addition, graduate survey results indicated the need for a pharmacology course, so one has been recently added to the curriculum.

Improvements in teaching are noted in annual instructor evaluation feedback reports, which are initially completed by the faculty member, reviewed by the chair, and then evaluated by the appropriate dean and the Vice President of Academic and Student Affairs to ensure results are being used to improve teaching. Besides using assessments of student achievement within the course, SIRII data, and classroom observation data, faculty may also refer to improvements stemming from CCSSE results and other national benchmark data for determining improvement strategies.

Student learning outcomes achievement data, while tracked in annual reports in a similar review procedure outlined above, are also used to form recommendations for improvement in each program/discipline's five year review. Results are shared in faculty department meetings or in faculty development sessions. However, in its self-study, the college recognized that the process for vetting reports and sharing results is uneven and could benefit from a more systematic process. This will be reviewed as part of the alignment process for strategic initiatives that will begin in fall, 2011.

Cecil College

Cecil College
Student Learning Outcomes Assessment Report (SLOAR) 2011
Prepared for the Maryland Higher Education Commission

Part One: Summary of Assessment Activities

Assessment of student learning and institutional effectiveness permeates all planning efforts at Cecil College. The following objectives serve as the overarching priorities for student learning outcomes measures:

- Develop and implement <u>student learning outcomes across the curriculum</u> to insure that each learner who enters the institution acquires the comprehensive skills and knowledge needed for higher levels of learning and/or the workplace.

- Develop and implement <u>student learning outcomes within each program of study</u> to insure that each learner acquires the necessary skills and knowledge needed to demonstrate a comprehensive understanding of an academic discipline.

- Develop and implement <u>student learning outcomes within each course</u> to insure that each learner who enters the institution will acquire fundamental skills and knowledge in a specific subject area.

The Cecil College Assessment Committee (CCAC) provides institutional leadership for the College's assessment efforts. Membership includes the Vice President Academic Programs; Vice President for Enrollment, Student Services, and Institutional Effectiveness; Dean of Academic Programs; Director of Academic Program Support (Co-Chair); Director of Institutional Research (Co-Chair); and full-time faculty representatives for each discipline.

A process has been implemented to collect student learning outcomes assessment data, results, and use of assessment results by requiring all faculty members to submit a course assessment report each fall and spring semester. Full-time faculty members submit reports for three courses each semester and include a maximum of five student learning outcomes for each course. Part-time faculty members submit a report for each course taught and also include a maximum of five student learning outcomes for each course. Excerpts from these assessment reports are included for each General Education Competency.

At the institutional level the College has implemented the Community College Survey of Student Engagement (CCSSE). This survey is administered every other year to collect indirect measures of student learning outcomes. We have included a comparison of 2006 Cecil scores with 2010 scores for each general education competency listed below.

Beginning in fall 2007, Cecil College implemented the Community College Learning Assessment (CCLA) to provide direct measures of student learning outcomes in general education competency areas. The survey is administered every other year: in the fall to first-time

students and in the spring to graduating seniors. An ongoing challenge has been obtaining a statistically significant sample size. The following tables present the results for 2008-2009 for Cecil College and all two-year schools that participated in the administration of the CCLA. The results indicate that Cecil College students (both entering and exiting students) performed better in all categories than the comparison schools on every type of assessment.

Mean Scores for First-Year Students

Assessment	Cecil College	All Schools
Performance Task	966	930
Analytic Writing Tasks	989	968
Make-an-Argument	976	957
Critique-an-Argument	1003	980
Total CCLA Score	978	949

Mean Scores for Exiting Students

Assessment	Cecil College	All Schools
Performance Task	1115	1013
Analytic Writing Tasks	1148	1053
Make-an-Argument	1144	1046
Critique-an-Argument	1152	1059
Total CCLA Score	1132	1033

Another institutional level measure is the standardization of the approval process for each course syllabus. The process ensures that measurable learning outcomes are embedded in each course, as approved by the institution's Academic Affairs Committee. This process has enhanced the College's ability to heighten the focus on learning outcomes while promoting a cross-discipline approach to the achievement of general education requirements.

At the course level, all course syllabi are required to include student learning outcomes, outcome indicators, types of assessment used, and sample assessment activities.

Part Two: Four Major Competency Areas

I. Written and Oral Communication

A. Institution's definition of competency

Cecil College defines college-level writing competency according to the *Standards for a "C" Paper* as approved on March 3, 1998, by the Maryland Statewide English Composition Committee and on April 21, 1998 by the Inter-segmental Chief Academic Officers of Maryland's two- and four-year institutions of higher education.

College-level oral communication is defined as improved oral expression, listening, critical thinking, and message analysis, and enhanced appreciation and understanding of various forms of expression/communication.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

All General Education competencies are assessed at the course and program level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct Measures of Assessment:

- Course embedded assessments including written work scored using the C-Standards rubric
- Oral presentations scored using a rubric
- Score gains between entry and exit vocabulary tests
- Ratings of student skills in the context of class activities, projects and discussions
- Portfolios of student work

Indirect Measures of Assessment:

- Student evaluations and ratings of the knowledge and skills they have gained in general education courses
- Grades on assignments
- Student satisfaction with their learning in general education competencies collected through Student Opinion/Satisfaction surveys
- Results of the nationally-normed Community College Survey of Student Engagement (CSSE) survey

D. Describe the results of the assessment work related to this competency. (Detailed results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The following table presents some detailed examples of assessment results and use of assessment results for written and oral communication skills. The information is drawn from faculty course assessment reports for fall 2010.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Demonstrate knowledge of sentence grammar and sentence boundaries.	By the end of the semester, 80% of students demonstrated improvement in their ability to self edit and to edit the work of others. Of those who entered the course having difficulties with sentence boundaries, about 50% showed improvement.	Students will receive more guided practice in editing their own work. To increase students' sense of ownership of repeated errors and to observe their preferred learning approaches, small, balanced groups will be assigned to teach the class core concepts.
Demonstrate improved oral presentation and discussion skills.	60% of students markedly improved their ability to articulate their ideas; 100% of students demonstrated awareness of what features comprised a successful oral presentation.	Informal opportunities to present material will be integrated earlier in the course, perhaps on behalf of small-group work in the classroom.
Demonstrate an understanding of the writing process from idea generation through multiple revisions to editing.	Approximately 75% of students participated fully in peer workshops by coming prepared with the required drafts and providing their peers with thorough feedback. Of those that participate, approximately 80% use the peer feedback to improve their papers.	Continue to make individual conferences with the instructor mandatory. Provide more models of clear and thorough feedback for peer workshops, and incorporate the peer workshop process in the final grade for the paper for both the writer and the reviewer so both peers take the assignment seriously.
Demonstrate improved verbal ability, self-confidence, and presentation in public speaking.	Most students did not take the risk to use voice variants in prepared readings. I believe they understand the concepts of pitch, volume, rate, pauses and emphasis but can't apply the concepts to readings perhaps because of feeling self-conscious.	More examples will be used as demonstration (live or recorded) to identify what variants the speaker used. Then, rather than using long readings to prepare, students will do just 1-2 sentences, and if they do not use variants, they will be challenged to make the sentence have a certain meaning, or said with a certain emotion and with passion.

A comparison of the 2006 and 2010 Community College Survey of Student Engagement (CCSSEE) shows that students' self-reported assessment of written and oral communication skills in 2010 remained constant or improved over scores for 2006.

"How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Knowledge, Skills & Personal Development	Cecil 2010	Cecil 2006
Writing clearly and effectively	2.80	2.79
Speaking clearly and effectively	2.63	2.58

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Cecil College defines college-level competency in scientific reasoning as students' ability to articulate the elements of the scientific method, and the application of such elements to the analysis and the practice of science. Students should be able to collect, analyze, interpret, evaluate, and present data.

College-level quantitative reasoning is defined by the following approved statewide attributes:
1. Interpret mathematical models given verbally, or by formulas, graphs, tables, or schematics, and draw inferences from them,
2. Represent mathematical concepts verbally, and where appropriate, symbolically, visually, and numerically,
3. Use arithmetic, algebraic, geometric, technological, or statistical methods to solve problems,
4. Use mathematical reasoning with appropriate technology to solve problems, test conjectures, judge the validity of arguments, formulate valid arguments, and communicate the reasoning and the results,
5. Estimate and check answers to mathematical problems in order to determine reasonableness
6. Recognize and use connections within mathematics and between mathematics and other disciplines

B. Level(s) at which the competency is assessed (e.g., department, program, course)

All General Education competencies are assessed at the course and program level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
Direct Measures of Assessment:

- Course-embedded assessments including written work scored using a rubric
- Oral presentations scored using a rubric

- Score gains between entry and exit tests
- Ratings of student skills in the context of class activities, projects and discussions

Indirect Measures of Assessment:

- Grades on assignments not accompanied by a rubric
- Student evaluations and ratings of the knowledge and skills they have gained in general education courses
- Student satisfaction with their learning in general education competencies collected through Student Opinion/Satisfaction surveys
- Results of the nationally-normed Community College Survey of Student Engagement (CSSE) survey

D. Describe the results of the assessment work related to this competency. (Detailed results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes

The following table presents some detailed examples of assessment results and use of assessment results for scientific and quantitative reasoning skills. The information is drawn from faculty course assessment reports for fall 2010.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Demonstrate an understanding of the basic ecological processes that drive ecosystem dynamics.	Eighty-nine percent of students successfully completed this assignment (earning a "C" or better).	Results support continuing to present material in the format of student-centered problem-solving teams.
Demonstrate an understanding of the properties of logarithms.	On-line homework scores were 82.9% or higher. On the first in-class quiz 95% of students received 60% or higher. On the second in-class quiz only 55% of students received 60% or higher. On two take home quizzes 76% of students received 60% or higher. On a test taken in the Math Lab 57% of students received 60% or higher on relevant questions.	More time will be spent reviewing the properties of logarithms in subsequent semesters and the number of tests will be increased to reduce the amount of material on each test and help students to focus more on each topic.
Perform calculations to fit least squares regression to data and understand the meaning of the terminology, measures, and calculations used in regression.	The median score on the regression quiz was 89% and the average was 67 percent.	To emphasize regression skills, the automobile project will be completed by students in class. This involves collecting data on a particular make and model of automobile and then plotting a scatterplot and performing a regression analysis.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Demonstrate an understanding of the structure and functions of the endocrine system.	Sixty-one percent of students were successful at identifying endocrine structures on an outline diagram quiz.	This exercise will be repeated in another format to see if students are increasing knowledge of this material.

A comparison of the 2006 and 2010 Community College Survey of Student Engagement (CCSSEE) shows that students' self-reported assessment of scientific and quantitative reasoning skills in 2010 improved over scores for 2006.

CCSSE Results Related to Scientific and Quantitative Reasoning:

"How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Knowledge, Skills & Personal Development	Cecil 2010	Cecil 2006
Solving numerical problems	2.79	2.57
Thinking critically and analytically	2.99	2.92

"During the current school year, how much has your coursework at this college emphasized the following mental activities?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Activities	Cecil 2010	Cecil 2006
Analyzing the basic elements of an idea, experience, or theory	3.05	2.94
Synthesizing and organizing ideas, information, or experiences in new ways	2.98	2.87
Applying theories or concepts to practical problems or in new situations	2.92	2.69

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Cecil College defines college-level proficiency in critical analysis and reasoning to include, but not limited to, the following: application, analysis, synthesis, evaluation, problem solving, and decision making, as well as creative thinking, meta-cognition, and productive habits of the mind.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

All General Education competencies are assessed at the course and program level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct Measures of Assessment:

- Course-embedded assessments including written work scored using a rubric
- Exams composed of multiple choice, true/false, and essay questions
- Case study analysis
- Oral presentations scored using a rubric
- Score gains between entry and exit tests
- Ratings of student skills in the context of class activities, projects and discussions

Indirect Measures of Assessment:

- Grades on assignments not accompanied by a rubric
- Student evaluations and ratings of the knowledge and skills they have gained in general education courses
- Self assessment exercises
- Student satisfaction with their learning in general education competencies collected through Student Opinion/Satisfaction surveys
- Results of the nationally-normed Community College Survey of Student Engagement (CSSE) survey

D. Describe the results of the assessment work related to this competency. (Detailed results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes

The following table presents some detailed examples of assessment results and use of assessment results for critical analysis and reasoning skills. The information is drawn from faculty course assessment reports for fall 2010.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Critically analyze texts for their audience, purpose, thesis, development, organization, tone, and style.	Over the course of the semester, the number of successful reading journal assignments rose from 60% to 90%, and the discussions were consistently successful for all students who had completed the journals as directed.	Since the most significant barriers with this assignment involved not following the directions and/or not answering in sufficient detail, the first journal entry will be done during a class period.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Demonstrate improved critical thinking skills and problem-solving strategies in various rhetorical situations.	Ninety percent of students were ultimately able to analyze texts and data, and then to contextualize this information.	Continue with current strategies, but check with individuals more frequently on the progress of their in-class work.
Demonstrate an understanding of critical reading and thinking strategies.	Approximately 80% of students can identify the target audience for an essay based on context clues, as well as determine which readers could be alienated by assumptions the writer makes about that audience's knowledge, background, and values.	Continue to assign readings that promote discussion of audience awareness and assumptions. Continue to assign formal evaluations of published argument essays for student improvement of critical reading and writing skills.
Demonstrate an understanding of different training methods and understand the need for lifelong learning, career development, and planning.	Approximately 80% of students are able to successfully design a simple training program for their workplace (or another company) that includes a needs assessment, goals, analysis of delivery/teaching methods, and an evaluation of the training program.	Instead of having each student design a training program, in the spring semester I will have students work in groups to design a training program together. In this way, students can support each other in understanding the concepts.

A comparison of the 2006 and 2010 Community College Survey of Student Engagement (CCSSEE) shows that students' self-reported assessment of critical analysis and reasoning skills in 2010 remained constant or improved over scores for 2006.

CCSSE Results Related to Critical Analysis and Reasoning:

"How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Knowledge, Skills & Personal Development	Cecil 2010	Cecil 2006
Thinking critically and analytically	2.99	2.92
Learning effectively on your own	2.97	2.89
Making judgments about the value or soundness of information, arguments, or methods	2.75	2.64

"During the current school year, how much has your coursework at this college emphasized the following mental activities?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Activities	Cecil 2010	Cecil 2006
Analyzing the basic elements of an idea, experience, or theory	3.05	2.94
Synthesizing and organizing ideas, information, or experiences in new ways	2.98	2.87
Applying theories or concepts to practical problems or in new situations	2.92	2.69
Making judgments about the value or soundness of information, arguments, or methods	2.72	2.64
Using information you have read or heard to perform a new skill	2.99	2.84

IV. **Technological Competency**

A. Institution's definition of competency

Cecil College defines college-level technological competency as the students' ability to engage in technology collaboration; use and create structured digital documents; perform technology-enhanced presentations; use technology tools for research and evaluation; use databases to manage information; use technology tools for analyzing qualitative and quantitative data; use graphical and multimedia representational technologies; demonstrate familiarity with major legal, ethical, privacy and security issues; demonstrate a working knowledge of hardware and software applications; and create an HTML web page.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

All General Education competencies are assessed at the course and program level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct Measures of Assessment:

- Course-embedded assessments including written work scored using a rubric
- Case study analysis
- Oral presentations scored using a rubric
- Ratings of student skills in the context of class activities, projects and discussions

Indirect Measures of Assessment:

- Grades on assignments not accompanied by a rubric
- Student evaluations and ratings of the knowledge and skills they have gained in general education courses
- Student satisfaction with their learning in general education competencies collected through Student Opinion/Satisfaction surveys
- Results of the nationally-normed Community College Survey of Student Engagement (CSSE) survey

D. Describe the results of the assessment work related to this competency. (Detailed results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes

The following table presents some detailed examples of assessment results and use of assessment results for technological competency skills. The information is drawn from faculty course assessment reports for fall 2010.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Develop an understanding of the personal computer, the Internet, the World Wide Web, and e-mail basics.	68.2% of students successfully completed objective tests.	Review materials covered in the PowerPoint and videos and make sure the tests are in line with these. Revise the tests to touch on the major points they should acquire.
Develop an understanding of the formulas and functions used in spreadsheets.	74.2% of students successfully completed project-based tests.	A manual, instructor graded problem will be added to the assignments to see if a more basic problem at the beginning of this material will assist in the understanding of formulas.
Master the creation and communication of ideas with digital images suitable for exhibition and publication.	The majority of students successfully expressed mood and message in some assignments, but had difficulty demonstrating it in others.	Increased focus will be placed on how to determine a mood or message before students begin the project.
Develop a basic understanding of computer networking.	70.6% of students completed the book assignment – grade was 100% for those students. 47.1% of students completed the post test assignment – 85.4% average grade. 58.8% of students completed the projects and lab assignments – 99% average grade.	For students who don't achieve 70% on the book activities provide alternative activities related to the same outcome indicators. If students don't achieve a 70% on the post test provide alternative post test activities related to the same outcome indicators. If students

Desired Learning Outcome	Assessment Results	Use of Assessment Results
		don't achieve a 70% on the projects and lab assignments alternative activities related to the outcome indicators will be provided.

A comparison of the 2006 and 2010 Community College Survey of Student Engagement (CCSSEE) shows that students' self-reported assessment of technological competency skills in 2010 improved over scores for 2006.

CCSSE Results Related to Technological Competency:

"How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Knowledge, Skills & Personal Development	Cecil 2010	Cecil 2006
Using computing and information technology	2.91	2.89

"In your experiences at this college during the current school year, about how often have you done each of the following?" 1=Never, 2=Sometimes, 3=Often, 4=Very often

Technological Activity		Cecil 2006
Used the Internet or instant messaging to work on an assignment	3.13	2.98
Used email to communicate with an instructor	3.15	2.79

V.   Information Literacy

A. Institution's definition of competency

Cecil College defines college-level information literacy as the students' ability to recognize the need for information; identify what information is needed; find that information; evaluate information critically for relevance and credibility; use information to solve problems or answer questions; and use information legally and ethically.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

All General Education competencies are assessed at the course and program level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

D. Describe the results of the assessment work related to this competency. (Detailed results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes

The following table presents some detailed examples of assessment results and use of assessment results for information literacy skills. The information is drawn from faculty course assessment reports for fall 2010.

Desired Learning Outcome	Assessment Results	Use of Assessment Results
Demonstrate an ability to integrate information from a variety of disciplines and media in order to interpret a literary work.	100% of students integrated information from a variety of disciplines – particularly history and sociology – in order to interpret a literary work. However, despite instructor modeling and access to college and online media, only 75% integrated media into their interpretations.	Reinforce the importance of multimedia by making multimedia a mandatory rather than optional feature of the student presentations.
Prepare a research paper on a contemporary topic in Organizational Psychology using scholarly resources.	90% of students successfully completed the assignment, but many struggle with evaluating resources as appropriate, particularly Internet resources.	More time will be spent explaining how to evaluate Web resources and journals.

A comparison of the 2006 and 2010 Community College Survey of Student Engagement (CCSSEE) shows that students' self-reported assessment of information literacy skills in 2010 improved over scores for 2006.

CCSSE Results Related to Information Literacy:

"How much has your experience at this college contributed to your knowledge, skills, and personal development in the following areas?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Knowledge, Skills & Personal Development	Cecil 2010	Cecil 2006
Thinking critically and analytically	2.99	2.92
Learning effectively on your own	2.97	2.89

"During the current school year, how much has your coursework at this college emphasized the following mental activities?" 1=Very little, 2=Some, 3=Quite a bit, 4=Very much

Activities	Cecil 2010	Cecil 2006
Synthesizing and organizing ideas, information, or experiences in new ways	2.98	2.87
Making judgments about the value or soundness of information, arguments, or methods	2.72	2.64
Using information you have read or heard to perform a new skill	2.99	2.84

Part Three: Evolution of Assessment Activities

The major change to assessment activities since Cecil College's 2007 report to the Maryland Higher Education Commission has been the establishment of a committee to provide institutional leadership for assessment activities and the implementation of semester reports by faculty members on assessment results and use of assessment results at the course level. The use of the Community College Survey of Student Engagement (CCSSE) and the Community College Learning Assessment (CCLA) are ongoing since 2007.

Any questions or requests for additional information on assessment activities at Cecil College should be directed to Rebecca Walker, Director of Academic Program Support rwalker@cecil.edu.

Chesapeake College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011
Chesapeake College

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Part One: Summary of Assessment Activities
Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

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Chesapeake College has systemic assessment processes at the institution, program and course level. The Academic Program and Curricula (APC) committee oversees the program and course-level assessment processes. This academic committee is comprised of faculty, the Vice-President for Academics, both academic Deans, and representation from the Office of Institutional Planning, Research, and Assessment (IPRA). The Academic Planning and Assessment (APAC) committee oversees campus-wide assessment initiatives. The group is comprised of administration, deans, IPRA staff, and representation from all major faculty committees including Developmental Studies and General Education. Additionally, representation from campus departments such as the Registrar and Advising are part of this committee.

Academic Program Review

All programs are included in a 5-year cycle for academic program review. Each program is assigned a program manager. The program manager collaborates with the department and associated faculty and staff to prepare a comprehensive program review. The IPRA office provides resources and support for each department completing a program review. A template is provided to guide the program review and assure all necessary components are included. In addition to the template, a comprehensive guide is available to provide specific directions, examples, and further explanation of the process. A major component of the academic program review is the inclusion of program-level student learning outcomes. For each outcome, indirect and/or direct data is presented to document student achievement in that particular outcome. Programs are encouraged to provide internal as well as external data to demonstrate the program's progress as well as demonstrate campus-wide support of the college's goals.

The committee has developed a rubric to assess the program quality and vitality. The APC committee provides feedback to the program manager about the assessment. For each program review, the APC considers any suggested program and/or curriculum changes in addition to any suggested resource allocations. Each program review suggests data-driven action plans for the APC committee to approve.

Course-Level Assessment

During the 2008-2009 academic year, Chesapeake College initiated a pilot course assessment process. Six courses participated by developing common student learning outcomes, determining targets and assessment tools and methodology. Data was collected and action plans developed for implementation the following academic year. During the 2009-2010 academic year, this pilot was expanded to include 40 high-impact courses. Faculty used the following table to organize and document their assessment activities.

Student Learning Outcomes	Targets/ Benchmarks	Assessment Methodology/ Tools	Results and Analysis	Action Steps

During the 2010-2011 academic year, the college established a campus-wide course-level assessment program. Approximately one-third of the 455 active courses were scheduled for course level assessment. A three-year plan was developed to systematically phase in all active courses. The IPRA office provided resources and support to all faculty involved in this initiative.

In December 2010, the Board of Trustees approved the purchase of TracDat, an online academic assessment system. This product is designed to support the assessment needs of the academic programs along with other divisions such as student support services. This tool helps to manages assessment processes such as planning, data storage, data analysis, data utilization and follow up. The software is able to demonstrate the purposeful alignment between college strategic goals, program outcomes, and course outcomes. Data is organized into reports for faculty, staff and administration to support formative and summative evaluation of program progress. TracDat also has the capacity to assist in the reporting requirements for accreditation purposes.

Additional support for program-level and course-level assessment is provided by the IPRA staff through multiple professional development opportunities. Several sessions were held throughout the 2010-2011 academic year to further explain and model assessment processes. These well-attended sessions allowed faculty to get one-on-one help to develop quality assessment plans in order to collect and analyze appropriate data to drive instructional decisions for improved student achievement at the course and program level.

During the academic year 2010-2011, the academic leadership facilitated training sessions for faculty members to review and revise all academic program mission statements, goals, and student learning outcomes for publication in the 2011-2012 academic catalog.

Institutional Assessment Initiatives

The General Education committee initiated a process for all previously-identified General Education courses to re-apply to the program. The committee developed an application template along with a rubric used to evaluate alignment of course to the program competencies. Each application required six general education competencies along with one content-specific competency (as appropriate). Pairs of faculty members peer-reviewed the applications. Thirty courses from across all academic departments were approved as General Education courses.

Appendix A documents the alignment between the courses and the specific competencies that are assessed in the course. At Chesapeake, General Education is considered a program; and as such, is included in the five-year cycle for academic program review. The General Education program will participate in a comprehensive review during the 2011-2012 academic year.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

Chesapeake College has oral and written communication as one of its ten general education competencies. The college has developed the following definition: "Communicating in oral and written English is the process of competently and effectively participating in the exchange of ideas, which includes the comprehension, articulation, and formulation of a logical argument." The overall competency is broken down into six sub-competencies:

- Write clearly, correctly, logically, and ethically.
- Express their own ideas coherently, as well as work collaboratively with others in a responsible manner.
- Generate ideas for writing and speaking, then select, arrange, express, evaluate, and revise the ideas to ensure effective communication.
- Evaluate the use of information and sources efficiently.
- Construct and present a convincing argument.
- Listen effectively.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

The written and oral communication competency is directly assessed at the course level. See Appendix A for specific general education courses that directly assess any of the sub-competencies. Additionally, many other Chesapeake College courses include this competency at various levels (introduce, assess, or review).

This general education competency is also indirectly assessed at the institutional level and the program level. At the institution level, recent graduates are surveyed and asked to provide feedback on this competency as well as other relevant topics. Included in the academic program review process is a student survey that gathers indirect evidence of the students' experiences concerning this competency specifically as it relates the students'

program-specific experiences. Additionally, since 2006 Chesapeake College has administered the Community College Survey of Student Engagement (CCSSE) to determine levels of engagement across various topics including competencies.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Courses that use this competency as one of the student learning outcomes have developed common rubrics to assess student work. Although the assignment is often instructor-specific, each department uses a common rubric to gather and analyze data. For example, both full-time and adjunct faculty members that teach ENG 101 *Composition* and ENG 102 *Introduction to Literature* use a common rubric developed by the department to assess the major writing assignment of the course. The department collaborates to analyze the data and develop action steps to improve student achievement. The department completes the assessment loop by re-assessing the following semester, determining the value of the previous action plan, and repeating the process each semester.

The communication department has developed several rubrics to assess oral and written communication in the COM 101 and COM 150 courses. Rubrics such as the "Competent Speaker Speech Evaluation Form" and the "Group Project Evaluation Form" are used to assess student work. At the close of the semester, the communication department uses the assessment cycle to collect data, analyze results and determine next steps for the following semester. Ongoing collaboration occurs between department members to determine necessary mid-course adjustments.

D. Describe the results of the assessment work related to this competency.

The results of the assessment work have resulted in dramatic and effective instructional changes in both the English and Communication departments. These changes have impacted many departments across campus. Examples include:

- Through several repetitions of the assessment process, the Communication department reached an 89% proficiency rate using the Competent Speaker Speech Evaluation Form. Initially, certain criteria proved to be challenge areas for the students. The rubric allowed faculty to differentiate between several criteria—thus, allowing the challenge areas to be apparent. For example, evidence proved the introduction and conclusion criteria to be challenge areas for students.
- Based on student data, the Communication department developed classroom strategies to address the deficient areas in oral communication. The department created a checklist, "Sal's Top 7 Trouble Spots" to help students identify potential challenge areas. This checklist was distributed to the entire faculty to help students with public speaking. Additionally, the Communication department developed and facilitated several trainings for the entire faculty on the topic of public speaking. Since many of Chesapeake's courses require student and/or group presentations, many faculty members use the Competent Speaker Speech Evaluation Form to assess student work in the area of public speaking.

- The assessment efforts of the English department have improved student achievement in this competency. For example, the department has documented assessment efforts that demonstrate over 90% proficiency in the areas of thesis, organization, use of language, supporting detail and technical correctness. The department uses a common rubric that differentiates these criteria at four levels (excellent, very good, satisfactory, and failing). Through the assessment process, the English department has improved its rubric to better differentiate the important components of an effective research paper.

- The assessment efforts have improved the collaboration between full-time and adjunct faculty members. Additionally, the assessment efforts have provided specific data to direct the Department Chair to facilitate instructional coaching in the documented challenge areas.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Quantitative reasoning is also one of Chesapeake College's general education competencies. The college has developed the following definition: "Quantitative reasoning has two components: 1) the ability to use the quantitative method: the process of solving problems; and 2) a demonstration of quantitative literacy: a basic understanding of mathematical theories, concepts, and facts." The overall competency is broken down into ten sub-competencies:

- Recognize mathematical problems in a variety of contexts, including their individual academic program, and apply mathematical skills in order to solve them.
- Demonstrate the mathematical reasoning skills required in problem-solving and decision-making situations.
- Use calculators and/or computers effectively/efficiently in problem solving.
- Interpret results and draw conclusions.
- Interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them.
- Communicate mathematical information symbolically, visually, numerically, and verbally.
- Estimate and check answers to mathematical problems in order to determine reasonableness.
- Demonstrate knowledge and interpretation of mathematical relationships, facts, concepts, and theories and show how they apply to their academic, professional, and personal lives.
- Evaluate mathematical information and concepts.
- Distinguish between the capabilities and limitations of mathematics and technology.

B. Level(s) at which the competency is assessed (e.g., institutional, program, course)

The scientific and quantitative reasoning competency is directly assessed at the course level. See Appendix A for specific general education courses that directly assess any of the sub-competencies.

This general education competency is also indirectly assessed at the institutional level and the program level. At the institution level, recent graduates are surveyed and asked to provide feedback on this competency as well as other relevant topics. Included in the academic program review process is a student survey that gathers indirect evidence of the students' experiences concerning this competency specifically as it relates the students' program-specific experiences. Additionally, since 2006 Chesapeake College has administered the Community College Survey of Student Engagement (CCSSE) to determine levels of engagement across various topics including competencies.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Five of Chesapeake's mathematics courses participated in the previously mentioned General Education application process (see Appendix A for list of courses). As part of that initiative, the mathematics department collaborated to develop student learning outcomes that meet the requirements of a general education course. The department wrote similar outcomes for each course reflecting quantitative reasoning, adding content-specific language appropriate for a particular course.

Each course developed an assessment plan that involved common items imbedded into various assessments throughout the semester. Common rubrics, checklists, and answer keys were developed to assess the items. Adjunct faculty members were encouraged to use the common items and participate in department data analysis sessions.

D. Describe the results of the assessment work related to this competency.

The assessment efforts for this competency resulted in increased collaboration between members of the mathematics department. Faculty members worked to develop common assessment tools and measures. Additionally, the department worked together to establish benchmarks for each student learning outcome. As these outcomes were new in Spring 2011, the data collected was considered baseline. Other outcomes include:

- Assessment results included a strong need for more opportunities for practice through coursework. Additionally, action plans must be committed to providing opportunities for students to verbalize, through written and oral communication, the connections between equations and associated relationships and solutions.
- The assessment efforts facilitated multiple vertical conversations pertaining to the content of sequential courses. The increased awareness of both course requirements and course exit skills promotes purposeful instruction and maximizes success as students navigate through the sequence of mathematics courses.
- An example of specific course-level assessment results for this competency is from MAT 115 *Pre-Calculus*. Data showed 74% of students were proficient or advanced on items designed to demonstrate application of problem-solving skills specific to algebraic and transcendental equations.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Critical thinking is one of Chesapeake College's general education competencies. The college has developed the following definition: "Critical thinking is the process of analyzing and modifying thinking based on logical and relevant criteria, with a view to improving it." The overall competency is broken down into ten sub-competencies:

- Differentiate between opinion and fact.
- Identify the points of view held by one's self and others with respect to an issue.
- Recognize assumptions used in reasoning.
- Formulate clear, precise, and relevant questions.
- Identify, assess, and interpret relevant information.
- Analyze the implications and practical consequences of a line of reasoning.
- Evaluate inferences, conclusions, and arguments for clarity, precision, relevance, accuracy, breadth, depth, significance, logic, and fairness.
- Demonstrate a willingness to change one's opinion based on new evidence.
- Apply critical thinking skills to the solution of complex problems.
- Apply critical thinking skills to personal behavior and life decisions.

B. Level(s) at which the competency is assessed (e.g., institutional, program, course)

The critical thinking competency is directly assessed at the institution, program and course level. See Appendix A for specific general education courses that directly assess any of the sub-competencies. See Part C for description of institutional level assessment processes.

The critical thinking competency is also indirectly assessed at the institutional level and the program level. At the institution level, recent graduates are surveyed and asked to provide feedback on this competency as well as other relevant topics. Included in the academic program review process is a student survey that gathers indirect evidence of the students' experiences concerning this competency specifically as it relates the students' program-specific experiences. Additionally, since 2006 Chesapeake College has administered the Community College Survey of Student Engagement (CCSSE) to determine levels of engagement across various topics including competencies.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

While course level assessment for critical thinking has been ongoing at the course level, a new assessment initiative was implemented during the 2010-2011 academic year. The APAC developed a process to directly assess the critical thinking competency across the campus. Each faculty member was directed to develop a critical thinking assignment for at least one section of one course. The common assessment tool used by all faculty members for this

assignment was a critical thinking rubric based on the AACU's value rubric. An additional checklist was developed by the APAC committee and distributed to faculty to better clarify the necessary components of a critical thinking activity.

The lesson plans, activities and/or assignments were submitted to the APAC for approval during the Fall 2010 semester to be utilized during the Spring 2011 semester. The APAC formed pairs to review a designated portion of the assignments, documenting feedback using a common rubric/checklist developed by the committee. Faculty members received the feedback and provided revisions as necessary.

During the Spring 2011, each full-time faculty members implemented the assignment or activity with one or more course sections. Faculty members were asked to submit student work samples to the Office of Academic Affairs and to provide summary data via an online survey tool.

D. Describe the results of the assessment work related to this competency.

The chart below shows the campus-wide results of this assessment initiative.

	Percent of Students per Rating				**Total Students**
	4	3	2	1	
Explanation of Issues	44.23%	27.27%	19.54%	8.96%	737
Evidence	37.79%	28.09%	22.21%	11.91%	680
Assumptions	32.38%	31.24%	17.69%	10.84%	707
Students Position	33.80%	30.13%	21.50%	14.57%	701
Conclusions/Outcomes	34.17%	26.07%	19.29%	20.47%	679

During the May 2011 Faculty In-service, time was devoted to reveal these results along with whole group and departmental dialog to determine analysis and next steps. These critical thinking assignments will be repeated during the Fall 2011 semester with data collected in a similar manner. Using the above data as baseline data, the Fall 2011 data will be analyzed to observe potential improvements in student achievement.

IV. Technological Competency

A. Institution's definition of competency

Technical competency is one of Chesapeake College's general education competencies. The college has developed the following definition: "Technology literacy is the set of skills necessary to use, manage, and assess technology in a responsible and ethical manner." The overall competency is broken down into four sub-competencies:

- Recognize the changing impact, capabilities, and limitations of technology on individuals and society.
- Use technology and information legally, responsibly, and ethically.
- Use current technology to communicate effectively with others in writing, presentations, and electronic communications.
- Use technology tools to store, retrieve, evaluate, and synthesize information.

B. Level(s) at which the competency is assessed (e.g., institutional, program, course)

This general education competency is directly assessed at the course level. See Appendix A for specific general education courses that directly assess any of the sub-competencies.

This general education competency is also indirectly assessed at the institutional level and the program level. At the institution level, recent graduates are surveyed and asked to provide feedback on this competency as well as other relevant topics. Included in the academic program review process is a student survey that gathers indirect evidence of the students' experiences concerning this competency specifically as it relates the students' program-specific experiences. Additionally, since 2006 Chesapeake College has administered the Community College Survey of Student Engagement (CCSSE) to determine levels of engagement across various topics including competencies.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

All thirty Chesapeake College General Education courses teach and assess at least one student learning outcome related to technology literacy. For example, PED 103 *Wellness for Life*, a required course for all Chesapeake graduates, incorporates a comprehensive activity that requires the students to access wellness-related information using technology to retrieve and evaluation web-based resources. Modeling and instruction is provided by the instructor in combination with a required appointment with a librarian for further expertise. The assessment tool is a department-developed rubric.

Many other courses directly assess this competency. For example, CIS 109 *Introduction to Computers* utilizes common assessment items throughout the semester. Also, for this competency, ENG 101 *Composition* pulls data from the technology criteria, one of six criteria listed on the common rubric. For many courses, this is typical, as technology is assessed as a sub-criteria embedded into a more comprehensive project or activity.

D. Describe the results of the assessment work related to this competency.

Because of the cross-campus use of student learning outcomes related to this competency, Chesapeake College's Learning Resource Center (LRC) is widely used as a source for resources and expertise. Faculty members from all departments direct students to the LRC for additional guidance in the area of technology literacy. One significant result of these partnerships is the opportunity for students to become more aware of college resources and staff outside of the classroom.

PED 103 *Wellness for Life* reported 90% of students scored satisfactory or outstanding on each criteria of the rubric. Both full-time and adjunct faculty members were included in the analysis. Action steps included (1) purposefully making students aware of the rubric that is used for assessing and grading the project, and (2) providing exemplar student work to professors to assure more consistent use of the rubric.

CIS 109 *Introduction to Computers* had set a benchmark of 75% of the students earning at least 80% on this competency. While Fall 2010 results were at the 61% mark, Spring 2011 results demonstrated 100% of the students meeting 80% or better on the project. The valuable component of the process can be noted in the action steps. After the Fall 2010 analysis, the department members concluded (1) student was not fully aware of the rubric used to assess and grade projects and (2) students were not prepared for such a comprehensive project. Although the project was not substantially changed, additional instruction and scaffolding strategies were used to better prepare students for the rigor of the project.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

Chesapeake College has recently embarked on several new assessment initiatives. As mentioned previously, application to the General Education program, critical thinking assignments across all content areas and course-level assessment were three separate initiatives started in the 2010-2011 academic year. However, in order to develop a culture of assessment, academic leaders found multiple opportunities to weave these initiatives, along with academic program review and accreditation processes, into sustainable processes that provide valuable data and analysis for quality instructional decisions to improve student achievement. Faculty found additional resources and staff available to assist in all assessment activities. In September 2010, Chesapeake College hired an Assistant Director for Academic Assessment. In January 2011, TracDat was purchased. The additional staff member provides support to all faculty members to develop appropriate and measureable student learning outcomes, design assessment measures, determine targets, collect and analyze data, and document and implement actions steps and follow-up. These systemic processes have directly impacted instruction by better aligning instructional strategies to meet the needs of Chesapeake's students. For example, each course involved in the course-level assessment

process must develop measureable student learning outcomes. This process forces the department to evaluate the criticalness of the set of skills, knowledge and attitudes necessary for the course. When asked to assess the student learning outcomes, the faculty members are more conscious of competency-based assessments versus simply grading. Through an end-of-year survey, faculty members overwhelmingly reported that assessment products and processes provide valuable information to drive instructional decisions for improved student achievement (88% of faculty selected strongly agree or agree). This item is part of an annual survey to ensure institutional processes are appropriately aligned to improve student learning in the classroom.

Some instructors at Chesapeake College have always used rubrics. However, through additional professional development, more departments are striving for consistency by determining inter-rater reliability through norming sessions. Checklists are being converted into detailed rubrics and distributed to all department members. Department chairs are increasingly expecting adjunct faculty to participate in the assessment process. Both the Physical Education and Accounting departments have found success with involving 100% of faculty (both full-time and adjunct) for the department's high impact courses.

Through the application process for the General Education program, a strong focus has been placed on the competencies. On the actual application, each of the 30 approved courses selected which sub-competencies are taught and assessed. Through course-level assessment, the courses will document targets and measures for each student learning outcome and provide data and analysis. Each year, the general education courses will participate in continuous improvement processes by reassessing, evaluating action plans, and determining future steps. Processes are in place to ensure and support these annual actions. The process acknowledged the various courses that teach and assess non-traditional content knowledge. For example, general education applications shed light on high-impact Sociology courses that place heavy attention to teaching and assessment mathematics as it pertains to health services curriculum. Other obvious cross-content connections to mathematics include Physics and Physical Science. Many other non-general education courses have these competencies embedded in the content as well.

Chesapeake College will choose one General Education competency for cross-campus assessment each year. Critical thinking was selected as the competency for academic year 2010-2011. Writing is scheduled for academic year 2011-2012. Academic leadership expects 100% participation in this assessment initiative each year. Baseline data (Section III, D) will be used for determining trends and progress.

Finally, the assessment processes imbedded in credit-bearing courses are impacting the developmental programs. For example, the lower of two developmental English courses (ENG 077) has been converted into a module-type curriculum meant to scaffold students quickly through the necessary skills and concepts into ENG 082. Competency-based assessments are used to determine readiness for the subsequent course. The rubrics used in ENG 101 are modeled and used in ENG 077 and ENG 082 to better assure student success in the credit-bearing course. The ultimate goal for this process is to improve student achievement, retention, persistence and graduation rates.

Chesapeake College continues to develop a culture of assessment. The assessment processes are imbedded throughout all divisions and departments. The assessment of student learning is directly aligned with the college's strategic plan and divisional tactical plans. Faculty and staff input are annually sought to ensure an effective and well supported assessment structure and processes. Tools and resources have been increased to ensure faculty and staff are supported. Through closely monitoring institutional performance measures and academic assessment results, Chesapeake College demonstrates its commitment to ensure a quality learning environment.

Appendix A: General Education Program - Curriculum Map (see legend on last page of map)

Legend: (A)ssessed, (I)ntroduced, (R)einforced

Outcomes	BIO-101	ECN-171	ECN-172	ENG-101	FLM-240	GEO-143	HIS-101	HIS-102	HIS-131	HIS-132	HUM-101	HUM-110	MAT-113	MAT-115	MAT-140	MAT-200	MAT-204	MUS-101	PED-103	PHY-205	PHY-215	PSC-150	SCI-102	SCI-110	SCI-111	SCI-141	SCI-142	SOC-162	THE-172
1.1	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A
1.2	A	A	A		A	A	A	A	A	A	A	A	A	A	A	A	A	A		A	A	A	A	A	A	A	A		A
1.3	A	A	A	A		A			A	A	A	A						A	A				A	A	A		A	A	A
1.4	A	A	A		A	A	A	A			A	A						A		A	A	A	A	A	A	A	A	A	A
1.5	A	A	A	A		A	A	A	A	A	A	A		A		A				A	A	A	A	A	A	A	A		A
1.6	A	A	A			A					A	A						A		A	A		A	A	A	A	A		A
2.1	A	A	A	A	A	A	A	A	A	A	A	A			A		A	A	A	A	A	A	A	A	A	A	A	A	
2.2		A	A		A		A	A			A	A							A									A	
2.3		A	A	A	A		A	A			A	A						A				A	A					A	A
2.4	A	A	A	A		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A
2.5	A				A	A	A	A	A	A			A	A	A	A	A	A	A	A	A			A	A	A	A		A
2.6	A	A	A	A			A	A										A					A						A
3.1	A	A	A	A	A	A	A	A			A	A						A	A	A	A	A	A	A	A	A	A	A	A
3.2	A	A	A	A	A	A	A	A			A	A	A					A	A	A	A		A	A	A	A	A	A	A

Outcomes	BIO-101	ECN-171	ECN-172	ENG-101	FLM-240	GEO-143	HIS-101	HIS-102	HIS-131	HIS-132	HUM-101	HUM-110	MAT-113	MAT-115	MAT-140	MAT-200	MAT-204	MUS-101	PED-103	PHY-205	PHY-215	PSC-150	SCI-102	SCI-110	SCI-111	SCI-141	SCI-142	SOC-162	THE-172
3.3	A	A	A			A	A	A	A	A	A	A		A						A	A		A	A	A	A	A	A	
3.4	A	A	A			A			A	A	A	A				A		A	A	A	A	A	A	A	A	A	A	A	
3.5	A	A	A	A		A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A	A		
3.6	A	A	A	A	A		A	A	A	A	A	A		A	A			A					A	A					
3.7	A		A	A	A		A	A			A	A				A	A	A	A	A	A		A	A			A	A	A
3.8	A	A	A			A					A	A				A				A	A		A	A	A	A	A		A
3.9	A	A	A				A	A	A	A		A	A	A	A	A	A		A	A	A	A	A	A		A	A	A	A
3.10	A	A	A								A	A						A					A						
4.1													A	A	A	A	A			A	A			A		A			
4.2													A	A	A	A	A			A	A			A		A	A	A	
4.3																A				A	A			A		A	A		
4.4						A							A	A	A	A	A			A	A			A		A	A	A	
4.5						A							A	A	A	A	A			A	A			A		A	A	A	
4.6													A	A	A	A	A			A	A			A		A	A		
4.7																A				A	A			A		A			
4.8													A	A	A	A	A			A	A							A	

Outcomes	BIO-101	ECN-171	ECN-172	ENG-101	FLM-240	GEO-143	HIS-101	HIS-102	HIS-131	HIS-132	HUM-101	HUM-110	MAT-113	MAT-115	MAT-140	MAT-200	MAT-204	MUS-101	PED-103	PHY-205	PHY-215	PSC-150	SCI-102	SCI-110	SCI-111	SCI-141	SCI-142	SOC-162	THE-172
4.9						A							A	A	A	A	A			A	A				A		A		
4.10																													
5.1	A																			A	A		A	A	A	A	A	A	
5.2	A					A														A	A			A	A	A	A		
5.3	A																			A	A			A	A	A	A	A	
5.4	A																			A	A				A	A		A	
5.5	A					A														A	A			A	A	A	A		
5.6	A																			A	A		A	A		A		A	
5.7	A					A														A	A		A	A	A	A	A	A	
5.8	A					A															A	A	A	A	A	A	A		
5.9	A					A														A	A		A	A	A	A	A		
5.10	A					A														A	A		A	A	A	A	A		
5.11	A					A																		A	A		A		
5.12	A																							A					
5.13	A					A														A	A		A	A	A	A	A		
5.14	A																			A	A		A	A		A			

Outcomes	BIO-101	ECN-171	ECN-172	ENG-101	FLM-240	GEO-143	HIS-101	HIS-102	HIS-131	HIS-132	HUM-101	HUM-110	MAT-113	MAT-115	MAT-140	MAT-200	MAT-204	MUS-101	PED-103	PHY-205	PHY-215	PSC-150	SCI-102	SCI-110	SCI-111	SCI-141	SCI-142	SOC-162	THE-172
6.1	A	A	A				A	A	A	A	A	A											A					A	
6.2	A	A	A				A	A	A	A	A	A										A	A					A	
6.3	A	A	A				A	A	A	A	A	A											A					A	
7.1					A						A	A						A											A
7.2					A						A	A						A											A
7.3					A						A	A						A											A
8.1							A	A										A				A							A
8.2	A					A	A	A			A	A				A		A		A	A		A	A	A	A	A		
8.3	A	A	A	A	A	A	A	A	A	A	A	A						A	A				A		A	A			A
8.4	A	A	A	A		A			A	A	A	A						A	A	A	A	A	A	A	A	A	A	A	A
8.5	A	A	A	A	A	A	A	A			A	A				A		A		A	A	A	A	A	A	A	A	A	A
8.6	A	A	A			A	A	A	A	A	A	A				A		A		A	A		A	A	A	A	A		A
8.7	A				A	A	A	A	A	A	A	A				A		A		A	A	A	A	A	A	A	A		A
8.8	A	A	A			A					A	A						A					A						
9.1	A				A						A	A						A					A						
9.2	A	A	A	A	A	A			A	A	A	A				A		A		A	A		A	A	A	A	A		A

Outcomes	BIO-101	ECN-171	ECN-172	ENG-101	FLM-240	GEO-143	HIS-101	HIS-102	HIS-131	HIS-132	HUM-101	HUM-110	MAT-113	MAT-115	MAT-140	MAT-200	MAT-204	MUS-101	PED-103	PHY-205	PHY-215	PSC-150	SCI-102	SCI-110	SCI-111	SCI-141	SCI-142	SOC-162	THE-172
9.3	A	A	A	A	A	A					A	A	A	A	A	A	A	A	A			A	A		A		A		A
9.4		A	A					A	A	A	A					A		A		A	A		A	A		A		A	A
10.1							A	A	A	A	A	A						A	A										
10.2							A	A	A	A	A	A						A										A	
10.3							A	A	A	A	A	A						A	A										
10.4	A		A	A	A	A	A	A			A	A						A	A	A	A	A	A	A	A	A	A		A
10.5	A		A	A	A	A					A	A								A	A		A	A	A	A	A		A
10.6	A		A			A					A	A						A		A	A	A	A	A	A	A	A		A

General Education Competencies

1. Oral and Written Competencies

Competencies: The student will be able to:
- 1.1 Write clearly, correctly, logically, and ethically.
- 1.2 Express their own ideas coherently, as well as work collaboratively with others in a responsible manner.
- 1.3 Generate ideas for writing and speaking, then select, arrange, express, evaluate, and revise the ideas to ensure effective communication.
- 1.4 Evaluate the use of information and sources efficiently.
- 1.5 Construct and present a convincing argument.
- 1.6 Listen effectively.

2. Reading with Comprehension

Competencies: The student will be able to:
- 2.1 Restate the literal meaning of a text.
- 2.2 Distinguish fact from fiction.
- 2.3 Differentiate between subjective and objective points of view.
- 2.4 Summarize key concepts, make inferences, and draw conclusions.
- 2.5 Use appropriate reading strategies to analyze and understand different types of texts.
- 2.6 Apply information gained from a text in other contexts.

3. Critical Thinking/Abstract Reasoning

Competencies: The student will be able to
- 3.1 Differentiate between opinion and fact.
- 3.2 Identify the points of view held by one's self and others with respect to an issue.
- 3.3 Recognize assumptions used in reasoning.
- 3.4 Formulate clear, precise, and relevant questions.
- 3.5 Identify, assess, and interpret relevant information.
- 3.6 Analyze the implications and practical consequences of a line of reasoning.
- 3.7 Evaluate inferences, conclusions, and arguments for clarity, precision, relevance, accuracy, breadth, depth, significance, logic, and fairness.
- 3.8 Demonstrate a willingness to change one's opinion based on new evidence.
- 3.9 Apply critical thinking skills to the solution of complex problems.
- 3.10 Apply critical thinking skills to personal behavior and life decisions.

4. Quantitative Reasoning

Competencies:

Quantitative Method: Students will be able to:
- 4.1 Recognize mathematical problems in a variety of contexts, including their individual academic program, and apply mathematical skills in order to solve them.
- 4.2 Demonstrate the mathematical reasoning skills required in problem-solving and decision-making situations.
- 4.3 Use calculators and/or computers effectively/efficiently in problem solving.

4.4 Interpret results and draw conclusions.

4.5 Interpret mathematical models such as formulas, graphs, tables, and schematics, and draw inferences from them.

4.6 Communicate mathematical information symbolically, visually, numerically, and verbally.

4.7 Estimate and check answers to mathematical problems in order to determine reasonableness.

Quantitative Literacy: Students will be able to:

4.8 Demonstrate knowledge and interpretation of mathematical relationships, facts, concepts, and theories and show how they apply to their academic, professional, and personal lives.

4.9 Evaluate mathematical information and concepts.

4.10 Distinguish between the capabilities and limitations of mathematics and technology.

5. Scientific Reasoning

Competencies:

Scientific Method: Students will be able to:

5.1 Examine assumptions.

5.2 Make observations.

5.3 Propose a falsifiable hypothesis.

5.4 Design and execute an experiment.

5.5 Gather data.

5.6 Analyze data, test its validity, and use it to test a hypothesis.

5.7 Communicate results and make conclusions.

5.8 Pose and evaluate arguments.

Scientific Literacy: Students will be able to:

5.9 Describe natural phenomena.

5.10 Evaluate scientific information, concepts, and theories.

5.11 Identify scientific issues underlying local and national policies.

5.12 Distinguish between science and technology, including the capabilities and limitations of each.

5.13 Apply scientific information, concepts, and theories in a variety of contexts.

5.14 Demonstrate an understanding of the historical and contemporary impact of science on daily life.

6. Cultural Diversity

Competencies: The student will be able to:

6.1 Analyze the similarities and differences of a variety of world cultures.

6.2 Analyze the historical basis of current society.

6.3 Analyze the inter-connectedness of global societies.

7. The Nature & Value of the Fine Arts

Competencies: The student will be able to:

7.1 Demonstrate an understanding of the language of the arts.
7.2 Demonstrate knowledge of the history of the arts.
7.3 Demonstrate the ability to analyze and criticize a work of art.

8. Information Literacy

Competencies: The student will be able to:

8.1 Describe how information is organized, formatted, and stored.
8.2 Determine the nature, focus, and extent of the knowledge required.
8.3 Access needed resource material effectively and efficiently.
8.4 Evaluate information and its sources critically.
8.5 Extract, synthesize, and summarize information.
8.6 Incorporate selected information into his or her knowledge base.
8.7 Use information effectively to accomplish a specific purpose, as an individual or as a member of a group.
8.8 Demonstrate an understanding of the economic, legal, and ethical issues affecting the access and use of information, and adhere to institutional policies.

9. Technology Literacy

Competencies: The student will be able to:

9.1 Recognize the changing impact, capabilities, and limitations of technology on individuals and society.
9.2 Use technology and information legally, responsibly, and ethically.
9.3 Use current technology to communicate effectively with others in writing, presentations, and electronic communications.
9.4 Use technology tools to store, retrieve, evaluate, and synthesize information.

10. Ethical Behavior

Competencies: The student will be able to:

10.1 Identify ethical frameworks.
10.2 Analyze ethical frameworks.
10.3 Apply ethical frameworks to social situations and community issues.
10.4 Consider the value of different points of view.
10.5 Practice tolerance.
10.6 Practice personal integrity.

College of Southern Maryland

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Quality Improvement Process

The Quality Improvement Process (QIP) is the vehicle to achieve greater institutional effectiveness by providing a vision and focus for the talent and energy of the college community. Achieving institutional effectiveness begins with the CSM mission statement and the statement of purpose of the college and for each unit. From the statement of purpose, strategic and operational plans are derived. The most successful, colleges collect data about themselves, their peers, and the environment on a regular basis and then act on them in an agile fashion. Decisions about institutional priorities and action timelines are made as units identify and implement appropriate plans. Ideally, departments/division work links to institutional work. Results from assessments of the basic unit operations and services flow to budget decisions and into new rounds of planning.

The Quality Improvement Council (QIC), consisting of representatives from all major areas and levels of organization within the College of Southern Maryland, helps to stimulate and monitor quality improvement efforts. Planning and assessment at the college is viewed as the shared responsibility of instructional and non-instructional personnel. There are several components of the QIP at CSM: Planning, both strategic and operational: assessment, including the assessment of student learning outcomes and administrative processes; and process improvement. To address each of these areas, the Quality Improvement Council (QIC) has three supporting sub-committees: College Strategic Planning Team (SPT), College Assessment Team (CAT), and College Innovation Team (CIT). These groups regularly review the planning and assessment results of the college from a "global" and strategic level and guide the college on all matters of planning and assessment.

The committee is chaired by the president of the college. Individuals from all areas of the college comprise the membership of the QIC, including the vice president of each college division and at least two designees from each of those divisions. The academic areas have both department chair and faculty representation.

Student Surveys

Assessment findings are consistently used to drive improvement and innovation. Teaching effectiveness of full- and part-time faculty is measured routinely. Faculty members receive student evaluations, both summative and formative, through both the general education survey and the Instructor Evaluation Questionnaire (IEQ). The results of the IEQs are reported to the faculty member and the division chair and are used for improving instruction, as well as to reinforce current practice. The evaluation results are one factor considered for an instructor's promotion or tenure status. A recent pilot program of the IDEA Center Student Ratings of Instruction Survey began in Spring 2011, and full implementation of this survey will be considered at the completion of the pilot program. The Community College Survey of Student Engagement (CCSSE) results, which are collected every other year, indicate CSM students perceive a better than normal emphasis on general education coursework, and graduate follow-up surveys demonstrate high levels of satisfaction with job and transfer preparation, as well as with general education.

In Spring 2011, CSM credit students were invited to complete the biennial CSM Student Satisfaction Survey. The survey was developed to measure key intended outcomes as identified within the assessment plans of the functional units of the college as part of the assessment component of the Quality Improvement Process. The goal of the survey is to provide units with results that can be used to inform decision making and target improvement efforts. The survey, first administered in Spring 2009, is conducted biennially in spring terms of odd-numbered years

as a complement to the Community College Survey of Student Engagement (CCSSE) which is administered in spring terms of even-numbered years.

Student Learning Outcomes and Curriculum Assessment

Much of the direct evidence that student learning assessment information is used to improve teaching and learning is found in the work of the academic divisions of the college, as well as the academic committees. Assessment measures and methods are determined, assessment results are reported, and recommendations are developed accordingly. In 2010, the college instituted a Curriculum and Instruction Committee which reports to the Learning Council. Each Academic Division is represented on the Curriculum and Instruction Committee; the committee is chaired by the Associate Vice President of Academic Affairs. The Learning Council consist of the Vice Presidents of each campus, Vice President of Student and Instructional Support Services, and representatives from academic and support services divisions; the Council is chaired by the Vice President of Academic Affairs.

One of the charges of the Learning Council and it's sub-committees is to ensure academic program integrity through an effective Student Learning Outcomes Plan, which has been under development during the 2010-11 academic year. Additional changed in 2010-11 included the development of the Core Learning Area approach to student outcomes assessment. The Core Learning Areas for all CSM students have been developed and a plan for assessing the outcomes associated with each Core Learning Area is nearing completion.

In addition, the Division of Academic Affairs has re-instituted an Academic Program Review plan, requiring a large-scale review of each program every five years; twenty program reviews were completed during the 2010-11 academic year under this revitalized plan.

While these new approaches to assessment have been under development, existing assessment approaches have not been abandoned. General Education measures continue. For each course, faculty documents the general education competencies they believe are taught with emphasis therein. Additionally, a master syllabus for each general education course has been developed that specifies the particular skills and categories of knowledge (from the list of 72 that appears in the college catalogue) that students can expect to be given the opportunity to practice or acquire in the course.

Indirect evidence of the assessment of general education competencies builds on a long tradition of assessment of the college's general education program. Acting on behalf of the General Education Committee, the Planning, Institutional Effectiveness, and Research (PIER) Department administers surveys to measure the program's success. Results enable faculty to determine deficiencies in any course or program and thereby address them. Several divisions (e.g., Biology and Physical Sciences; Business, Economics, and Legal Studies; Languages and Literature) use the results of these surveys in order to make adjustments to their general education courses or simply to verify that the general education outcomes are being met.

As students prepare to graduate from CSM they are asked to complete a General Education Survey. Graduates are asked whether they were exposed to the values, skills, and knowledge that faculty members believed they were teaching in their courses. The four surveys administered to the graduates, when combined, address all of the 72 general education competencies students are given opportunities to acquire. Student Learning Outcomes are also measured through ETS Proficiency Profile testing used to assess how much our students are learning and how we can improve our educational outcomes. This test assesses the four core skill areas of critical thinking, reading, writing, and mathematics.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

The College of Southern Maryland defines this competency, written and oral communication, as certain skills and knowledge contained in the domains of writing, speaking, listening, interpersonal communication, and computer literacy (from the CSM Catalog, pp. 48-49):

Domain	Skills Identified in General Education Statement
Writing	• write complete sentences, proofread and edit, punctuate, and spell in standard English • conceive ideas, select materials, and organize contents effectively for a purpose • choose style and contents appropriate to audience and purpose • write a unified, coherent academic essay, correct in structure and mechanics, which supports a clear, limited thesis • write a coherent research paper, including gathering information, taking notes, quoting, paraphrasing and summarizing accurately, and documenting sources properly
Speaking	• express needs and expectations clearly • ask and answer questions effectively • give clear directions • organize and present ideas and feelings in language appropriate to the situation and audience
Listening	• interpret, analyze, and evaluate spoken messages • identify the main and subordinate ideas in spoken messages • recognize the use and meaning of nonverbal messages • distinguish between informative and persuasive spoken messages • recognize when another does not receive or understand a spoken message • follow spoken instructions
Interpersonal Communication	• recognize and seek to resolve interpersonal conflicts • recognize cultural diversity • accurately describe another's point of view, even if it is different from one's own • behave appropriately in a variety of social situations • engage in constructive discussion

The Core Learning Area Coordinators have developed proposed revisions to these definitions (see next page) which is currently being vetted through the Learning Council structure as part of the development of the 2011-2016 Student Learning Outcomes Assessment Plan.

Institutional Core Learning Area Definitions

Domain	Definition	Skills

Oral Communication	Oral Communication is the ability to develop, express, adapt, and interpret verbal and nonverbal messages clearly in a variety of contexts.	Competency in this area is measured by the ability to: - Support arguments with evidence and sound reasoning - Organize messages effectively - Use language appropriate to the context - Choose nonverbal communication appropriate to the context - Articulate ideas clearly and coherently - Describe emotions clearly and coherently - Convey empathy - Analyze verbal and nonverbal messages - Demonstrate active listening - Adapt messages to the specific purpose and audience within a variety contexts
Written Communication	Written Communication is the development and expression of ideas in writing in many genres and styles for various purposes. Written communication requires invention of an idea, coherence of expression, attention to language and technical skill, and focus on the writing process.	Competency in this area is measured by the ability to: - Develop complex topics with a rhetorical purpose - Tailor the topic to the audience - Choose the most effective rhetorical modes - Arrange the text in a logical and purposeful way - Use transitions to provide textual cohesion - Construct paragraphs for rhetorical effect - Deploy the grammar and mechanics of standard written English - Use complex syntax and varied sentence structure - Use an appropriate and varied style and tone - Incorporate correctly cited source material - Edit for correctness - Revise for effectiveness

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Written and oral communication competencies are assessed at the institution, division, program, and course levels. Processes at each of these levels are detailed below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, written and oral communication is measured at the macro level through the general education graduate surveys and through the ETS proficiency profile, a nationally-normed test of general education knowledge and skills.

At the program level, assessment is carried out by academic divisions and by committee. Until 2010, the committees involved in this effort included the General Education Committee and the Program Outcomes Assessment Committee. Beginning in September 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

At the course level, assessment is carried out by faculty within academic divisions, and until 2010 was reported through the Course and Program Outcomes Assessment committee structure. Like the program level assessment, beginning in 2010, this committee work was

assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

Some examples of additional measures used to assess written and oral communication competency follow; program, division, or degree program in parentheses.
- Capstone Writing Exercise (History)
- GPA in Writing & Communication courses (Arts & Sciences, Accounting,
- Communications, Engineering Tech, Electronic Tech, English, History,
- Information Services Tech, Journalism, Management Development, and
- Paralegal)

D. Describe the results of the assessment work related to this competency.

Data from the assessment of the general education competencies are maintained in several places and are widely available. Assessment results on each of the competencies are available in the academic departments at the course and program levels, with the General Education Committee, and for some assessments, at the institutional research level. Individual responses to the general education graduate surveys are on a scale of 1-5 to each survey question (i.e. skills/value category statement) where 5 is the strongest rating. In the domain of **writing**, data indicate the following:

2007		2008		2009		2010	
N	Mean	N	Mean	N	Mean	N	Mean
181	4.47	132	4.52	162	4.68	125	4.57

In the domain of **speaking**, data indicate the following:

2007		2008		2009		2010	
N	Mean	N	Mean	N	Mean	N	Mean
179	4.31	132	4.36	161	4.51	124	4.52

At the program level, the general education surveys indicate the following programs rated the strongest and weakest in these domains (n>4):

Domain	Strongest Programs	Weakest Programs
Writing	Arts & Sciences General Studies	Business Administration Management Development
Speaking	Nursing General Studies	Business Administration Accounting

A statistically significant group of student first completed the ETS Proficiency Profile during the 2010-11 academic year. The abbreviated form of the Profile was administered and aggregate data has been provided to date (see next page), with an expectation of July 2011 delivery of disaggregated data that would allow for domain-specific analysis.

ETS Proficiency Profile Results: Academic Year 2010-11

Average Score - All Domains	445	Note: This result is consistent with results from 2008 and previous. Disaggregated data will have to be considered to understand more about the domain of *writing*.

Range of Total Score	400-497	
Standard Dev	21.515	Note: This standard deviation is higher than previous results and the national norm. This anomaly will be considered once the disaggregated data is obtained.
Number of Students Participating	201	Note: Substantial increase over 2009 and 2010, allowing for a statistically valid sample.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

The College of Southern Maryland defines this competency, scientific and quantitative reasoning, as certain skills and knowledge contained in the domains of mathematics, observation, reasoning, and natural/technological (from the CSM Catalog, pp. 48-49):

Domain	Skills Identified in General Education Statement
Mathematics	- perform mathematical operations accurately - make mathematical estimates and approximations to judge the reasonableness of results - interpret graphs, tables, and charts - understand mathematical information and relationships stated in words - utilize appropriate mathematical models to solve problems while recognizing the assumptions and limitations of the models
Observation	- conduct careful observations of objects and phenomena in nature, society, science, and art - select and use appropriate instruments to measure and observe objects and phenomena - describe their observations & measurements accurately using appropriate terms and units - interpret and draw appropriate conclusions based on their observations and measurements - evaluate the significance of the conclusions reached
Reasoning	- recognize valid and invalid reasoning - understand and use inductive and deductive reasoning - draw reasonable conclusions and information found in various sources - distinguish between fact, opinion, and inference - develop, present, and defend valid arguments - identify, define, evaluate, and solve problems - compare, contrast, and classify information and concepts - recognize cause and effect
Natural/ Technological	- understand methodologies of natural science - have a basic knowledge of local, national, and world geography - be familiar with how technology and human activities shape society and - the environment

The Core Learning Area Coordinators have developed proposed revisions to these definitions, which are currently being vetted through the Learning Council structure as part of the development of the 2011-2016 Student Learning Outcomes Assessment Plan:

Domain	Definition	Skills
Scientific Reasoning	Scientific Reasoning is the process of solving problems and learning about the world through	Competency in this area is measured by the ability to: - Evaluate reasoning as generally scientific or non-scientific - Explain the difference between scientific and non-scientific reasoning

	the analysis of quantitative and qualitative empirical data.	• Critique the degree of scientific validity in the reasoning applied to the collection and interpretation of data • Construct a valid hypothesis • Explain the difference between an hypothesis and a theory as the terms are used by scientists • Conclude whether a given set of data supports a particular hypothesis or theory
Quantitative Reasoning	Quantitative Reasoning addresses the conceptual understanding of numbers, the correct application of proportional reasoning, and the proper interpretation of various representations of statistical data.	Competency in this area is measured by the ability to: • Solve problems using mathematics that model real-world applications • Perform mental arithmetic to make informed decisions or demonstrate an outcome • Use proportional reasoning to describe quantitative relationships • Accurately estimate quantitative outcomes to determine the reasonableness of results • Analyze data using basic descriptive statistics • Communicate results numerically, graphically, symbolically, and in words • Construct arguments for and against results using numerical, graphical, and symbolic means where appropriate

B.   Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Quantitative Reasoning and Scientific Reasoning competencies are assessed at the institution, division, program, and course levels. Processes at each of these levels are detailed below.

C.   Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, quantitative reasoning is measured at the macro level through the general education graduate surveys and through the ETS proficiency profile, a nationally-normed test of general education knowledge and skills.

At the program level, assessment is carried out by academic divisions and by committee. Until 2010, the committees involved in this effort included the General Education Committee and the Program Outcomes Assessment Committee. Beginning in September 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

At the course level, assessment is carried out by faculty within academic divisions, and until 2010 was reported through the Course and Program Outcomes Assessment committee structure. Like the program level assessment, beginning in 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

D. Describe the results of the assessment work related to this competency.

Individual responses to the general education graduate surveys are on a scale of 1-5 to each survey question (i.e. skills/value category statement) where 5 is the strongest rating.
In the domain of **mathematical reasoning**, data indicate the following:

2007		2008		2009		2010	
N	Mean	N	Mean	N	Mean	N	Mean
184	4.28	132	4.36	162	4.49	124	4.45

At the program level, the general education surveys indicate the following programs rated the strongest and weakest in these domains (n>4):

Domain	Strongest Programs	Weakest Program
Mathematical Reasoning	Nursing Accounting	General Studies

As noted earlier, a statistically significant group of student first completed the ETS Proficiency Profile during the 2010-11 academic year. The abbreviated form of the Profile was administered and aggregate data has been provided to date (see below), with an expectation of July 2011 delivery of disaggregated data that would allow for domain-specific analysis in the area of quantitative reasoning. Total scores are included in Part I, Section I of this report.

III. Critical Analysis and Reasoning
A. Institution's definition of competency

As noted on the next page, the College of Southern Maryland defines the competency, critical analysis and reasoning, as certain skills and knowledge contained in the domains of learning and reasoning (from the CSM Catalog, pp. 48-49).

Domain	Skills Identified in General Education Statement
Learning	• set study goals and priorities to attain stated course objectives • plan for completion of both long-term and short-term assignments • prepare for different types of examinations or evaluations • adapt to a variety of methods of instruction
Reasoning	• recognize valid and invalid reasoning • understand and use inductive and deductive reasoning • draw reasonable conclusions and information found in various sources • distinguish between fact, opinion, and inference • develop, present, and defend valid arguments • identify, define, evaluate, and solve problems • compare, contrast, and classify information and concepts • recognize cause and effect

The Core Learning Area Coordinators have developed proposed revisions to these definitions, which are currently being vetted through the Learning Council structure as part of the development of the 2011-2016 Student Learning Outcomes Assessment Plan:

Domain	Definition	Skills
Critical Thinking	Critical Thinking is an intentional, reflective process used to make judgments and decisions through reasoning, analysis, evaluation, interpretation, and inference.	Competency in this area is measured by the ability to: • Judge the credibility of information through the analysis of evidence and counter-evidence • Formulate clear, precise, and relevant clarifying questions • Identify assumptions, values and biases • Develop a reasonable position • Defend a reasonable position • Analyze other points of view • Demonstrate a willingness to change perspective based on new evidence • Analyze the implications and consequences of decisions and judgments • Analyze how parts of a whole interact with each other to produce outcomes • Use self direction to monitor one's own thinking
Information Literacy	Information literacy is the ability to recognize a need for information and to use an efficient process to obtain reliable information that meets the need.	Competency in this area is measured by the ability to: • Recognize when one needs information • Formulate and implement a viable research strategy • Evaluate the sources of information encountered as well as the integrity of the information and to amend one's research strategy as needed • Use the information one finds effectively and efficiently • Recognize when one has enough information to satisfy the initial need • Use information responsibly, ethically, and legally • Assimilate the process used and the information gained into personal knowledge base

    B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Critical Analysis and Reasoning competencies are assessed at the institution, division, program, and course levels. Processes at each of these levels are detailed below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, quantitative reasoning is measured at the macro level through the general education graduate surveys and through the ETS proficiency profile, a nationally-normed test of general education knowledge and skills.

At the program level, assessment is carried out by academic divisions and by committee. Until 2010, the committees involved in this effort included the General Education Committee and the Program Outcomes Assessment Committee. Beginning in September 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

At the course level, assessment is carried out by faculty within academic divisions, and until 2010 was reported through the Course and Program Outcomes Assessment committee structure. Like the program level assessment, beginning in 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

D. Describe the results of the assessment work related to this competency.

Individual responses to the general education graduate surveys are on a scale of 1-5 to each survey question (i.e. skills/value category statement) where 5 is the strongest rating.
In the domain of reasoning, data indicate the following:

2007		2008		2009		2010	
N	Mean	N	Mean	N	Mean	N	Mean
173	4.41	132	4.45	156	4.57	119	4.5

At the program level, the general education surveys indicate the following programs rated the strongest and weakest in these domains (n>4):

Domain	Strongest Programs	Weakest Programs
Reasoning	Nursing Accounting	Business Administration

As noted earlier, a statistically significant group of student first completed the ETS Proficiency Profile during the 2010-11 academic year. The abbreviated form of the Profile was administered and aggregate data has been provided to date (see below), with an expectation of July 2011 delivery of disaggregated data that would allow for domain-specific analysis in the area of critical thinking. Total scores are included in Part I, Section I of this report.

IV. Technological Competency

A. Institution's definition of competency

The College of Southern Maryland defines this competency, technological, as certain skills and knowledge contained in the computer domain (from the CSM Catalog, pp. 48-49):

Domain	Skills Identified in General Education Statement
Computer	- describe the functions and application of a computer system - identify the major hardware components of a computer system - use microcomputer software programs

The Core Learning Area Coordinators have developed proposed revisions to these definitions, which are currently being vetted through the Learning Council structure as part of the development of the 2011-2016 Student Learning Outcomes Assessment Plan:

Domain	Definition	Skills
Technological Competency	Technological Competency is the ability of students to engage in activities that integrate instructional content and relevant technology skills. Effective integration means students select technology tools to obtain, analyze, synthesize and present information and ideas.	- Understand basic technological concepts - Recognize the changing impact, capabilities, and limitations of technology on individuals and society. - Use technology and information legally, responsibly, and ethically - Explain new technologies that are useful for communicating, managing information, solving problems, and carrying out daily tasks. - Use a variety of technology resources to communicate effectively - Use guidelines and etiquette for electronic communication - Construct meaning from information using technology - Create a quality technology based product

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Technological competency is assessed at the institution, division, program, and course levels. Processes at each of these levels are detailed below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, quantitative reasoning is measured at the macro level through the general education graduate surveys.

At the program level, assessment is carried out by academic divisions and by committee. Until 2010, the committees involved in this effort included the General Education Committee and the Program Outcomes Assessment Committee. Beginning in September 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

At the course level, assessment is carried out by faculty within academic divisions, and until 2010 was reported through the Course and Program Outcomes Assessment committee structure. Like the program level assessment, beginning in 2010, this committee work was assumed by the Learning Council, Curriculum and Instruction Committee, and the Core Learning Area Coordinators.

D. Describe the results of the assessment work related to this competency.

Individual responses to the general education graduate surveys are on a scale of 1-5 to each survey question (i.e. skills/value category statement) where 5 is the strongest rating.
In the domain of **computer**, data indicate the following:

2007		2008		2009		2010	
N	Mean	N	Mean	N	Mean	N	Mean
135	4.07	93	4.01	124	4.23	87	4.03

Individual responses to the general education graduate surveys are on a scale of 1-5 to each survey question (i.e. skills/value category statement) where 5 is the strongest rating.
In the domain of **natural/technological**, data indicate the following:

2007		2008		2009		2010	
N	Mean	N	Mean	N	Mean	N	Mean
173	4.06	132	4.11	153	4.37	114	4.28

At the program level, the general education surveys indicate the following programs rated the strongest and weakest in these domains (n>4):

Domain	Strongest Programs	Weakest Program
Natural/ Technoligical	General Studies Nursing	Accounting

Additional Competencies

V. Global Citizenship

A. Institution's definition of competency

Global citizenship is the ability to discern the interdependence of local and transnational political, social, economic and cultural networks.

Competency in this area is measured by the ability to:
- Evaluate the global impact of social, political, environmental and economic decisions made at local, regional, national and international levels.
- Demonstrate an appreciation of the similarities and differences in the customs, values and beliefs of one's own culture and the culture of others
- Recognize the value of diversity and the limitations of stereotyping

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Under the 2011-2016 Student Learning Outcomes Assessment Plan, the Global Citizenship competency will be assessed at the institution, division, program, and course levels. Processes at each of these levels are under development.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Under development.

D. Describe the results of the assessment work related to this competency.

No data available.

VI. Experiential Education

A. Institution's definition of competency

Experiential education is learning outside of the traditional classroom environment that encourages increased skills and competencies through active experimentation and direct experiences and reflection.

Competency in this area is measured by the ability to:
- Integrate knowledge, skills, and understanding derived from course content to practice
- Apply knowledge, skills, and understanding derived from course content to practice
- Discuss contributions of community agencies and businesses to the functioning of a community
- Utilize tools of reflection for increased self-awareness
- Articulate the mission, services, and organizational structure of non-profit or business entities.
- Apply analytical and problem solving skills to personal, social and professional issues and situations
- Express what it means to act ethically and responsibly as an individual in one's career and as a member of society

B. Indicate level(s) at which the competency is assessed

Under the 2011-2016 Student Learning Outcomes Assessment Plan, the Experiential Education competency will be assessed at the institution, division, program, and course levels. Processes at each of these levels are under development.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments) are under development.

D. Describe the results of the assessment work related to this competency.

No data available.

VII. Arts Appreciation

A. Institution's definition of competency

Arts appreciation is the ability to use reflective, visual, auditory, or kinesthetic   processes to participate in or recognize the value of literary and artistic creative expression; and to interpret what has been seen, read, heard or felt in the context of the aesthetic, cultural and historical importance of the arts.

Competency in this area is measured by the ability to:
- Engage in the creative process for the literary, performing and/or studio arts
- Communicate with clarity, sound reasoning, and understanding an appreciation of the creative process
- Articulate a critical interpretation of works in the literary, performing and/or studio arts
- Demonstrate knowledge of the aesthetic, cultural and historical facets of the arts
- Explain the importance of the arts in the daily life of humans
- Express a knowledgeable personal response to literary, performing and/or studio arts that stimulates the emotions and engages the senses and the intellect

B. Indicate level(s) at which the competency is assessed

Under the 2011-2016 Student Learning Outcomes Assessment Plan, the Arts Appreciation competency will be assessed at the institution, division, program, and course levels. Processes at each of these levels are under development.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments) are under development.

D. Describe the results of the assessment work related to this competency.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

No data available.

The most substantive changes to student learning outcomes activities were reported in Part One, and include the following activities:

- Development of a 5-year Academic Assessment Plan (2011-2016)
- Development of Institutional Core Learning Areas and associated competencies

- Pilot adoption of the IDEA Student Ratings of Instruction course survey
- Re-vitalization of a more rigorous Academic Program Review process, that includes review by a content expert external to the college

In addition to these activities, CSM has recently added a position in the Division of Academic Affairs to coordinate academic assessments. This Coordinator of Academic Assessment began work in May, 2011, and will greatly assist in ensuring that assessment of the Core Learning Areas and program/course outcomes has been integrated throughout the college. The following examples provide additional concrete evidence of how assessment activities have impacted and/or improved teaching and learning:

Languages and Literature Division

- Data were collected from the students' use of PLATO in building writing skills, providing a foundation on which to construct a permanent, evolving database of composition exercises particularly helpful to our student writers.
- A new final to determine a student's passing or failure of ENG 0900, Developmental Writing, was adopted in the 2008 academic year. Evaluation data from this program resulted in further revisions and training for faculty.
- Based on data indicating lower persistence rates for students initially placing in developmental courses, individualized (modular) options to complete developmental reading and English were deployed and evaluated. Follow-on data supports continuation and expansion of these programs, as 92% of students are increasing initial placement in English and 80% are increasing their initial placement in reading.
- Based on data indicating lower persistence rates for students initially placing in developmental courses, students within certain placement test score ranges were offered the opportunity to enroll in ENG-1010T instead of developmental English (0900). ENG-1010T provides a unique opportunity for students whose placement test scores fall just below college-level placement; these students are provided with individual learning plans and additional assistance in critical areas. With these new pedagogical approaches, students in ENG-1010T have successfully completed course requirements, completing a valuable General Education course that serves as a pre-requisite to many other courses.

Mathematics, Physics and Engineering Division

- Based on data indicating lower persistence rates for students initially placing in developmental courses, individualized (modular) options to complete developmental mathematics were piloted and evaluated. Follow-on data supports continuation and expansion of these programs, targeting mathematics and basic algebra skills. A faculty member has been hired to focus solely on this implementation during AY2011-2012.

Course	% Students Improving Initial Placement	% Students Passing Follow-On Course
Mathematics	79%	50% (pass rate is 48 % for all students)
Algebra	75%	74% (pass rate is 68% for all students)

- Based on data indicating the importance of skill mastery in transitional algebra courses (MTH-1000 and MTH-1080), use of teaching assistants in certain sections of these courses was adopted and evaluated. Follow-on data supports continuation and expansion of these programs; funds are being sought to allow for continuation and expansion.
- Based on data indicating significantly higher withdrawal rates in online mathematics courses, use of teaching assistants in certain online sections of these courses was adopted and evaluated. Follow-on data supports continuation and expansion of these programs; funds are being sought to allow for continuation and expansion.
- Based on data indicating completion of the mathematics sequence as a substantial barrier to graduation, efforts are underway to re-design the math sequence and curriculum.
- Course level data indicated that students were not achieving the desired level of mastery in the skill of interpreting graphs, tables, and charts. An experiment that studies the calculation of constants such as pi was added to the curriculum of online physics sections for the purpose of increasing the student mastery of this skill. Data is being collected and analyzed to determine impacts of adding this activity.

Business, Technology and Industrial Studies Division

- Based on mathematics proficiency data from accounting program students, math prerequisites placed on Principles of Accounting I to improve student success. Results show marked improvements in GPA and lowering of failure/withdrawal rates.
- Based on mathematics proficiency data from economics students, math, English, and reading prerequisites were placed on gateway course ECN 1015 (Introduction to Business in a Market Economy) to improve students' chances for success. Results show marked improvements in GPA and lowering of failure/withdrawal rates.

Biological and Physical Sciences Division

- Course level data indicated that students were not achieving the desired level of mastery in the skill of interpreting graphs, tables, and charts. An experiment that studies diffusion using decalcified chicken eggs was added to the curriculum for BIO 1040L for the purpose of increasing the student mastery of this skill. Data is being collected and analyzed to determine impacts of adding this activity.

Health Sciences Division

- Based on data collected regarding successful program completion as compared to entering ACT and SAT score, admission criteria were adjusted to an ACT of 20 or higher or an SAT composite score of 950 for creative reading and math. Course failure rates have shown decreases since these changes took place.
- Based on faculty input data, when nursing faculty accorded students' results of ATI testing midules a weight of 15% of the students' grades in the final course in the nuring program, nursing students noted that students were more motivated to take the testing modules more seriously; ATI and certification exam performance improved as a result.
- Based on data regarding reasons for non-completion of Nursing programs, an outreach Coordinator was hired to provide support necessary for preclinical nursing students' successful program completion. Completion rates have shown improvement since hiring the Outreach Coordinator.
- Course exams being evaluated with new Scantron machine and related software, providing statistics for advanced test analysis; faculty adjusting curricula, teaching methods, and improving clarity of exam questions in response to data collected using this advanced test analysis.

Community College of Baltimore County

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

The Community College of Baltimore County (CCBC) celebrates learning and is committed to ensuring that our students grow as learners, develop a passion for life-long learning and use what they have learned to benefit our community. Therefore learning outcomes assessment has been a major emphasis of the college and is prominent in the college's strategic plan.

To guide this process the college has a Learning Outcomes Assessment Advisory Board (LOAAB) comprised of faculty and administrators from all disciplines at CCBC and includes representatives from Student Advising and Student Services, who are implementing their own process and learning outcome assessment projects. This Board, along with assistance from the Planning, Research, and Evaluation Office, reviews the results from all General Education Assessments and works with the college's Outcomes Associate and GeneRal Education Assessment Teams (GREAT) Coordinator to help faculty and student services staff determine what changes need to occur to further enhance student learning. At this level results from Learning Outcomes Assessment (LOA) Projects, GREAT Projects, institutional survey results, and the results from standardized tests are brought together into a broader picture of how programs and courses need to be changed. In addition to curriculum changes that have resulted from particular LOA projects, the results from this review process contribute to the creation of professional development workshops. These workshops are provided to assist faculty with areas of student performance that need improvement such as global awareness and inclusion of culturally responsive teaching techniques. All assessment projects at CCBC follow the same five-stage model:

> Stage 1: Design and Propose a Learning Outcomes Assessment Project
> Stage 2: Implement the Design and Collect and Analyze the Data
> Stage 3: Redesign the Course to Improve Student Learning
> Stage 4: Implement Course/Program Revisions and Reassess Student Learning
> Stage 5: Analyze and Report Final Results

During the four years since the last SLOAR report, CCBC has conducted program reviews, course level assessments and institutional level assessments. In addition to course level and general education assessment, the college supports 8-10 program reviews each year. These projects involve the collection of

student work to provide direct evidence of the degree to which students are meeting their course and program level outcomes.

The goal of program review is to determine a program's strengths and weaknesses and provide direction when improvements are needed. Degree programs are assessed at least once every five years. Program level assessment examines the cumulative results of a sequence of courses, and may include the use of capstone courses, critiques, portfolios, certification exams, real-life simulations, and internships. Program assessments must meet several standards, including measurable outcomes and external validation. Program learning outcomes for every program are included in the college catalog, which is available on-line. The Program Review process is designed to assess those measurable outcomes. Subsequent recommendations have led to a range of improvements in the use of portfolio assessment as well as the use of software packages, standardized tests, internships, work projects and other means to verify that students have mastered program requirements.

Course level assessments are conducted on all high impact courses, which are courses with high enrollments. Each year several new courses begin an assessment project. The goal of this assessment is to create a plan for improving student learning. Over the past four years, a variety of courses have participated in this assessment activity, ranging from Criminal Justice 202 to Spanish 101. Project leaders design a common instrument which is disseminated to all sections, including courses offered via the web. The results are utilized to target specific areas that may be challenging for students, then interventions are implemented and the data collection process proceeds again. Course level assessments have been utilized to make significant gains in the success of students.

General education assessment takes on a different form from the course level assessment. General education assessment is based on standardized course-embedded written assignments. All courses that are classified as general education must participate. Written projects are assessed on six criteria: content, communication, critical thinking, technology, cultural appreciation, and independent learning. Each course must design a rubric to correspond with the assignment. The assignment is graded by two independent scorers. The assignments are scored on a 1 to 6 scale with one being the lowest score and 6 the highest. The majority of courses receive mean scores in the three to four range. Some of the results from these projects are provided in the data section for the different competencies.

In addition to course level assessment, CCBC has conducted a variety of institutional level assessments such as the Measure of Academic Proficiency and Progress (MAPP) (See Appendix A for results) and the Community College Survey of Student Engagement (CCSSE). The MAPP was conducted in the Fall of 2008 and assesses critical thinking, college-level reading, writing and mathematics skills. This assessment was administered to students enrolled in English 101 and Health 101 during the Fall 2008 semester. The findings indicate that in the areas of critical thinking and mathematics CCBC students performed similarly to other community college students. In the areas of reading and writing CCBC students obtained slightly lower scores than those at other community colleges.

CCBC has participated in the CCSSE and the Community College Survey of Faculty Engagement for the past seven years. These surveys are conducted every two years. The student component is administered to a randomly selected group of students while the faculty portion is distributed to all faculty members. In 2009, the Vice President of Instruction implemented Pedagogy Projects across all schools to focus on some of the areas that students responded were lacking in their relationship with the college. The 2010 CCSSE results showed an increase in four of the five benchmarks. These results confirmed the successful impact of the Pedagogy Projects on student engagement. Each year, the Dean of Instruction for Curriculum and Assessment publishes a report, which summarizes all assessment activities and results. This report is shared with the Board of Trustees and all members of the college community.

I. Written and Oral Communication

A. Institution's definition of competency

For a course to be approved and designated as a General Education offering it must meet <u>all</u> seven of the General Education criteria. For the purposes of this report each criterion will be discussed separately under each of the identified competencies. In addition to these general criteria, there are specific distribution requirements in English Composition, Speech Communication, Biological and Physical Sciences, and Mathematics that all students must complete. Students enrolled in transfer programs must also complete three credits in Information Technology. The definitions for these categories and the criteria that a course must meet to be approved as a General Education course in each of these categories are available at http://ccbcmd.edu/loa/genedindex.html.

Criterion II: "Prepare students to communicate effectively using written and oral or signed communication skills." English composition courses provide students with communication knowledge and skills appropriate to various writing situations, including intellectual inquiry and academic research.

Upon successfully completing a sequence of **two three-credit courses** in **English Composition**, students will be able to:
1. write about specific topics for specific audiences and purposes;
2. use a recursive writing process that includes: developing information, organizing, drafting, revising, editing, and proofreading;
3. apply the principles of academic inquiry, including: identifying issues, formulating questions, finding relevant information, and incorporating information in their own writing using summary, paraphrase, and quotation;
4. conduct research using both print and electronic sources;
5. develop a clear thesis statement;
6. develop appropriate, adequate, unified, and coherent support for a thesis statement;
7. apply advanced conceptual skills: formulation, analysis, synthesis, and evaluation;
8. use a variety of rhetorical modes and strategies to develop essays;
9. document the use of print and electronic sources;
10. use the conventions of standard written U.S. English;
11. read sophisticated texts (that is, texts that do not include the kinds of outlines, headings, review questions, and highlight boxes that are frequently found in textbooks; examples of such texts include autobiographies, biographies, dramas, essays, fiction, nature or scientific writings, poetry, and public speeches) in order to understand meaning, nuance, and implications;
12. identify the "voice" (or "voices") that is (or are) speaking in a sophisticated text, the implied and/or intended audience for that text, and the purpose, goal, or significance of that text; and
13. for a sophisticated text, discuss the structure, the assumptions, the imagery, the language, the rhetorical devises, the biases, the purpose, and the meaning.

Upon successfully completing a general education course in **Communication**, students will be able to:

1. explain the components of the communication and perception process;
2. demonstrate effective speaking and listening techniques in a variety of settings;
3. design messages suitable in form and delivery for various audiences and purposes;

4. analyze the variables that influence communication, including culture, gender, nonverbal settings and symbols;
5. apply appropriate conflict resolution skills to interpersonal relationships;
6. apply technology in the design and delivery of messages;
7. collaborate effectively to achieve group objectives;
8. apply effective response skills in impromptu communication situations;
9. write effectively using standard written U.S. English in conjunction with visual and aural communication principles;
10. analyze how intra-personal communication, self-concept and perception of others are developed and how they affect human communication;
11. explain the highly personal nature of language and its effect on communication;
12. apply effective communication techniques to relationship development and maintenance; and
13. differentiate the ethical dimensions of communication.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

In order to document student learning in the CCBC General Education program and to gather evidence related to the overall effectiveness of this program, the General Education Review Board designed a comprehensive assessment model that has been in effect since 2001. All of the general education competencies are assessed at the course level via the GREAT Project and at the program level as an assessment for the General Education Program via a standardized test. Indirect measures are used to gather information at the institutional level. The student sample that is used for the standardized test is a representative selection of students enrolled in general education courses, and thus this is considered an institution-level assessment. In a similar vein, all students enrolled in general education courses participate in the GREAT Project, and therefore can also be considered an institution-level assessment. The GREAT results are aggregated across courses and disciplines to provide an institutional view of students' strengths and weaknesses and become the basis for developing strategies to improve student learning. **The same technique is utilized in assessing each of the competencies.**

B. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

CCBC utilizes a mixed methods approach to evaluate the competencies and effective learning. At the course level Common Graded Assignments are assessed, which utilize course-specific rubrics. At the institutional level a standardized assessment tool, the Measure of Academic Proficiency and Progress (MAPP) is utilized. In addition to these direct assessment methods, CCBC also utilizes indirect methods, which consist of a variety of surveys that are administered on a routine basis. More information about how these methods are used is provided below.

GREAT Project/Common Graded Assignments are assessments designed by teams of faculty representing each general education discipline. The GREATs have developed a faculty-approved list of assignments and scoring rubrics for each discipline area, which are then incorporated into all sections of designated courses each semester. At the end of the fall and spring semesters, a random sample of these assignments is collected and scored by trained faculty. The feedback from these assignments provides valuable information about the degree to which students are achieving each of the General Education Program Outcomes and provides direction for curricular changes. Every general education course is assessed at least once every three years. Data is shared with faculty and administrators on a regular basis. This process has been institutionalized and is working well to assess the General Education Program Outcomes at the course level.

The Measure of Academic Proficiency and Progress (recently renamed the Proficiency Profile), is a standardized assessment instrument created by the College Board and the Educational Testing Service. It is a measure of college-level reading, mathematics, writing, and critical thinking in the context of the humanities, social sciences, and natural sciences. The test is designed for colleges and universities to assess their general education outcomes, so they may improve the quality of instruction and learning. It focuses on the academic skills developed through general education courses, rather than on the knowledge acquired about the subjects taught in these courses. This test is administered every four to five years to a wide range of CCBC students. The sample typically consists of new students and students in the middle of their academic careers.

Indirect Measures - Indirect measures of the general education program include items such as the Graduate Follow-up Survey, annual survey of current students, surveys of students who do not return to CCBC, the Employer Feedback Survey, and a variety of transfer measures obtained from public four-year institutions where many CCBC students transfer. These tools provide indirect feedback regarding student satisfaction with the general education program. In addition, the College reviews the results from the Community College Survey of Student Engagement (CCSSE) and uses those results to identify areas that need improvement. Recommendations for changes to pedagogy are implemented for general education courses as well as non-general education courses.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The general education assessment project is conducted every semester with different courses participating each term. The Written and Oral Communication competency is assessed in every project. Below is a table that provides the mean scores that were obtained for a variety of courses assessing written, oral, and/or signed communication skills in one semester. Each course has a rubric that was developed specifically for that course, but all rubrics follow the same template. Each assignment is scored from 1 to 6 with 1 indicating that the report has numerous errors and six meaning that the report goes above and beyond all of the necessary/required components of the assignments. Based on the findings, the mean scores in these courses ranged from a 3.08 in English 102 to 4.10 in Spanish 101. Scores in the area of three to four indicate that students had most/all of the required items (4.0), but may have been missing one or more key elements (3.0). A mean score of 4.0 and higher indicates good performance.

Subject	Written, Oral, and/or Signed Communication Skills Mean Scores
English 101	3.3
English 102	3.1
Speech Communication 101	3.6
Spanish 101	4.1
French 101	3.9

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Criterion VI: "Provide the experiences that will allow students to become independent learners, the skills to analyze their strengths and weaknesses as learners and the knowledge to accomplish the tasks involved in learning." Note that this competency is assessed in all disciplines, but for the purpose of this report we are pulling out the definitions and data from the Biological, Physical and Mathematical Sciences courses.

The biological and physical sciences examine living systems and the physical universe. They introduce students to a variety of methods used to collect, interpret, and apply scientific data, and to an understanding of the relationship between scientific theory and application. Mathematics courses provide students with numerical, analytical, statistical, and problem-solving skills. The minimum expectation in this category is one course (minimum 3 credit hours) at or above the level of college algebra.

Upon successfully completing a general education course in the **Biological or Physical Sciences**, students will be able to:

1. apply the fundamental principles, concepts, vocabulary, and methods essential for the acquisition of knowledge basic to the science;
2. apply the scientific method, independently and collaboratively, in order to acquire, analyze and use information for purposes of inquiry, critical thinking and problem-solving;
3. apply mathematics to derive or explain concepts and/or data;
4. identify, analyze, evaluate, and use sources of scientific information;
5. discuss the role of technology in scientific research;
6. apply technology in scientific research; and
7. discuss the effect of the sciences on the individual, society, and the environment.

Upon successfully completing a general education course in **Mathematics,** students will be able to:

1. analyze, interpret, and evaluate quantitative information;
2. express mathematical information in writing and speaking and/or signing;
3. identify, analyze, and use sources of mathematical information;
4. apply technology in mathematics;
5. discuss the worldwide historical and technological development of mathematics;
6. apply mathematics to other disciplines of learning; and
7. apply mathematics to everyday experience.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
All competencies are assessed at the same level. See question 1B for a detailed description.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
The methods and measures that are utilized are the same for all competencies. See question 1C for a detailed description.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Scientific Reasoning was assessed in the Math and Sciences courses and scored in the critical thinking category. The results indicate that most of these courses obtained mean scores of 4.0 and higher with Environmental Science obtaining a score of 5.16. Courses such as Physics 101, Chemistry 107, and Biology 110 obtained relatively lower than desired mean scores. The Math 163 GREAT Project rubric is provided in Appendix C.

Course	Critical Thinking Mean Scores*
Mathematics 111	4.2
Mathematics 125	4.4
Mathematics 131	4.1
Mathematics 132	3.9
Mathematics 133	4.9
Mathematics 135	4.4
Mathematics 153	3.0
Mathematics 163	3.3
Physics 101	2.7
Chemistry 107	2.6
Chemistry 124	4.9
Environmental Science 101	3.8
Environmental Science 102	5.2
Biology 110	2.6

*Mean scores range from 1 to 6: 1 indicating that the report has numerous errors and six meaning that the report has above and beyond all of the necessary/required components of the assignments.

III. Critical Analysis and Reasoning
A. Institution's definition of competency

Criterion III: "Provide a variety of learning experiences that encourage students, independently and in collaboration with others, to use those fundamental principles and methods to acquire, analyze, and use information for purposes of inquiry, critical thinking, problem-solving, and creative expression in a diverse environment."

Upon successfully completing a general education course in **Social and Behavioral Science**, students will be able to:

1. analyze and apply methods of collecting, analyzing, interpreting, and presenting quantitative data;
2. identify and analyze the role of data in evaluating alternatives and making decisions;
3. identify ethical issues relevant to the discipline; and
4. analyze the relevance of religion, race, class, gender, and ethnicity to the economic, social and political life of the United States and the world as appropriate to the discipline.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
All competencies are assessed at the same level. See question 1B for a detailed description.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
The methods and measures that are utilized are the same for all competencies. See question 1C for a detailed description.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.
   Critical thinking is assessed in all projects. The results of courses in the social and behavioral sciences and arts and humanities disciplines are depicted below. The results indicate high scores in Interpreter Preparation but lower than desired scores in History 101.

Subject	Critical Thinking*
Anthropology 101	4.2
Geography 102	3.5
History 101	2.9
Interpreter Preparation 101	4.8
Psychology 101	3.1
Sociology 101	3.3
Women Studies 101	3.7

*Mean scores range from 1 to 6: 1 indicating that the report has numerous errors and six meaning that the report has above and beyond all of the necessary/required components of the assignments.

In addition to the GREAT Projects a sample of students were assessed on their critical thinking skills by utilizing the standardized MAPP test. The findings indicate that CCBC students completing the test in 2008 performed similarly when compared to other community college students.

Categories	Scale	CCBC 2001 Mean Academic Profile Score (N=924)	CCBC 2004 Academic Profile Score (N=1,191)	CCBC Fall 2008 MAPP Score (N=1,715)	2008 Community Colleges (N=58,033)
Critical Thinking	100-130	108	113	109	110

IV. Technological Competency
   A. Institution's definition of competency

   Criterion IV: "Prepare students to adapt to change, including the increasing integration of information technology in all fields of knowledge and expression."

Upon successfully completing a general education course in **Information Literacy/Technology**, students will be able to:
   1. define basic computer terminology;
   2. describe the history and development of computers and other related technology;
   3. identify the types and functions of hardware commonly used to store data and retrieve information;

4. identify the types and functions of software commonly used to format, access and manipulate information;
5. explain how computers and other related technologies impact individual lives as well as society as a whole;
6. discuss the capabilities and limitations of computer technology;
7. utilize computers and other related technology to solve complex problems;
8. demonstrate how computer technology can be used as a learning medium; and
9. assess information retrieved through computer technology.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
   All competencies are assessed at the same level. See question 1B for a detailed description.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
   The methods and measures that are utilized are the same for all competencies. See question 1C for a detailed description.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.
   Technological competency is assessed via the GREAT Project in the "technology as a learning tool" category. A review of some of the projects that have participated revealed mean scores ranging from 2.7 in History 101 to 4.5 in Sociology 101.

Subject	Technology as a Learning Tool Mean Scores*
History 101	2.7
Psychology 101	3.9
Sociology 101	4.5
Computer Information Systems 120	2.8
Environmental Science 101	3.8
Economics 201	3.9

*Mean scores range from 1 to 6: 1 indicates that the report has numerous errors and six means that the report has above and beyond all of the necessary/required components of the assignments.

Additional Competencies
Because institutional mission and goals differ, institutions may wish to report on assessment activities beyond the four major competency areas. However, this is not mandatory; institutions may report on up to three additional competencies.

V. *(Cultural Appreciation)*

   A. Institution's definition of competency

   Criterion V: "Provide students with the knowledge and skills to understand themselves and others from various cultural, social, aesthetic, political, and environmental perspectives."

Upon successfully completing a general education **Diversity** course, students will be able to:
1. explain the fundamental values and traditions of diverse groups;
2. describe important factors that influence interactions within and among diverse groups;
3. identify problems that occur within and among diverse groups and explore possible solutions to them; and
4. compare and contrast one or more of the histories, mores, political ideologies, religions, literature, systems of government, artistic and technological achievements, or philosophies of diverse groups.

   B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
       All competencies are assessed at the same level. See question 1B for a detailed description.

   C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
       The methods and measures that are utilized are the same for all competencies. See question 1C for a detailed description.

   D. Describe the results of the assessment work related to this competency.
       Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.
       On the Common Graded Assignments the cultural appreciation category obtained mean scores ranging from 2.9 in Theatre 101 to 5.4 in Interpreter Preparation 101. Although it is difficult to compare across the different courses, the results suggest that Theatre 101 may want to develop interventions to address their low scores in this category.

Course	Cultural Appreciation Mean Scores*
English 101	3.6
English 102	3.7
English 201	4.2
French 101	4.3
Spanish 101	4.3
Spanish 102	4.4
Interpreter Preparation 101	5.4
Music 102	3.1
Theatre 101	2.9

*Mean scores range from 1 to 6: 1 indicating that the report has numerous errors and six meaning that the report has above and beyond all of the necessary/required components of the assignments.

VI. *(Content Knowledge)*

   A. Institution's definition of competency

Criterion I: "Introduce students to the fundamental principles, concepts, vocabulary, and methods essential for the acquisition of knowledge and skills basic to the field of study."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
All competencies are assessed at the same level. See question 1B for a detailed description.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
The methods and measures that are utilized are the same for all competencies. See question 1C for a detailed description.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.
The mean scores in content knowledge suggest that most students were approaching competency, which is evidenced by the mean scores of 3.0 and higher. The mean score of 3.0 in Math 153 indicates that some students did not master all of the essential components of the assignment, whereas in Interpreter Preparation 101, the mean score was 4.8.

Course	Content Knowledge Mean Scores*
English 101	3.7
English 102	3.6
Math 153	3.0
Math 163	4.1
Health 190	4.1
Recreation 101	3.1
Interpreter Prep 101	4.8
Psychology 101	3.3
Women Studies 101	3.7
Music 101	4.4
Music 102	3.5
Speech Communications 101	3.7
Theatre 101	3.6

*Mean scores range from 1 to 6: 1 indicating that the report has numerous errors and six meaning that the report has above and beyond all of the necessary/required components of the assignments.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

For over 10 years, assessment activities at CCBC have continued to evolve. Below is a depiction of the numerous assessment activities that have taken place in general education courses and the impact of their interventions on student learning. The data that is provided in this table are based on a variety of assessment measures ranging from multiple choice exams to written assignments.

General Education Course	Intervention Strategy	Pre-Intervention Scores	Post-Intervention Scores
CHEM 122	-Revision and improvement of laboratory design to address deficiencies	78% proficiency	100% proficiency
CHEM 108	-Revised and improved laboratory design to address deficiencies	68.7% proficiency	95.7% proficiency
HLTH 101	-Improved communication with students via Early Alert program, email contact, attendance monitoring and hands-on class activities	Mean score of 65.2	Mean score of 72.1
PEFT 101	-Adoption of common textbook -Software training for adjunct faculty -Additional class time dedicated to math skills	Mean score of 34.2 out of 50	Mean score of 35.2 out of 50
CINS 101	-Adoption of common textbook -Software training for adjunct faculty -Additional class time dedicated to math skills	Mean score of 69.5% on CLEP equivalency exam	Mean score of 70.96% on CLEP equivalency exam
BIOL 110	-Adoption of a college-wide textbook -Creation of a teacher's handbook -Expanded offerings of non-majors' course on the Essex campus -Mentoring of adjunct faculty	Mean score of 50%	Mean score of 55%
SOCL 101	-Implementation of research project and short paper to ensure consistent student exposure to these assignments	Students scored below the 60% pass rate on pre and post tests.	Students scored below the 60% pass rate on pre and post tests. (Further intervention strategies are being explored.)
PSYC 101	-Students earning a D or F on an exam required to take a study skills questionnaire -Students earning a D or F on a second exam required to meet with the faculty member to discuss study skills strategies before student would be permitted to take	Possible Score of 50 for each campus: Mean score:37.97	Possible Score of 50 for each campus: Mean score:40.25

General Education Course	Intervention Strategy	Pre-Intervention Scores	Post-Intervention Scores
	another exam.		
ENGL 101	-Improved thesis development -Additional grammar instruction focusing on run-on sentences, sentence fragments and verb errors	Mean score of 23.79	Mean score of 24.75
SPCM 101	-Textbook review and common adoption -Ongoing involvement with learning communities -Adoption of Culturally Responsive Instruction -Production of student examples for class demonstration -Increased communication with and development of adjunct faculty members -Review of Common Course Outline -Increased communication between faculty teaching SPCM 101 on all CCBC campuses	2003-2004 pre-test mean score: 16.96 Post-test mean score: 18.73	2007 Pre-test score: 16.52 Post-test means score: 17.57
ARTS 104	-Faculty member discussion of effective techniques in the classroom -Examples of quality assignments provided to adjunct instructors -Enhanced engagement of African-American students through projects based on culturally relevant pieces of art	Mean Scores: All campuses: 65%	Mean Scores: Catonsville: 69% Dundalk: 84% Essex: 74%
PHIL 101	-Students provided instructions for composing a three page essay explaining and defending their position on one of six philosophical topics. -LOA combined with GREATS analysis (use of same grading rubric) -Students were permitted rewrites after receiving graded comments	Fall 2006: Scores stable or lower in all rubric categories compared to fall 2005	Fall 2008: Increase in critical thinking, content knowledge and technology as a learning tool
CRJU/SOCL 202	-Addition of an interactive CD in lieu of a traditional textbook -Production of 25 Tegrity lectures with integrated Power Point presentations -Mandatory advisory conferences with faculty members for any student with a grade D or below in the fourth week of class	26% increase in mean scores from pre-test administered in the same semester	Scores were steady at a 26% increase in mean scores from pre-test administered in the same semester
WMST 101	-Revision of the Common Course Outline -Creation of glossary of terms for use by all instructors -Clarification of language on LOA (no content changes) -Talking points, bibliographies, and media sources disseminated to faculty to address areas such as reproductive rights,	-Higher mean scores on essays in 2007 than 2009 administration	-Similar mean scores in 2009 in fill-in-the-blank and short answer questions.

General Education Course	Intervention Strategy	Pre-Intervention Scores	Post-Intervention Scores
	feminization of poverty, and sexual harassment. - An examination copy of *An Introduction to Women's Studies: Gender in a Transnational World* and *Women Across Cultures* (both published by McGraw-Hill) was distributed to each women's studies faculty member. - Co-curricular events coordinated with student life on each campus		
PHYS 101	- Implemented interventions focusing on course objectives, the questions about which had a mean score of <50% on the post test - Placed more emphasis on objectives during class time - Added ½ hr. exercises on objectives in lab - Created take-home exercises on objectives – Starting fall 2012, will require an A or B in math prerequisite courses	Completed Fall 2010	

Appendix A: MAPP Assessment Scores

The table below displays the results from the standardized tests that have been conducted for the last several years. The name of the test changed from the Academic Profile to MAPP in 2008. However, the test has assessed the same abilities.

Categories	Scale	CCBC 2001 Mean Academic Profile Score (N=924)	CCBC 2004 Academic Profile Score (N=1,191)	CCBC Fall 2008 MAPP Score (N=1,715)	2008 Community Colleges (N=58,033)
Total Score	400-500	435	435	432	440
Skills Subscores					
Critical Thinking	100-130	108	113	109	110
Reading	100-130	116	111	114	117
Writing	100-130	113	112	112	114
Mathematics	100-130	111	116	111	112
Context-based subscores					
Humanities	100-130	113	113	112	114
Social Sciences	100-130	111	108	111	113
Natural Sciences	100-130	112	112	112	114

Appendix B: Two Examples of GREATs Intervention Plans

Foreign Language Intervention Plan

Background

Results of the GREATs Assessments for Foreign Language (FL) courses were very successful. For the assessment methodology where a mean score of 4.0 is considered ideal, the Common Graded Assignments for Foreign Language in July 2010 showed:

- In the category of "content knowledge," the Foreign Languages Arabic, French, Japanese and Spanish all had mean scores of 4.0 or higher.
- In communication, Spanish obtained a mean score of 4.0.
- Arabic, French and Spanish had mean scores of 4.0 or higher in "cultural appreciation."
- The category of independent thinking showed mean scores of 4.0 and higher in several Foreign Languages.
- Chinese and Italian showed the lowest mean scores and lowest participation (partly due to enrollment).

<u>Intervention Plan</u>

The intervention plan for Foreign Language is focused on improving the use and quality of writing assignments in FL courses. Specific actions are:

- Ensure that at least one writing assignment is included in each FL course offering, at all levels and in all languages. Provide FL faculty with the common GREATs assignment to be used as a model each semester.
- Provide a copy of the Writing within the Discipline (WIDAC) guide/handbook for writing to all FL faculty. Ensure faculty incorporate the WIDAC guide descriptions of FL levels into writing assignments.
- Prepare and distribute a guidance document (memo or email) to all full time and part time FL faculty explaining GREATs and outlining the requirements of a general education course. This guidance will include definitions of a general education diversity course and its importance for instructors. This guidance will be distributed each semester.
- Provide individual mentoring and training to instructors on the use of writing assignments and WIDAC guidance where necessary.
- Incorporate a session on writing in FL courses in the next FL faculty retreat in June 2011. Arrange for a member of English faculty to attend and give general guidance on papers.
- Review the GREATs rubric for optimum application for FL courses and obtain feedback from the Coordinator, Nancy Bogage

Spring 2010 SPCM 101 GREATs Intervention Plan

The purpose of the GREATs assignment is to measure the student's understanding and application of general education goals and standards in general education courses. The standards include the following: content knowledge, written, oral and/or signed communication skills, technology as a learning tool, cultural appreciation and independent learning skills. The Communication Arts Department's Spring 2010 GREATs assignment focused on the "Fundamentals of Communication" or SPCM 101 course. The assignment that was supported by the full-time staff was a speech evaluation essay to measure general education goals and expected outcomes.

A total of 368 (or 25 percent) random selected SPCM 101 student essays were evaluated and the mean results are as follows: content/knowledge (3.7), communication (3.6), critical thinking (3.5), technology as a learning tool (3.4), cultural appreciation (3.5) and independent thinking (3.6). The SPCM 101 students scored slightly below the goal of "4.0". The score of "4.0" demonstrates a solid presence of student performance. The highest possible score was 6.0.

Suggestions to enhance the next SPCM 101 GREATS assignment includes: clarity of general education objectives such as technology as a learning tool and cultural appreciation. Also, it was noted that the assignment questions and rubric should be clearer or transparent for students and faculty to interpret.

Communication Arts Intervention Plan for future GREATS SPCM 101 assessment:
- Speech Lab – A speech lab was implemented on the Essex campus to help students with understanding the principles of communication including the integration of technology. The Catonsville campus will launch a speech lab to address general education requirements in the Spring 2011 semester.
- Create faculty resource book – A faculty resource book will be developed to provide instructors with exercises to meet general education requirements. The general education objectives and

common course outline will be included in the faculty resource book. Cultural awareness activities will be included to achieve general education expectations.

- Provide mentoring and training to adjunct faculty – Meetings will be continually held with adjunct faculty to review general education requirements and common course objectives. Faculty will be observed to ensure general education requirements are applied in the SPCM 101 classes.
- Create a standard syllabus – Syllabi will be reviewed to ensure general education requirements and common course objectives are established. Assignments will be suggested to ensure general education requirements are met.
- Common course outline will be distributed to faculty in person and email as well as posted on the College's website and faculty resource book.
- Review SPCM 101 GREATS assignment – The general education assignment and rubric will be reviewed and edited for clarity to ensure that general education goals are met.

Appendix C: Math 163 Great Project Fall 2011

This project is designed to test your mathematical knowledge and skills, your communication skills, your critical thinking skills, your ability to use technology, and your independent learning skills.
Thus you must complete this project without help from any other person.
You must support your answer to questions in grammatically correct paragraphs.
You must supply illustrations when requested and use your graphing calculators and/or computers to provide graphs and illustrations.
Your mathematics must be correct and interpreted and explained correctly.
Your presentation must be neat and submitted on time in a folder.
You must submit two copies of your presentation. One copy must have your name on it and will be graded by your teacher.
The other copy must have your student ID number but **not your name** anywhere on the project.

The knowledge you will acquire from this project will allow you to see how this mathematical material has made our everyday life more convenient. You will be able to see how meteorologists can predict weather patterns, and where storms, etc. are predicted to go next. It also gives us a time frame of when the storm will be there as well.

- What tools do you think will be helpful to have in front of you when predicting weather patterns in the United States?

Suppose a cold front is passing through the United States at noon having a shape roughly like a parabola with its vertex at Des Moines Iowa and a stretch/shrink factor of $\frac{1}{20}$ if the independent variable is measured in hundreds of miles. See the figure below.

- What type of function are you working with?
- Is the leading coefficient positive or negative?

17
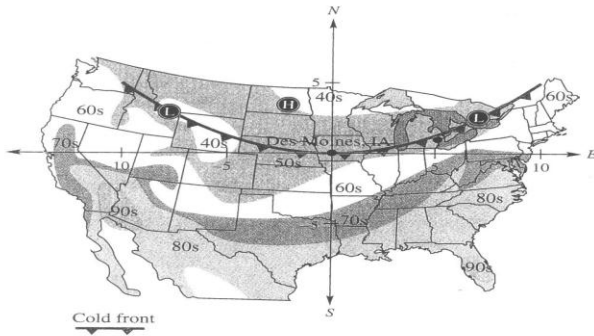
Cold front

1. Suppose an x-y axis is superimposed on the map with its origin at Des Moines, Iowa. Write the equation for the parabola that would represent the cold front. Let x be in hundreds of miles. Verify your equation on your graphing calculator.
   - How do you change 40mph for 4 hours to hundreds of miles?
2. If the cold front is moving south at 40 mph for 4 hours and retains its present shape, what would be the equation of its graph at that time?
   - What is the general rule for translating a parabola left and right?
3. Suppose that by midnight the vertex of the front has moved 250 miles south and 210 miles east of Des Moines, maintaining the same shape. Write the equation for the parabola that would represent the cold front at midnight. Let x be in hundreds of miles.
   - Using the quadratic function you previously used in problem #1, how would you modify that equation, to translate the graph vertically and horizontally in order to get the new path of the parabola in #3?
4. a) Draw a graph of the parabola at midnight on the x-y axis keeping Des Moines at the origin and label the location of Columbus, Memphis, and Louisville on the graph.
   Columbus, Ohio is 550 miles east and 80 miles south of Des Moines;
   Memphis, Tennessee is 190 miles east and 430 miles south of Des Moines; and
   Louisville, Kentucky is 420 miles east and 230 miles south of Des Moines.

   b) Has the cold front reached any of the three cities? If so, which one(s)? Explain why or why not?

Appendix C continued: Math 163 Rubric

Gen. Ed. Criteria	6	5	4	3	2	1
	High					Low
Content Knowledge and/or Skills	Correct equation given in #1, #2, and #3 and all preliminary questions with detail above and beyond.	Correct equation given in #1, and #3, but #2 is incorrect and/or 1 preliminary question incorrect.	Correct equation is given in #1, #2 but #3 has one error and/or up to 2 preliminary questions incorrect.	Correct equation is given in #1, but #2 and #3 have one error each and/or up to 3 preliminary questions incorrect.	Correct equation in #1, but #2 and #3 are wrong and up to 3 preliminary questions incorrect.	All three equations are there but incorrect and 3 or more preliminary questions are incorrect.
Written, Oral, and/or Signed Communication Skills	Report is clearly, neatly and succinctly written with no spelling or grammatical errors.	Report is clearly and succinctly written with no more than two minor spelling or grammatical errors.	Report is clearly and succinctly written with no more than three minor spelling or grammatical errors.	Report is adequately written with no more than one major and no more than three minor spelling or grammatical errors.	Report is adequately written with no more than one major and numerous minor spelling or grammatical errors.	Report has more than one major grammatical error and written with numerous spelling errors.
Critical Thinking Skills	Converts 40 mph for 4 hours to distance and derives the correct equation for #2. Converts numbers correctly for "x" representing the number of hundreds of miles. Answers question 4b correctly with detailed explanation.	Converts 40 mph for 4 hours to distance but has an error in conversion of x-values to the number of hundreds of miles. Answers question 4b correctly.	Converts 40 mph for 4 hours to distance but incorrectly scales the x-axis for #3. Answers question 4b correctly.	Converts 40 mph for 4 hours to distance but incorrectly scales the x-axis for #3 Answer to question 4 may or may not be correct.	Does not convert 40mph to distance. Graph in #3 does not use correct x-axis scale. Answer to 4b may or may not be incorrect.	Equation for #2 is there but incorrect. Graph for #3 incorrect. Answer to #4 may or may not be correct.

Gen. Ed. Criteria	6	5	4	3	2	1
	High					Low
Technology as a Learning Tool	Graph drawn correctly, and neatly (maybe even in color) in #4 in an appropriate window and scale and correct equation is given in #3.	Graph drawn correctly in #4 in an appropriate window and correct equation in #3.	Graph drawn correctly for #4 but an inappropriate scale is used. The correct equation is given in #3.	Graph drawn correctly in #4 is in an appropriate window but there is an error in the equation.	Does not properly apply manipulatives to the fundamental operations of arithmetic and/or there is an error in those manipulations.	Does not properly apply manipulatives to the fundamental operations of arithmetic and/or there is an error in those manipulations. Equation is incorrect.
Cultural Appreciation	Cities in #4 located and labeled neatly and correctly on the graph.	One of the cities in #4 was located incorrectly on the graph.	One of the cities in #4 was located incorrectly on the graph and not neatly labeled.	Two of the cities in #4 were located incorrectly on the graph.	Two of the cities in #4 were located incorrectly on the graph and not neatly labeled.	More than 2 cities were labeled but were not located correctly on the graph.
Independent Learning Skills	Correct equation of cold front after moving south 4 hours at 40 mph. Correct answer to 4b with detailed explanation for each city.	Correct equation for cold front in #2. One correct answer in 4b. Explanation touched on most main points.	Correct equation for cold front in #2. No explanation to correct answers in part 4b or 1 incorrect answer.	Correct equation for cold front in #2. More than one incorrect answer in 4b.	An error in equation for cold front in #2 but 4b was answered correctly according to their equation.	Incorrect equation in #2. #4b was answered but no explanation.

Frederick Community College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Frederick Community College

Section 1: Summary of Assessment Activities

Frederick Community College (FCC) rigorously assesses Middle States General Education
Competencies (Standard (St) 12) using a three-year Outcomes Assessment Cycle. FCC targets high-
enrollment general education courses which require students to demonstrate core competencies.
Rubrics, practical assessments, and outcomes-linked exams are used to assess student performance
and ensure that students acquire the knowledge, skills, and abilities needed to succeed throughout
their academic career. In spring 2011, FCC implemented a rigorous program-level student learning
outcomes assessment process as part of a new academic program review of all existing programs.
Over the next five years, every academic program will assess student learning outcomes and relevant
general education core competencies. Faculty will determine which General Education
Competencies correlate and enhance outcomes in each program, and Program Managers will
compare data and design additional course-level assessments to improve general education
competency. This rigorous new Academic Program Review process will help the College modify
existing general education curricula, career and transfer programs, and educational practices and
ensure that the College is fulfilling its institutional mission, meeting its intuitional goals, and
exceeding higher education expectations (St14).

The Frederick Community College Course-Level Outcomes Assessment Cycle

Academic departments choose a high-enrollment course to undergo a rigorous assessment for a three-
year cycle. High-enrollment general education courses or courses that require general education
competency are assessed. FCC completed the first three-year assessment cycle in 2009, and will
complete the second cycle in spring 2012. To this date, all departments have submitted their
assessment data and are on track based on the established timeline. During the first cycle faculty
assessed:

- Health Education students' *Critical Thinking Competency,*
- Fundamentals of Speech students' *Critical Thinking Competency,*
- General Psychology students' *Critical Thinking Competency,*
- Computer Information Systems students' *Technological Competency*,
- English Composition students' *Written Communication and Critical Thinking Competency,*
- Pre-calculus students' *Quantitative Reasoning and Critical Thinking Competency*, and
- Introduction to Biology students' *Scientific Reasoning and Critical Thinking Competency*.

The College's 2nd Cycle (fall 2009-spring 2012) was made even more rigorous, requiring that
departments assess two St 12 competencies simultaneously. During the 2nd Cycle faculty assessed:

- Introduction Nursing and Introduction Surgical Nursing students' *Quantitative Reasoning and
  Technological Competency,*

- Introduction to Art, Introduction to Drama, Introduction to Music, Drawing I, and Fundamentals of Music, Developmental Reading, and Survey of US History students' *Critical Thinking and Written and Oral Communication* Competency,
- Computer Information Systems students*' Critical Thinking* and *Technological Competency*.
- US History students' *Critical Thinking and Written Communication Competency.*
- Developmental Reading student's *Critical Thinking and Written Communication Competency.*
- Anatomy and Physiology students*' Scientific Reasoning and Critical Thinking Competency*, and
- Career Math students' *Quantitative Reasoning and Critical Thinking Competency*.

Frederick Community College Program Assessment

In fall 2009, faculty experimented with methods of assessing programs in a way that was concise and rigorous. During this pilot phase (2009-2010), faculty directly and indirectly assessed the Culinary Arts, Police Science, Bioprocessing, Emergency Management, Construction Management, Nuclear Medicine, and Nursing programs.

Faculty recommended that FCC implement a more comprehensive, systematic program review process in fall 2010. Over 5-years every academic program will assess the program's student learning outcomes, evaluate the program based on quantitative performance measures, conduct a rigorous self study, and host external reviewer visits. General education competencies will be mapped throughout each program, and program managers will work with other faculty to implement multiple new course-level assessments. This will lead to even more assessment projects as curricula are modified. Each year, 15 programs will rigorously assess student learning. Program managers will have the option of creating an ongoing assessment project to measure student competency each year.

Additional Assessment Activities

Since 2009 FCC faculty have worked on additional assessment projects outside of the three year cycle. The Assessment and Research Department (A&R) enhanced resources available for all faculty and launched ongoing learning assessment in all Chemistry 101 (*Scientific Reasoning)*, all Developmental Math (*Quantitative Reasoning*), and all Developmental Writing (*Written and Oral Communication Competency*). A&R created and piloted a unique assessment toolkit for measuring Cultural Competence. In addition, qualitative data from faculty's Annual Self-Assessment Reports were collected to capture how full-time faculty use embedded assessment techniques in the classroom. A&R collected hundreds of rubrics for a newly designed intranet site, enhanced its bi-semester newsletter, and coordinated a new Annual Assessment Showcase to share annual assessment results with faculty, students, administrators, and support staff. In fall 2009 A&R developed a customized new online assessment webportal to easily and accurately capture any type of assessment data. The webportal has dramatically improved collection of large-scale quantitative data for assessment of general education competencies.

Institutional Effectiveness

Institutional effectiveness (St7) is measured in many different areas at FCC. The College conducted an internal evaluation of how each academic and support area helps the College fulfill its mission, goals, and accreditation standards in preparation for the Periodic Review Report (PRR) due in June 2011. The College has conducted several assessment projects for the student support services in assessing and improving institutional effectiveness. So far the Tutoring Center (2010, *various competencies*), Writing Center (2010, *College-level Communication*), Student Engagement – (2010, *Co-Curricular events' impact on Critical Thinking*), Library Services (2010, *Critical*

thinking/research competency), Multicultural Student Services (Written and Oral Communication) have all assessed student learning in various competencies as well as have collected indirect survey based data to improve institutional effectiveness. Currently, the College is developing an Institutional Effectiveness Plan with emphasis on assessment of student learning for the student support services.

Institutional Assessment Leadership at Frederick Community College

The College has a clearly defined leadership structure designed to maximize faculty's support. The Assessment Coordinator assists with outcomes assessment projects, meets with faculty, processes data, and authors concise analysis reports. The Executive Director of Assessment and Research, AVP of Arts and Sciences, and the Vice President of Learning provide departmental guidance and oversight of assessment projects. The Outcomes Assessment Council (consisting of ten full-time faculty, A&R, AVP of Arts and Sciences, and AVP of Teaching and Learning meet monthly to discuss project status and results. The new Program Review Support Team (consisting of all A&R specialists and AVP of Arts) supports individual program managers.

I. Written and Oral Communication

A. Frederick Community College's Definition: *Written and Oral Communication.*

College-Level Written and Oral Communication requires that FCC students demonstrate analytical reading, effective writing, informational literacy, public speaking, and critical reading skills necessary for ongoing academic, workplace, and personal success.

B. Competency Assessment Levels (Departments, Programs, Courses)

Written and Oral Communication competencies are assessed at the course level. Since 2007 FCC has assessed:

- English Composition students (2006-2009): EN101 was one of the first courses to be assessed at the College. It is a graduation requirement and all degree seeking students take the course.
- Developmental Reading students (2009-2011): Students increasingly need remedial reading education to be academically successful. The course introduces students to general education outcomes they will develop in college-level courses.
- Developmental Writing students (2009-2011): A webportal was developed to effectively capture assessment data at the conclusion of the developmental course and helped the ENG department determine if students are ready to take college-level courses.
- US History students (2009-2012): Faculty focused on students' ability to demonstrate writing competency.
- Introduction to Art, Introduction to Drama, Introduction to Music, Drawing I, and Fundamentals of Music students (2009-2011): Adopted a departmental assessment tool and incorporated a standardized post-artistic event assignment.
- Forensic Science and Communication courses for Police Science students (2010): Developed a rubric to assess effective verbal and non-verbal communication based on a capstone project.

C. Processes which evaluate competency (Methods, Measures, Instruments)

The most common method to assess this competency is course writing and presentation assignments. Many of these assignments assess written and oral communication and critical thinking outcomes simultaneously, minimizing workload and encouraging students to incorporate critical thinking into

effective communication. Several rubrics were designed to assess writing and reading competencies. Oral competency was assessed by using a rubric that was applied to videotaped and lived presentations. FCC uses a 4-point competency scale for all General Education Rubrics. In 2009 FCC began using its new web portal to assess this competency, a function of the new College's assessment webportal. Hundreds of students are assessed with this tool every semester.

D. FCC Written and Oral Communication Assessment Results

English 101 faculty noticed that many of the 309 students assessed in the 1st Cycle showed low competency levels on several reading communication outcomes. Students in courses with instructors not trained in special "Critical Reading" instruction performed significantly lower in all college-level communication outcomes compared to students whose instructors had the training. FCC now requires English 101 instructors attend professional development in critical reading instruction and additional resources for adjunct faculty were offered to improve student learning. Results were shared with Developmental English faculty and influenced the English Department's 2nd Assessment Outcomes Cycle project.

FCC implemented an initiative to "link" developmental reading students to general education courses to address lack of critical reading skills based on English 101 assessment findings. English faculty assessed 736 Developmental Reading students in the 2nd cycle. Initial results indicated that about 60% of Developmental Reading completers still have significant difficulty with written communication outcomes at the end of the semester, and "linked" courses had almost identical competency scores. After making changes to instruction and additional professional development for faculty, that figure has improved to 52%. Faculty also noticed that "linked" students are now succeeding in their Developmental Reading courses at a higher rate (+9%) than traditional students. Assessment will be concluded in fall 2011 and additional changes will be made based on final data.

In fall 2009, the College began assessing Developmental Writing students based on EN101 1st Cycle results. This summative assessment measures student learning on specific college-level general education outcomes. One hundred twenty one (121) students were assessed, with about 50% (n=61) performing at "Approaching" or "Full" competence on all outcomes, 48% (n=58) struggling with one or two competencies, and 2% (n=2) scored "Insufficient" on all outcomes. After modifying instruction and assessing an additional 225 students, 2010 results were almost identical. In an effort to improve the assessment further, an English faculty member is conducting a rigorous analysis of the project as part of a Kellogg Foundation project, and is expected to make additional recommendations by fall 2011.

FCC History instructors' 2nd Cycle assessment of college-level communication (2009-2010) has highlighted challenges in how non-English instructors help students improve student writing. One hundred and four (104) HI201 students have been assessed so far. In order to improve student's critical thinking and writing skills, as well as establish better expectations for adjunct faculty, the department has used text results to facilitate several professional development workshops. In addition, Full time faculty are in the process of developing a new FCC Textual Writing and Analysis Expectations Document to help all History instructors and students improve their written competence and improve critical thinking skills. Assessment will conclude in fall 2011 and full time faculty will make additional recommendations based on final assessment findings.

The Communications, Humanities, and Arts department incorporated assessment of Written and Oral communication into almost all of their introductory courses for the 2nd Cycle. The department piloted FCC's online assessment web-portal, utilizing an interactive rubric to capture competency data on a randomly selected 89 students in spring 2010. The result revealed 69% of all students assessed

demonstrated "Full" or "Outstanding" comprehension of all college-level written communications outcomes. The Department decided that, while this was an acceptable rate, it would be preferable that students perform at a higher competence level. Faculty emphasized the importance of this project to students and the department required that the assessment be included in additional courses. Starting in fall 2010 almost all faculty teaching Introduction to Art, Introduction to Drama, Introduction to Music, Drawing I, and Fundamentals of Music assessed their students for this competency, (n=137 in F2010). Students throughout the department are now required to view multiple artistic performances, shows, or artistic showcases and write and/or present a detailed artistic analysis papers.   After this major departmental change, 76% of students demonstrated "Full" or "Outstanding" comprehension of all Communication student learning outcomes. Assessment will be concluded in fall 2011 and final recommendations will be made based on results.

The Police Science program piloted an assessment of oral communication competency in spring 2010, assessing 22 students for college-level communication. Only 23% (n=5) of all students nearing completion of the program were able to effectively demonstrate competency on all communication skills. After reviewing the data, the program manager conducted a program-wide audit of all courses, classes, and training offered by the College and the MD police academy. It was determined that college-level communication was not being effectively taught throughout the program. As a result, the program's entire curriculum was modified to afford students more time to practice public presentation and report writing, and they now receive additional weeks in public speaking classes. Additional data will be captured for this program in the 1st year of FCC's new Academic Program Review.

II. Scientific and Quantitative Reasoning

A. Frederick Community College's Definition: *Scientific and Quantitative Reasoning.*

College-Level Scientific Reasoning requires that FCC students demonstrate an understanding of scientific processes occurring every day throughout the world and universe and apply scientific knowledge and experimental methods to effect positive change throughout society.

College-Level Quantitative Reasoning requires that FCC students demonstrate the ability to identify mathematical problems, interpret data, synthesize problems with multiple solutions, and apply mathematical principles to arrive at accurate conclusions.

B. Competency Assessment Levels (Departments, Programs, Courses)

FCC assesses Scientific Reasoning and Quantitative Reasoning at the course level. Assessments incorporate General Education student learning outcomes into assessment methodology, measurement tools, and reporting structures. From fall 2007-spring 2011, FCC assessed:

- Pre-calculus students (2006-2009). Pre-calculus, which many students take to transfer, was one of the first high-enrollment general education courses to be assessed.
- Career Math Students (2009-2011). This high enrollment general education course requires students to solve problems using many quantitative reasoning skills. The math department has encountered numerous problems organizing their 2nd cycle assessment, and so their initial goal to assess all students has not been met.
- Developmental Math (Algebra II) students (2009-2011). Faculty developed, piloted, and implemented this ongoing assessment. Sixty-one percent of students who enroll at FCC are placed into this course, so it is important for the College to assess these students' quantitative reasoning competency at the conclusion of their developmental sequence.
- Introduction to Biology students (2006-2009). BI101 was the first high-enrollment general education science course as well as an Allied Health requirement to be assessed at FCC.
- Anatomy and Physiology students (2009-2011). Anatomy and Physiology faculty studied 1st Cycle Biology 101 assessment results and determined that additional assessment was needed in addition to high-enrollment pre-requisite courses for Allied Health programs.
- Chemistry 101 students (2010-2011). Faculty developed, piloted, and implemented an ongoing CH101 assessment project in fall 2010. Faculty use an outcomes-linked standardized final exam to measure students' scientific reasoning competency level.
- Introduction to Nursing and Introduction Surgical Nursing students (2009-2011). These high-enrollment courses require students to demonstrate high general education competency in specific quantitative reasoning areas.

C. Processes which evaluate competency (Methods, Measures, Instruments)

Scientific Reasoning and Quantitative Reasoning are most often assessed using standardized outcomes-linked exams. Faculty created exam questions linked to specific outcomes, then linked each question to a general education competency, and finally linked each question to the chapter where material from the question is learned by students. Data is captured using scantron forms, with likert-scale infused practical exams, or with FCC's interactive assessment web-portal. Hundreds of Developmental Math (MA82) and Career Math (MA103) students' assessment data is now recorded and analyzed each semester. A&R then conducts item analysis to determine student competency level and individual outcomes mastery. For Biology 101 assessment project, an outcomes-rubric was utilized, but faculty found this method confusing, work-intensive, hard to enforce among adjuncts. The rubric was revised and students were reassessed using standardized departmental exams.

The Allied Health Department assesses quantitative reasoning using an interactive online assessment tool (Math Mastery). The tool measures how accurately 1st and 2nd year nursing students (Introduction to Nursing and Introduction to Surgical Nursing) demonstrate competence on quantitative reasoning problems. Students are required to take and pass the assessment before being admitted to the Nursing program.

D. FCC Scientific and Quantitative Reasoning Assessment Results

FCC instructors made numerous changes to science courses based on 1st Cycle results. Biology 101 faculty had difficulty implementing the 2006 assessment tool as was explained above. The data that was captured highlighted challenges that students had when asked to demonstrate scientific reasoning competence. Fifty-nine percent of the Biology students assessed (N=198) were unable to demonstrate college-level competency on a majority of the Scientific Reasoning Outcomes assessed. For some outcomes over 70% of students scored a "1" or "2" competency level on a 4-point scale. As a result, the department implemented numerous changes. Biology 101 was changed so that the

scientific method and reasoning skills were introduced immediately at the start of the semester in lecture and lab. Two additional lab activities were created so that students could practice solving practical scientific problems, both administered immediately after the midterm to provide additional reinforcement. Departmental standardized exams were implemented in all Biology 101 sections, each with questions linked to specific outcomes. Faculty planned to assess scientific reasoning in other Biology courses to make sure that Biology 101 changes helped students.

During the 2nd Cycle, the department has already doubled the number of students assessed (N=518) and competency scores have improved. Biology students demonstrate competence on 69% of all scientific reasoning-linked questions on a standardized final exam. Of the top 10 outcomes that students had low scores, only 3 of them were linked to scientific reasoning. The assessment result was shared in the department and instructional changes have been made to other Biology courses (BI55, BI103, and BI104). The department also developed student-focus groups and is working on graphical hands on activities such as body atlas and podcast reasoning activities. Additional changes will be implemented to help students once the project concludes in fall 2011.

In 2010, Science faculty requested that all Chemistry (CH) 101 courses also be assessed on an ongoing basis independently of FCC's 3-year cycle. Faculty developed a standardized problem-solving practical exam, which required students (N=93) to work step by step through complex chemistry problems rather than answer multiple choice questions. Each question was linked to a scientific reasoning competency using likert scales. Recent results indicated that students' performance was significantly higher for the sections with this intervention than the section without. Moreover, all full-time and adjunct CH instructors are establishing reliable internal standards and expectations of teaching scientific reasoning competency for every section.

From 2006-2009 the Math Department assessed Pre-Calculus students, focusing on four Quantitative Reasoning student learning outcomes (Numerical Reasoning, Symbolic Analysis, Graphical Analysis, and Verbalizing Mathematic Principles.) Results indicated that many of the students assessed had trouble effectively using and analyzing graphics. Faculty also learned from the assessment result that the more students worked together in small groups and participated in interactive "active learning" workshops, the higher their competence score on specific learning outcomes. As a result, the department instituted substantial changes to all Pre-Calculus courses and encouraged changes in all other math courses. Faculty significantly reduced the amount of time allotted for lecture and doubled the time that students have to work on problems in interactive small groups. A new student-oriented textbook was adopted and 40 interactive workshops were developed as well. Alternative assessment techniques were developed for multiple types learners and utilization of podcasting was implemented in all pre-calc sections to reinforce student learning in quantitative reasoning.

Developmental Math faculty also volunteered to assess their courses on an ongoing basis independently of the 2nd Cycle. About 61% of all students at FCC place into remedial math, so introducing quantitative reasoning student learning outcomes is increasingly important. Faculty developed a comprehensive standardized exam for use in all MA82 courses, with each question linked to specific quantitative learning targets covered. This problem-solving focused assessment let instructors determine the degree that students master the outcome presented in the question (0-4pts). So far, the department has collected assessment data on 1,007 students. Faculty have noticed that of the top 10 quantitative reasoning outcomes that students have the most difficulty with, 7 of them were covered extensively throughout the last part of the course. As a result faculty have developed workshops targeting each outcome and created learning exercises to reinforce essential quantitative reasoning skills. Developmental Math instructors used FCC's assessment webportal to capture data.

The Math Department had difficulty implementing Career Math's 2nd Cycle assessment. Due to communications problems, workload issues, and issues with assignment standardization only 47 students (about 20%) were assessed for the spring 2010 pilot, and no data was captured in fall 2010. The Math department's assessment representative, the department chair, and A&R created an action plan to re-launch this project. The Math department made major changes to the assessment instrument, created a mandatory student learning outcomes assessment project, targeted specific quantitative reasoning student learning outcomes to assess, and worked with A&R to create an interactive rubric on the College's assessment webportal to capture data. Still in spring 2011, communication issues within the department caused several adjuncts to not participate, significantly reducing their (n) students assessed. The department continues to learn from the challenges of its 2nd cycle project and is sharing their difficulties with other departments at Outcomes Assessment meetings.

In 2009, the Allied Health Department instituted mandatory "Math Mastery" quantitative reasoning assessment in all 1st and 2nd year nursing courses. Three hundred and seventeen (317) students in Introduction to Nursing and Introduction to Surgical Nursing have been assessed, with approximately 88% of all nursing students demonstrating mastery of all quantitative reasoning outcomes at 90% accuracy. As a result, the department developed a quantitative reasoning assistance DVD to help all 1st and 2nd year students in the nursing program. Students who struggle receive a direct intervention from faculty mentors and receive extra tutoring, study-time, and one-on-one mentoring. Assessment concludes in fall 2011, and additional recommendations will be made.

III. Critical Analysis and Reasoning

A. Frederick Community College's Definition: *Critical Thinking*

College-Level Critical Thinking requires that FCC students demonstrate how to (1) describe and differentiate between facts, opinions, and inferences, (2) analyze and interprets information from various sources, (3) recognize and develop alternative perspectives or solutions, (4) evaluates alternatives to make sound judgments, and (5) synthesizes academic knowledge with personal opinion and experiences to arrive at enhanced conclusions.

B. Competency Assessment Levels (Departments, Programs, Courses)

FCC assesses Critical Thinking at the course level. Faculty incorporate critical thinking into nearly all courses and programs, so critical thinking is also assessed using embedded outcomes assessment activities and assignments. Data from FCC's Annual Internal Self-Assessment Report routinely indicates that critical thinking is the most common competency assessed by faculty. Students have greater difficulty demonstrating critical thinking than any other competency assessed. From fall 2007-spring 2011, FCC assessed this competency in:

- Health Education students (2006-2009). This high-enrollment general education course was one of the first courses to be assessed at the College.
- Fundamentals of Speech students (2006-2009). This high-enrollment general education course attracts students from across multiple program disciplines.
- English 101 Students (2006-2009). This high-enrollment general education course is a major FCC graduation requirement. Students were assessed with writing competency.
- Pre-calculus students (2006-2009). The high enrollment course assessed overall critical thinking as part of a broader assessment of student's quantitative reasoning competency.
- General Psychology 101 students (2006-2009). Faculty focused on improving student's critical thinking skills in one of the College's highest enrollment general education courses.

- Introduction to Biology students (2006-2009). The course assessed Critical Thinking in conjunction with a broader assessment of student's Scientific Reasoning competency.
- Introduction to Art, Introduction to Drama, Introduction to Music, Drawing I, and Fundamentals of Music students (2009-2011). The department created a department-wide assessment of multiple critical thinking outcomes.
- Computer Information Systems students (2009-2011). Faculty learned from the 1st Cycle that students need to be critical thinkers to demonstrate technological competence and created a new project to assess computer competency.
- Developmental Reading Students (2009-2011). The English Department determined based on the previous assessment results that a central component of effective written and verbal communication was critical thinking. About 30% of FCC students place into developmental reading, it is extremely important to introduce them to critical thinking.
- Career Math students (2009-2011). Math faculty struggled implement this assessment for the 2nd Cycle (see above) but is hoping to fully assess students' critical thinking by the end of the assessment period.
- Survey of US History students (2009-2011). Faculty chose this high-enrollment General Education course to be assessed for critical thinking and written communication.
- Anatomy and Physiology students (2009-2011). This high enrollment course assessed critical thinking in conjunction with students Scientific Reasoning competency.

C. Processes which evaluate competency (Methods, Measures, Instruments)

Critical Thinking is assessed at FCC using a wide variety of methods, measures, and instruments. Faculty utilize language and competency levels from the official FCC General Education Critical Thinking rubric to create embedded assessments of student learning in individual courses. Then, the Critical Thinking rubric is modified to adapt to the course content.

The Math, Science, and Social Science, and Computing Business Technology Department each utilizes standardized exams to assess this competency, with certain questions specifically written to require students to think critically. These questions are linked to specific general education critical thinking student learning outcomes and multiple other variables so and item analysis is conducted to analyze the data.

In spring 2011, FCC initiated a new comprehensive Academic Program Review, which will require that all programs assess student learning at the Program level. Many of the programs' SLOs deal specifically with critical thinking and the College will be working to develop new methods and instruments to help assess this competency at the Program-Level.

D. FCC Critical Thinking Assessment Results

Fundamentals of Speech faculty learned greatly from the 1st Cycle and implemented many changes to the course. The speeches of 24 students were randomly selected out of 154 and all but one (96%) struggled with one or more critical thinking learning outcomes when articulating an argumentative speech. Data was significantly impacted by grading styles of different faculty and a new inter-reliability exercise for all Speech courses was implemented. In addition a new "Fusing Critical Thinking Into Persuasive Speech" resource packet was developed for students. Communications faculty also created an intranet site to disseminate information on strategies and techniques that help students with each outcome. Lastly, the instructors began recording every student's speech which could be shown to future students to help illustrate effective critical thinking techniques. All Speech instructors were also asked to complete professional development courses on teaching public speaking and critical thinking competence.

EN101 assessed 281 students' critical thinking competency in the 1st cycle. Randomly 20% (n=60) of the students' papers were selected for outcomes assessment analysis. Sixty-two percent (n=37) of students demonstrated full competence of all critical thinking learning outcomes from 2 of 3 instructors and only 27% (n=16) were rated as fully competent by all instructors. Students had the greatest difficulty using researched material to support a thesis. Faculty used this data as justification to pilot the department's new emphasis on "critical reading." Faculty shared data with developmental education instructors in an effort to target critical thinking even before arriving in EN101. Faculty worked within the General Education committee over several summers (07-09) to develop co-curricular critical thinking activities, assessment tools, and teaching resources. In addition, most EN101 faculty now assign activities for students to participate in multiple FCC co-curricular event that specifically deal with issues which enhance critical thinking.

Pre-calculus instructors assessed critical thinking during the 1st Cycle and noticed that it was one of the lowest scoring outcomes of the assignment. On average students scored at 2.61 on a 4 pt scale (Still Developing). After implementing minor changes to the course, students showed no significant change in their critical thinking competency level. As a result faculty participated in professional development on teaching critical thinking and the cognitive psychology. Faculty developed specific critical thinking infused workshops for students and several attended or presented at multiple national and state level critical thinking conferences over the last 5 years.

Psychology 101 students were assessed in the 1st Cycle using a critical thinking outcomes-linked final exam with 1,156 students were assessed. The results indicated that students demonstrated successfully answered about 73% of questions linked to specific critical thinking outcomes related to "application" and 67% of questions linked to "conceptualization." To improve performance, a team of three full-time Psychology faculty designed a remediation plan containing three course-wide assignments aimed at improving students ability to analyze and apply the theories learned in the course to enhance overall critical thinking. Faculty members participated in a critical thinking professional development course at the end of the assessment cycle. Scoring patterns remained unchanged at the end of the assessment. As a result psychology faculty are now required to assign at least two critical thinking projects a semester, which uses a departmental critical thinking rubric to capture data and develop strategies to improve student learning.

Assessing critical thinking was a small component of Biology 101's 1st cycle assessment. Faculty measured the ability to interpret information and apply critical skepticism of data and study authors. Data indicated that most Biology 101 (61%) students had trouble demonstrating competence with these outcomes, and that number actually increased dramatically after midterm assessment intervention. The department reorganized the critical thinking component of the assessment as well as the lab component of the course to emphasize critical thinking. At the end of the 1st cycle, the department implemented numerous changes (see above, scientific reasoning) and recommended to have critical thinking emphasized in all biology courses.

The College assessed Health Education students' critical thinking skills during the 1st cycle starting in 2006. Only one online section completed the pilot assessment (n=12 students). Faculty members met after the pilot and debated the values of utilizing a critical thinking rubric to enhance student learning. Thereafter, participation considerably improved (n= 68 total, including face to face sections) and faculty discovered that students had considerable trouble on multiple critical thinking outcomes, particularly synthesizing information and arriving at effective conclusions. Twenty percent of all students assessed had difficulty with more than one critical thinking indicator. As a result, faculty rewrote the assessment assignment to better explain expectations and infused all assignments with critical thinking vocabulary and outcomes-linked objectives. At the end of the

assessment, 20% of students were still scoring at "Developing Competency." However scores improved among remaining students on almost every other outcome assessed, especially *analyzing sources* and *relating research to course experiences*. The department continued to incorporate critical thinking language into multiple course and program assignments after the assessment.

For the College's 2nd Cycle, the History faculty emphasized critical thinking competency in its assessment project with assessing 104 students in History 201. The preliminary results have shown that students struggle considerably with all three critical thinking outcomes assessed, particularly with *analysis and evaluation*. Only 29% of students demonstrated expected competency on each outcome in spring 2010. In addition to course changes made based on written and verbal communication data, faculty assessment coordinators organized a panel of both full-time and adjunct history instructors to discuss critical thinking results and outlined expectations about college-level critical thinking assignments. Assessment concludes in fall 2011, and final recommendations will improve instruction in multiple history courses at FCC.

Almost all Introduction to Art, Introduction to Drama, Introduction to Music, Drawing I, and Fundamentals of Music assessed 226 students for the 2nd Cycle. The students for these courses were asked to attend an event and write a paper utilizing knowledge gained in their respective courses. Unlike other departments, faculty learned that their students demonstrated high critical thinking competency on all outcomes, only having trouble with synthesizing conclusions. The faculty have changed assessment organization and adopted FCC's new assessment webportal to capture student's critical thinking using a digitized general education critical thinking rubric. Faculty will conduct a day-long retreat at the end of summer 2011 to review the results and design activities to help students develop synthesis-specific general education outcomes.

Computer Information System (CIS) 101 faculty have assessed 238 students as part of the 2nd Cycle. So far, of the three critical thinking outcomes assessed, most students struggle to demonstrate competency on *recognizing and developing alternative solutions* (73%-61% competent). Faculty also noted that students taking CIS101 in spring semesters scored much higher than students taking it in the fall. As a result, the department has redesigned multiple assignments and infused problem solving exercises throughout the course that encourage students to evaluate the purchase of different software systems. Additional course changes will be made once assessment concludes in fall 2011. Faculty are already planning critical thinking assessments for numerous other CIS courses that are pre-requisite for programs participating in the new Academic Program Review.

Building on 1st Cycle results (06-09), the English department now conducts ongoing assessment of all developmental reading students' critical thinking competency at the conclusion of their course which resulted in assessment of 154 students since 2009. The average critical thinking competency level of all completing English 52 students during the pilot assessment were very low (developing). This is especially true when EN52 students were asked to *differentiate among facts, inferences and opinions* (1.9 average on a 4pt scale). The department shared the reports with faculty and asked that all of them continue to infuse critical thinking language into their courses, especially in "linked" courses. As a result, the average competency level on of critical thinking outcomes significantly increased, especially on "*differentiating...*". Faculty will make additional recommendations and changes once assessment concludes in fall 2011.

Five-hundred eighteen Anatomy and Physiology (A&P) students have been assessed in the 2nd cycle using an outcomes-linked critical thinking final exam. Faculty who analyzed pilot results noticed that students have significantly greater difficulty on critical thinking-linked questions compared to scientific reasoning questions. On average, a typical A&P student during the pilot and the 1st year of the assessment correctly answered 63% of their critical thinking outcome-linked questions and 69%

of their scientific reasoning outcome-linked questions. The department has made numerous instructional and curriculum changes based on assessment results so far, and students who take A&P are showing signs of slight improvement. In spring 2011, students correctly answered 65% of critical thinking linked questions and 72% of scientific reasoning linked questions. A&P faculty are working on many additional improvements to the course in summer 2011, planning student focus groups, study-hall workshops, and developing critical thinking podcasts and online exercises for all A&P faculty and students. Additional recommendations and changes to BI55, BI101, and BI103, and BI104 are expected when assessment is completed in fall 2011.

IV. Technological Competency

A. Frederick Community College's Definition: *Technological Competency*

College-level Technological Competence requires that FCC students demonstrate practical and intellectual understanding of software utilities and applications, operating systems, technical terminology, and ethical technology practices.

B. Competency Assessment Levels (Departments, Programs, Courses)

FCC assesses Technological Competency at the course level. Most courses which assess technological competence are high-enrollment general education courses in the Computing Business Technology department. Many general studies students take CIS 101, CIS 104, or CIS 106 to fulfill "Computer Literacy" graduation requirements. Many other courses incorporate embedded technological competency assessments, which are highlighted in the FCC Annual Faculty Self Assessment Report. Since 2007 FCC has assessed:

- Computer Information Systems 101 students (2006-2011). The College assessed all CIS 101 students in both the 1st and 2nd Cycle, targeting this high enrollment general education course which provides a technological foundation for many other courses. In the 2nd Cycle, all CIS 101 students were assessed.
- Introduction to Nursing and Introduction to Surgical Nursing students (2009-2011). In 2009, an outcomes based rubric was developed to help students master rapidly evolving medical technologies. All 1st and 2nd year nursing students are assessed using a general education rubric focusing on technological competence.

C. Processes which evaluate competency (Methods, Measures, Instruments)

Technological Competency is measured almost exclusively using an outcomes-linked rubric that was created in 2006. After the 1st Cycle, a new faculty coordinator completely changed existing teaching and assessment methodology in the course. All CIS101 assignments were redesigned to be more current and an updated version of the rubric was designed for a re-assessment in the 2nd Cycle.

The Allied Health and Wellness Department also measures technological competence using outcomes-linked rubrics which are modified to reflect the need to adapt to rapidly changing medical technology. The department worked with A&R to develop a rubric that measured students' ability to adapt to new functions, overall comfort level, effectively utilize multiple types of technology simultaneously, and understand the social, ethical, and legal issues related to using particular instruments.

D. FCC *"Closes the Loop"* Technological Competency Assessment Results (07-11)

The CIS course assessed 259 students during the 1st Outcomes Assessment Cycle (06-09). Problems with the assessment's methodology and implementation invalidated some assessment results. In the initial pilot phase, 51 assessments were discarded because the directions of the assessment confused students and only 4% (n=2) completed the assessment correctly. CIS faculty assessed a single student learning outcome, *integrating data from one application into another,* making minor changes to the standardized assignment that helped student learning (1.48 average student competency for fall 2007 compared to 3.40 average in fall2008, based on a 4pt competency scale). The department did not implement any major changes to the course at the conclusion of the assessment.

In 2009, at the start of the 2nd Cycle, the department made some administrative changes and designed a totally new and rigorous assessment of student learning outcomes. Before the assessment, the new coordinator completely rewrote the course, changed all syllabi to reflect up-to-date standards, and developed several assignments to "sequence" learning to improve student's technology competence throughout the course. These changes resulted in 261 students were assessed, and hundreds more will be by the end of the 2nd Cycle. Students are assessed throughout the course using rubrics which measure multiple student learning outcomes. Current results for two technological competence outcomes (*using software utilities* and *performing on-line research*) show that about 75% of students score at "Full Competency." Scores were slightly lower for "*understanding terminology and sound practices*" (66% Full Competence) and much lower in "*using software applications"* (48% Full Competence). Scores are particularly low whenever students are asked to work with spreadsheet software like Excel. The CIS101 coordinator has made major changes to the course throughout the assessment cycle such as implemented an advanced computer simulation program for students, created a pilot standardized CIS outcomes-linked exam, and organized multiple faculty assessment meetings. Faculty will make additional recommendations and changes to multiple CIS courses at the conclusion of the assessment in 2011 and will use data to lead a college-wide discussion on co-curricular assessment of technological competence.

The Allied Health and Wellness Department created a new technological competence outcomes rubric for 2nd Cycle assessment. So far, 111 nursing students have been assessed. Initially, the department attempted to conduct a "pre" and "post" assessment of student competency, but this led to problems in the pilot, with a few faculty inaccurately assessing students. The assessment coordinator shared this phenomenon with the Outcomes Assessment Council, which led to broad discussion among departments about different assessment methods. As a result the department changed their assessment methodology, using the rubric as a teaching tool *throughout* the course to establish outcomes expectations, and creating a summative assignment at the end of the clinical component of the course. All Nursing Faculty now participate in bi-annual inter-reliability workshops to ensure that students are accurately assessed using the rubric. Nursing instructors will make additional recommendations and changes once assessment concludes in fall 2011.

Section 3: Evolution of FCC Assessment Activities

Frederick Community College's Outcomes Assessment practices have rapidly evolved since 2007. FCC successfully completed its 1st three-year Outcomes Assessment Cycle in 2009 and is preparing to finish its 2nd Cycle, with final data collection in fall 2011 and recommendations for course/curricular changes scheduled for spring 2012.

Since the start of the 2nd Outcomes Assessment Cycle, faculty's interest in developing course and program assessment projects has increased significantly. Five out of seven academic departments lobbied the Assessment and Research Department for additional course level assessment tools and projects to be implemented *in addition to* official 2nd Cycle projects. Program faculty volunteered to practice in the program level assessment of multiple competencies and recommended that the College implement an even more enhanced assessment structure built around Academic Program Review. Multiple non-academic support areas such as Multicultural Student Services, the Office for Student Engagement, FCC Library Services, the Testing Center, and the Writing Center have piloted projects which attempt to directly measure how well student competency improves after receiving help from the respective departments. The Outcomes Assessment Council, the General Education Committee, the new First-Year Focus Committee, the Learning Leadership Council, the College's Board of Trustees, and individual department committees routinely discuss specific student competency findings and develop strategies to help improve competency and enhance our effectiveness as a learning college.

FCC is proud of its course-level assessment accomplishments. Continued interest in assessment led to the forming of a faculty committee in fall 2010 to create a new assessment model focused on a 5-year Academic Program Review cycle which was launched in spring 2011. Over five years, all Academic Programs offered at the College will conduct a rigorous program-level assessment, using direct and indirect data, of all of their students as part of a comprehensive review process. Faculty will establish ongoing assessments of numerous "gatekeeper" courses at the College, and several faculty have officially requested that their 2nd cycle assessments be continued beyond the three-year cycle due to their positive effect on student learning.

The assessment of student learning at FCC is a critical part of the institutions strategic plan, academic master plan, and day to day life of faculty and staff. FCC has a well established culture of assessment, with years of experience using outcomes assessment results to effect positive changes in its courses, programs, and support areas. Frederick Community College's new Academic Program Review will involve every faculty, increase the quantity and quality of student learning outcomes assessment, evaluate quantitative performance measures, and establish binding "Action Plans" to improve how to incorporate assessment results to help students learn. FCC is dedicated to using MHEC and Middle States' General Education competency assessment data to help students learn.

Garrett College

GARRETT COLLEGE

STUDENT LEARNING OUTCOMES ASSESSMENT REPORT

Submitted to the Maryland Higher Education Commission

June 30, 2011

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

The adoption in April 2009 of new institutional goals that derive from the institution's mission and that are measurable established a coherent framework which serves as the basis for Garrett College's institutional assessment process.   These Goals address six main areas of institutional performance: accessibility; student satisfaction and success; educational effectiveness; effective use of financial, human, and physical resources; workforce development; and community service. In addition, changes made to many of the College's structures and processes, most notably its resource allocation and budgeting processes, coupled with the adoption of a much more comprehensive strategic plan, have created an organization and an environment within which data are used effectively to inform decision-making, drive improvements, and bring about institutional renewal.

The data collected as part of the Maryland Higher Education Commission's Institutional Performance Accountability System and for reporting to the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS) provide the foundation for the College's assessment data needs. The long-term use of the Collegiate Assessment of Academic Proficiency (CAAP) tests for communication, mathematics, and critical thinking; the more recent (since 2006) biennial administration of the Community College Survey of Student Engagement (CCSSE); and instructor-designed assessments used at the individual course level are currently the primary tools used for assessing the achievement of student learning outcomes. Data from these assessments will be supplemented by results obtained from the College's soon to be implemented assessment of student learning outcomes at the program-level. Recent improvements to the College's management information system have enabled wider and easier access to data and have also significantly increased the range of available data, much of it in real-time.

Garrett College first began to develop a plan for assessing student learning outcomes in fall 1997. Between fall 1997 and fall 1998, the College's faculty worked as teams to establish six core learning goals for the general education program. Based on these six learning goals, the

College's general education outcomes assessment plan was completed in fall 1998 and implemented in spring 1999, with the first administration of the Collegiate Assessment of Academic Proficiency (CAAP). The plan was modified in 2003 and 2004, ultimately resulting in eight student learning goals focusing on the following skills: (1) information literacy (2) written and oral communication (3) critical analysis and reasoning (4) scientific literacy and quantitative reasoning (5) information management skills (6) cultural and global perspective (7) personal and interpersonal skills, and (8) academic and technical proficiency in the major. These broad learning goals parallel and expand on the five competencies identified in Standard 12 of the Middle States Commission on Higher Education's "*Characteristics of Excellence in Higher Education.*" It should be noted that the eighth learning goal having to do with proficiency in the major is not a general education goal, but rather an "institutional" goal to be assessed at the program level. These same goals also provide the framework for assessing student learning at the course and program level (where applicable).

Garrett College currently assesses student learning at the institutional (viz., general education) and the course level, with assessment at the program-level scheduled for implementation in fall 2012 (although some program-level assessments may be piloted during the 2011-12 academic year). The College relies primarily on the CAAP for assessing written and oral communication skills, critical analysis and reasoning skills, and quantitative reasoning (mathematics) skills, and the Texas Information Literacy Tutorial (TILT) to assess information literacy. The remaining learning goals are assessed at the course-level. A number of instructor-developed assessments are used to assess student learning at the course-level. These include course-embedded assessments, including written work and presentations scored using a rubric; scores on tests and competency exams accompanied by test "blueprints" describing what is being assessed; score gains between entry and exit on tests, competency exams and writing samples; ratings of student skills in the context of class activities, projects and discussions; and portfolios of student work.

The College also employs a number of other (mostly indirect) measures in order to assist in assessing learning outcomes at the various levels. Such measures include acceptance rates of students applying to programs at transfer institutions; student performance at Maryland institutions after transfer from Garrett (with data regularly collected by the Maryland Higher Education Commission); grades and passing rates in courses, e.g., GER math and communication courses; graduate satisfaction with educational goal achievement and quality of transfer preparation as measured by exit surveys administered to all graduates; employer satisfaction with career program graduates; classroom observations; student evaluations of instruction; and results from the Community College Survey of Student Engagement (CCSSE).

The College's Dean of Instruction is responsible for overseeing the student learning outcomes assessment program with assistance from the Office of Institutional Planning and Research.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. <u>Institution's definition of competency</u>

Communication skills include making connections that create meaning between one's self and his or her audience; speaking, reading, writing, and listening effectively; using electronic media, technology, and data effectively; and having information literacy skills that enable students to find, evaluate, incorporate, and present information effectively.

B. <u>Level(s) at which the competency is assessed (e.g., department, program, course)</u>

Attainment of written and oral communication skills is currently assessed at the institutional and the course level. Program level student learning outcomes have been established, but as of yet have not been assessed. Program level assessment for all programs is scheduled to begin in academic year 2012-13, although some programs may begin piloting assessments beginning next year (academic year 2011-2012).

Oral and written communication skills are currently being assessed in the following classes:

English 101 & 102; Biology 101, 102, 104, 141, 150, & 201; Computer Science 105; History 105, 106, 111, & 112, Humanities 210; Math 105, 110; Physics 101 & 102, Psychology 101; Speech 101, Sociology 101

C. <u>Process(es) used to evaluate competency (i.e., methods, measures, instruments)</u>

At the institutional level the Collegiate Assessment of Academic Proficiency (CAAP) is administered to all graduating students each spring. Since 1999, GC has used this test or a similar instrument (the ETS Academic Profile was used in 2001) to assess students' writing skills at the institutional level. In 2004, GC began administering the essay portion of the CAAP in order to measure students' written composition skills in place of the multiple-choice rhetorical and grammar/mechanics skills test which had been administered previously (1999 to 2003).

Other direct measures of communication skills:

   Pre-, mid-, and end-of-term scores achieved on common instruments (essays, grammar/mechanics tests) to students enrolled in developmental writing courses

Pre-, mid-, and end-of-term scores achieved on the Nelson-Denny reading test administered to all students enrolled in developmental reading courses

Assessment of students' writing portfolios in designated classes, including developmental writing courses,

Other indirect measures of communication skills:

Grades and passing rates in speech and both credit and developmental English courses (English 90, 91, 92)

Graduate satisfaction with educational goal achievement and quality of transfer preparation, as measured by exit surveys administered to all graduates

Student performance at Maryland institutions after transfer, as reported in the annual Performance Accountability Report that is submitted to MHEC

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The results of Garrett College students' performance on the writing portion of the Collegiate Assessment of Academic Proficiency from 2000 through 2011 are shown in Table 1.

Table 1
Results from the Writing Assessment
Collegiate Assessment of Academic Proficiency*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Students Tested	73	85	81	59	78	76	62	59	86	85	76	83
Writing (multiple choice)	60%	52%	52%	53%								
Writing (essays)					28%	62%	60%	80%	89%	68%	64%	72%

  * 2002 Results are from Academic Profile

The percentages shown represent the proportion of students who received certificates of proficiency. Students are awarded certificates if their scores meet or exceed the national mean for the particular test being assessed. It should be noted that from 2000 through 2003, writing was evaluated using a standardized multiple-choice test; from 2004 on, students have been evaluated by the writing of two required essays. It should also be noted that the results for 2002 are from the Academic Profile, which was piloted for one year only.

Garrett College students have generally performed very well on the essay portion of the CAAP, especially over the past five years, with about 75% of the students on average scoring at or above the national mean.

Written and oral communications skills are included among the student learning outcomes that have been identified for most GER courses as well as for required courses for program

majors. These written and oral communications outcomes are recorded and analyzed by individual instructors and are periodically reviewed by the academic program directors and the Dean of Instruction.

II. Scientific and Quantitative Reasoning

A. <u>Institution's definition of competency</u>

Scientific literacy and quantitative reasoning skills include the use of appropriate scientific, mathematical, or statistical models in interpreting quantifiable phenomena and the use of scientific, mathematical, or statistical symbols, techniques, and logic in solving problems of a quantifiable nature.

B. <u>Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)</u>

Attainment of scientific reasoning skills is currently assessed at the course level. Attainment of quantitative reasoning (mathematics) skills is currently assessed at the institutional and the course level. Program level student learning outcomes have been established as appropriate, but as of yet have not been assessed. Program level assessment for all programs is scheduled to begin in academic year 2012-13, although some programs may begin piloting assessments beginning next year (academic year 2011-2012).

Scientific literacy and quantitative reasoning skills are currently being assessed in the following classes:

Math 105, 110, 190, 191, 192, & 210; Biology 101, 102, & 104; Chemistry 100, 101, & 102; Physics 101, 102, & 130, Earth Science 101, 121, 210, & 265

C. <u>Process(es) used to evaluate competency (i.e., methods, measures, instruments)</u>

At the institutional level the Collegiate Assessment of Academic Proficiency (CAAP) is administered to all graduating students each spring. Since 1999, GC has used this test or a similar instrument (the ETS Academic Profile was used in 2001) to assess students' mathematics ability (basic and college algebra skills). GC does not administer the science module of the CAAP, although it may consider doing so at some point in the future.

<u>Other direct measures of scientific and quantitative reasoning skills:</u>

Pre-, mid-, and end-of-term scores achieved on instruments administered in selected mathematics (credit and developmental) classes at Garrett

Course-embedded assessments, including written work and presentations scored using a rubric

Scores on tests and competency exams accompanied by test "blueprints" describing what is being assessed

Other indirect measures of scientific and quantitative reasoning skills:

Grades and passing rates in science and both credit and developmental mathematics courses

Graduate satisfaction with educational goal achievement and quality of transfer preparation, as measured by exit surveys administered to all graduates

Student performance at Maryland institutions after transfer, as reported in the annual Performance Accountability Report that is submitted to MHEC

Assessment of competency in mathematics occurs at the course, program, and institutional levels. Competency in science is currently assessed only at the course level.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The results of Garrett College students' performance on the mathematics portion of the Collegiate Assessment of Academic Proficiency from 2000 through 2011 are shown in Table 2.

Table 2
Results from the Mathematics Assessment
Collegiate Assessment of Academic Proficiency*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Students Tested	73	85	81	59	78	76	62	59	86	85	76	83
Mathematics	59%	54%	58%	66%	42%	67%	63%	53%	48%	52%	63%	48%

   * 2002 Results are from Academic Profile

The percentages shown represent the proportion of students who received certificates of proficiency. Students are awarded certificates if their scores meet or exceed the national mean for the particular test being assessed. It should be noted that the results for 2002 are from the Academic Profile, which was piloted for one year only.

Compared with writing, Garrett students have not performed as well on the mathematics portion of the CAAP and the results have been more variable as Table 2 shows. Nevertheless, over the last five years, Garrett College students have performed reasonably well, with on average more than half scoring at or above the national mean.

Scientific literacy and quantitative reasoning (mathematics) skills are included among the student learning outcomes that have been identified for some GER courses and for some courses required for program majors. These scientific literacy and quantitative reasoning outcomes are recorded and analyzed by individual instructors and are periodically reviewed by the academic program directors and the Dean of Instruction.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Critical analysis and reasoning skills involve the ability to engage in clear and critical analysis of situations, events, issues, ideas, and texts by fusing experience, reason, and training into considered judgment.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Attainment of critical analysis and reasoning skills is currently assessed at the institutional and the course level. Program level student learning outcomes have been established, but as of yet have not been assessed. Program level assessment for all programs is scheduled to begin in academic year 2012-13, although some programs may begin piloting assessments beginning next year (academic year 2011-2012).

Critical analysis and reasoning skills are currently being assessed in the following classes: Accounting 113, Business 170, Economics 201& 202, English 101 & 102, History 105, 106, 111, & 112, Math105, 190, 191, 192, & 210, Psychology 102

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level the Collegiate Assessment of Academic Proficiency (CAAP) is administered to all graduating students each spring. Since 1999, GC has used this test or a similar instrument (the ETS Academic Profile was used in 2001) to assess students' critical analysis and reasoning ability (critical thinking and reading skills).

Other direct measures of critical analysis and reasoning skills:

   Grades on assignments that are scored using a rubric, as such assignments are administered in GC's GER and developmental courses, including developmental reading courses

Indirect measures of critical analysis and reasoning skills:

   Grades and passing rates in selected GER communication, humanities, social sciences, mathematics, and sciences courses that specifically require critical analysis and reasoning skills

   Graduate satisfaction with educational goal achievement and quality of transfer preparation, as measured by exit surveys administered to all graduates

   Student performance at Maryland institutions after transfer, as reported in the annual Performance Accountability Report that is submitted to MHEC

   Assessment of critical analysis and reasoning currently occurs primarily at the course and the institutional levels.

D. <u>Describe the results of the assessment work related to this competency</u>.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The results of Garrett College students' performance on the Critical Thinking portion of the Collegiate Assessment of Academic Proficiency from 2000 through 2011 are shown in Table 3.

Table 3
Results from the Critical Thinking Assessment
Collegiate Assessment of Academic Proficiency*

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Students Tested	73	85	81	59	78	76	62	59	86	85	76	83
Critical Thinking	56%	62%	54%	58%	62%	66%	52%	68%	66%	61%	58%	57%

* 2002 Results are from Academic Profile

The percentages shown represent the proportion of students who received certificates of proficiency. Students are awarded certificates if their scores meet or exceed the national mean for the particular test being assessed. It should be noted that the results for 2002 are from the Academic Profile, which was piloted for one year only.

As can be seen from the data, Garrett College students have generally performed well on the critical thinking portion of the CAAP. Over the past five years, on average, 62% of Garrett students have recorded scores at or above the national mean.

Critical analysis and reasoning skills are included among the student learning outcomes that have been identified for some GER courses and for some courses required for program majors. These critical analysis and reasoning outcomes are recorded and analyzed by individual instructors and are periodically reviewed by the academic program directors and the Dean of Instruction.

IV. Technological Competency

A. <u>Institution's definition of competency</u>

Information management skills involve the ability to use and apply electronic media for research, communication, and practical application.

B. <u>Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)</u>

Attainment of technological competency (information management skills currently assessed at the course level. Program level student learning outcomes have been established, but as of yet have not been assessed. Program level assessment for all programs is scheduled to begin in academic year 2012-13, although some programs may begin piloting assessments beginning next year (academic year 2011-2012).

Information management skills are currently being assessed in the following classes:
Computer Applications 183, 185, 196, and 224, Computer Science 105 and 180, English 101

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Course level assessment involves some or all of the following instruments and/or measures:

- Course-embedded assessments, including written work and presentations scored using a rubric (DIR)
- Scores on tests and competency exams accompanied by test "blueprints" describing what is being assessed (DIR)
- Score gains between entry and exit on tests, competency exams and writing samples (DIR)
- Ratings of student skills in the context of class activities, projects and discussions (DIR)

Other direct measures of information management skills:

Pass rates on national tests assessing competency or proficiency in information technology/management, such as CompTIA A+ and Net+, Microsoft MOS, MCSA/MCSE, and CCNA certifying exams

Indirect measures of information management skills:

Grades and passing rates in GER courses as such courses that require the incorporation of electronic media

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Assessment activities for information management competencies have been ongoing, and data pertaining to direct and indirect measures continue to be gathered. In addition, computer and information technology faculty are working to design local instruments that will capture pre- and post-term knowledge pertaining to information management, particularly as presented in CS 105, or in certain cases, CS 180.   All students who are candidates for A.A., A.E.T., or A.A. degrees must take either CS105 or CS 180.

Information management skills are included among the student learning outcomes that have been identified for some GER courses and for some courses required for program majors. These information management outcomes are recorded and analyzed by individual instructors and are periodically reviewed by the academic program directors and the Dean of Instruction.

V. Information Literacy

A. <u>Institution's definition of competency</u>

The Garrett College Library uses the Middle State's Commission on Higher Education's publication *Characteristics of Excellence in Higher Education: Eligibility Requirements and Standards for Accreditation* to define information literacy:

"...an intellectual framework for identifying, finding, understanding, evaluating and using information. It includes determining the nature and extend of needed information; accessing information effectively and efficiently; evaluating critically information and its sources; incorporating selected information in the learner's base and value system; using information effectively to accomplish a specific purpose; understanding the economic, legal and social issues surrounding the use of information and information technology; and observing laws, regulations, and institutional policies related to the access and use of information."

B. <u>Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)</u>

All courses identified as meeting a General Education requirement include an information literacy component, although the concept receives primary emphasis in English 101, where it is formally assessed. Currently, information literacy skills are also being directly assessed in the following classes: Biology 101, 102, & 104, Business 170, Computer Science 105, English 101, & 102, History 105, 106, 111, & 112, Psychology 101, Speech 101

Program level student learning outcomes have been established, but as of yet have not been assessed. Program level assessment for all programs is scheduled to begin in academic year 2012-13, although some programs may begin piloting assessments beginning next year (academic year 2011-2012).

C. <u>Process(es) used to evaluate competency (i.e., methods, measures, instruments)</u>

A variety of assessment tools are used, including an online tutorial with built in assessment, quizzes, surveys, and other rubrics for measuring specific outcomes.

The Texas Information Literacy Tutorial (TILT), which was developed by the University of Texas in Austin, is an online self-paced tutorial available on the Library's web page that teaches and evaluates information literacy competencies. All English 101 students are assigned to do this self-paced tutorial, which incorporates three modules focusing on information literacy skills: Selecting Information, Searching for Information, and Evaluating Information. Each module contains an assessment tool which asks students questions that reflect their understanding of the concepts. The goal of Module 1 is to instruct users on the different sources of information, where to find these sources, and how to choose the best ones for a research topic. The goal of Module 2 is to instruct the user in knowing how to focus a search for information into an appropriate and manageable amount. This includes selecting the best source to search, choosing the most appropriate words, and combining them successfully to retrieve the desired information. The goal of Module 3 is to teach the user to apply criteria by which one can evaluate both print and electronic resources in order

to choose appropriate sources of information for the desired research. These tutorials include summary tests that are scored with percentages of correct answers for assessment of student learning.

D. <u>Describe the results of the assessment work related to this competency</u>.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

An assessment of information literacy skills was conducted in FY2009 based on a selected group of English 101 students who took the TILT tutorial. (All English 101 students were assigned to do the tutorial.) A sampling of results was collected from selected English 101 classes that had completed all three modules of the tutorial. The questionnaire contained in the TILT tutorial tabulates the students' results and then emails them to the person calculating the results. The benchmark that was established for this assessment was that 90% of the students would achieve a 90% or better on each of the three modules. The results are illustrated in the graph below:

TILT Tutorial Results

	Module 1	Module 2	Module 3
95.00%			
94.50%			
94.00%			
93.50%			
93.00%			
92.50%			
92.00%			

The modules represent the following skill sets:

Module 1:	**Module 2:**	**Module 3:**
Searching for	**Selecting**	**Evaluating**
Information	**Information**	**Information**
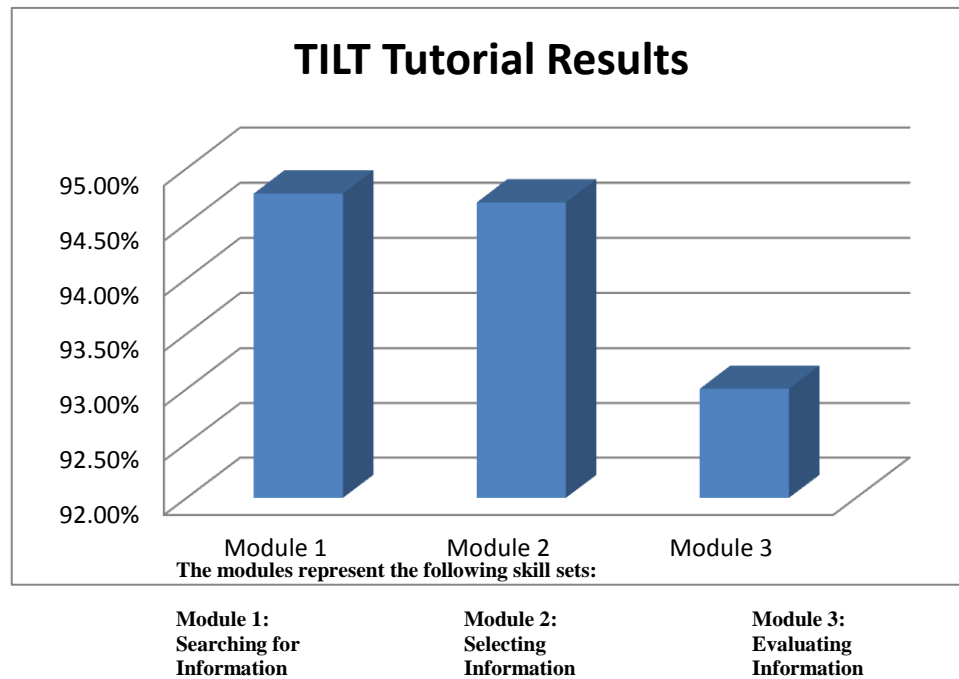
All students who participated in the tutorial achieved 93% or better, therefore the benchmark was reached and it appears that the students are effectively using the tutorial and grasping the information literacy concepts. The slight decrease in Module 3 is not significant, but indicates the module on evaluating information may be more difficult, and students might be encouraged to retake that section. Since the benchmark results were better than anticipated, students will continue to be required to complete the TILT tutorial as it is serving as an effective tool for instruction.

A survey of English 101 students was conducted during the 2009-10 academic year in order to assess student's perceptions of how well they had incorporated information literacy skills into their coursework. Most students in English 101 have information literacy competency

training, including completion of the TILT tutorial and instruction in the use of library databases and the creation of research papers requiring knowledge of information literacy skills. The survey also was distributed to distance learning students who had completed English 101 via distance learning. Survey results were recorded separately to get a clearer picture of the differences that may occur between face-to-face instruction and distance learning. The survey recorded student's perceptions of how well they felt they had mastered the various information literacy competencies. The results of this survey showed that most students felt they had mastered the required information literacy skills; although they did point to an increased need for skill development in skill in paraphrasing to avoid plagiarism and giving appropriate credit to sources.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

While results from the College's assessment of student learning outcomes at the course-level are still somewhat limited (due to several factors which are explained below), at the institutional level (general education), the College has now accumulated twelve year's worth of data from the CAAP (and the Academic Profile in 2002). The College has analyzed these data and has used the results in an effort to improve pedagogy and curricula with the ultimate goal of improving student learning. For example, faculty have been working to incorporate more critical thinking and reading activities into the classroom in response to concerns over the apparently low scores recorded on the critical thinking/reading portion of the CAAP. The College's English faculty have also adjusted their teaching as well as classroom assignments to include more persuasive writing exercises and writing to specific audiences. This change was made as a result of students' poor performance on the written essay portion of the CAAP in spring 2004, which required students to compose persuasive letters. Course completion rates, course grades, and results from student satisfaction surveys have been used to validate improvements made to the College's developmental mathematics program and more recent improvements made to its developmental English program. In addition, based on results from the 2008 administration of the Community College Survey of Student Engagement (CCSSE), which showed that Garrett students skip class more frequently than their peers nationwide, the faculty have been encouraged to adopt more stringent classroom attendance policies or to adopt other strategies aimed at improving attendance.

However, despite these improvements, analysis of the CAAP results from 2000 to 2011 for all three of the areas tested reveals no definite trends, although students' performance on the writing section for 2005 and beyond shows very significant improvement over 2004 performance (the first year the essay test was given), and a slight improvement over the three preceding years. However, student performance overall, does appear to have improved somewhat during the most recent five-year period (2007-2011). The College has had some concerns about the efficacy of continuing to use the CAAP as a direct measure for several reasons: (1) the cohort taking the test nationally is not comparable to GC students since all Garrett students are required to take the test whereas at other institutions only sample cohorts are tested; (2) the data from the CAAP do not

correlate well with students' transfer performance upon leaving Garrett College (their performance has generally been better that that indicated by the CAAP); and (3) American College Testing (ACT) recommends caution in evaluating results for a cohort smaller than 100 students (the number of Garrett students taking the test has so far has typically been well below that number). The validity of the results from the CAAP may also be affected by the fact there is no penalty for poor performance, although students' results are now shown on their transcripts. Clearly, the extent to which students take the test seriously can markedly affect the results. The College continues to analyze and consider the efficacy of the results yielded by the CAAP test. This task may become easier as more results from individual course assessment become available

As was mentioned above, there have been only limited results from the College's efforts to assess student learning at the course level, despite the fact that course level assessment of student learning outcomes was piloted in fall 2006 and had been incorporated into most courses by spring 2008. The College initially tried to collect and analyze course-level assessment results using a web-based survey that was completed by students and faculty. This approach failed to produce any useful results. Due to a change in academic leadership that occurred shortly thereafter, emphasis was shifted to developing a process for assessing student learning at the program-level and so assessment of learning outcomes at the course level languished until this year when efforts have been made to re-start the process, which will now be managed by the individual faculty member for his or her particular courses, but with oversight from the academic program directors and the Dean of Instruction.

The College had originally planned to develop and implement student learning outcomes assessment in phases: the first phase was to be general education assessment, the second phase was to be program-level assessment, and the third phase was to be course-level assessment. The College's program-level learning outcomes assessment process was developed based on information contained in *Student Learning Assessment: Options and Resources*, which, at the time, had just been published by Middle States. After program-level learning outcomes had been determined for most of the College's programs and strategies for assessing them were being developed, it appeared that many of the program outcomes were going to be assessed at the individual course level, sometimes in multiple courses. At this point, given the apparent reliance on assessments conducted in individual courses, the College decided to postpone the implementation of program–level assessment and to focus instead on developing and implementing course-level learning assessment; this task was completed in fall 2007.

When implementation of course-level learning assessment had been completed, the College recognized the need to proceed with implementation of program-level learning assessment, recommending in its 2008 Self-Study Report that the process for assessing student learning outcomes at the program level be implemented as quickly as possible. At the time, however, the College was also anticipating the arrival of a new Dean of Academic Affairs in summer 2008; therefore, a decision was made to delay the implementation until sometime after the arrival of the new Dean. A new Dean of Academic Affairs was appointed in July 2008. Under her leadership, work on implementing program-level assessment resumed with the onset of the 2008-2009 academic year.

Expected learning outcomes for most of the College's transfer and career programs have been determined, except for General Studies, the College's pre-Teacher Education transfer programs, and several program options offered under the Computer Information Technology degree. Work

on identifying these remaining learning outcomes and determining appropriate benchmarks for the achievement of program-level learning outcomes is targeted for completion in fall 2011. Assessment of program-level learning outcomes will be accomplished through the use of a variety of assessment methods including capstone courses, student portfolios, scores on tests and competency exams accompanied by test "blueprints" describing what is being assessed, and score gains between entry and exit on tests and competency exams. Faculty and Program Directors will then be expected to collect the required course and program learning outcomes assessment data on a semester basis and to review it annually. Assessment of program-level student learning outcomes is targeted for implementation in academic year 2012-13, although some pilots may occur in academic year 2011-12.

Garrett College is well aware that student learning outcomes assessment is an evolutionary process dependent upon the energy and attention of its administration, faculty, and staff, as well as the efforts of its students. The College thus sees the formal assessment of learning outcomes as an ongoing process which will continue to be refined and improved across and throughout the life of the institution. Assessment of student learning is a component of the College's 2010-2013 Strategic Plan and the results from the assessment of student learning outcomes are integrated with results from the College's institutional assessment process in order to inform planning, decision-making, and resource allocation, and to drive institutional improvement, including teaching and learning.

Hagerstown Community College

STUDENT LEARNING OUTCOMES ASSESSMENT REPORT

Hagerstown Community College
11400 Robinwood Drive
Hagerstown, Maryland 21742

June 29, 2011

Part One: Summary of Assessment Activities

Outcomes assessment of student learning provides feedback to faculty members and professional staff for the purpose of improving academic programs, teaching and learning. The involvement and leadership of faculty as the content specialists is essential as they bring relevant experience, useful interventions and strategies for change, and expertise to the outcomes assessment process. It is through the analysis of student learning that Hagerstown Community College (HCC) improves learning in a systematic and effective manner. Assessment has fostered communication between full-time and adjunct faculty to help create uniformity across course sections. Student learning outcomes assessment is a primary component of the institutional effectiveness model at HCC and, as a result, faculty and staff have become more familiar with the importance of data analysis, accountability and quality assurance. Assessment, curriculum development and review, and planning are interrelated processes that foster accountability at all levels.

Written in 2004, the Student Learning Outcomes Assessment Plan includes strategies for assessing all courses and programs, as well as procedures and timelines that encompass eight academic years from 2004 to 2012. It also includes methods and tasks for the assessment of general education. The initial emphasis of the plan was at the course level. Major impact courses in each academic division were selected by faculty to be assessed in the first cycle. Assessment priorities are now focused at the program, as well as continuing at the course level.

The SLOA cycle at HCC is a continuous cycle of plan, do, assess, and adjust - developing outcomes, assessing the outcomes and using the data obtained to improve student learning. Faculty in every academic division developed student learning outcomes for courses and programs. Working in teams, they determined and sought external validation for assessment instruments and methods to measure achievement of outcomes. In addition, academic divisions incorporate follow-up information on transfer and career program graduates into assessment reports and unit planning.

Continuous data-driven assessment occurs in both academic and non-academic units and provides for formative review of established targets, as well as an overall institutional effectiveness. Assessment activities and key performance indicators align with the Middle States accreditation standards. Specifically, Standard 7 addresses institutional assessment, Standard 12 covers general education and Standard 14 addresses student learning outcomes assessment.

The College's vision, mission, strategic goals, and annual institutional priorities serve as the foundation of HCC's integrated planning, assessment / evaluation and budgeting system. Through its planning process, the College ensures efficient utilization of institutional resources and receives significant feedback related to planning, assessment and resource allocation activities. The achievement of strategic goals commences with unit planning meetings, which involve each area of the College. As each unit addresses strategic goals and action plans delineated in the 2012 strategic plan, the unit planning system improves effectiveness, efficiency,

the teaching and learning process, enhances communication, contains costs, and redirects resources to support mission-based priorities that have strategic importance.

The SLOA Leadership Team is comprised of five faculty members. The five faculty members of the team receive alternative faculty assignments (either teaching overload or a course release) each semester for their work. A major responsibility of the team is to serve as a resource to faculty for outcomes assessment projects. The team supports, monitors, and directs the academic divisions' progress toward assessment goals. The team reports directly to and meets monthly with the Vice President of Academic Affairs. They also report monthly to faculty in two formats, division meetings and faculty assembly, which provides an opportunity for faculty to express their ideas and concerns. This provides assurance that each academic division is considered in the process. Student learning outcomes assessment processes are reviewed at many levels of the College – by the faculty, by the academic chairs and directors, by the Vice-President of Academic Affairs, and by the College President and Board of Trustees. SLOA is also a unit planning component for the Vice President and the entire division of Academic Affairs. Finally, an annual progress report is presented to the President and Board of Trustees. During each of these stages, the processes are evaluated and modified to align with the needs of the College.

HCC uses ten key institutional performance indicators (KPI) that are integrated into the College's strategic plan and its action plans. The documentation of the use of evaluation results closes the loop in the College's assessment and evaluation processes for academic and non-academic units of the College. Over 480 data measures that broadly demonstrate how well the College operates as an organization were developed to measure the ten KPI. The data measures are the foundation for institutional renewal, which is defined as the improvement and/or enhancement of effective teaching and learning, and educational and administrative support services. As outcomes results become available, they are analyzed at all levels to determine how the College can best direct its attention to achieving its strategic objectives. Assessment results are reviewed, analyzed and discussed as a part of the College's unit planning process. Additionally, analyses by groups such as the SLOA leadership team, academic officers and Academic Council, faculty and executive officers may result in revisions to strategies, increased or decreased resource allocations and further new or refined assessments.

Part Two: Assessment of Major General Education Competency Areas

Work began in 2006 with courses that were considered high impact, which are defined as courses that offered more than three sections per semester. Faculty refined their course level outcomes and are at various stages of assessment of these outcomes. Courses taught by more than one faculty member incorporate common student learning outcomes within their syllabi. Syllabi are reviewed by division chairs and directors to ensure the inclusion of student learning outcomes. Faculty report progress in course level outcomes assessment in a standard template, the Course Outcomes Guide (COG), which is stored in the locally-developed SLOA database.

Once faculty developed common student learning outcomes, they developed a common assessment to measure the outcomes. Groups of faculty, with oversight and facilitation provided by division chairs and directors, as well as the SLOA Leadership Team, meet to analyze the results of the common assessment and to determine how to improve student learning.

Programs coordinated by full-time faculty have program level student learning outcomes. The program outcomes have been aligned with course outcomes to ensure they are being met through the program's required courses. Matrices aligning program and course outcomes are a component of the SLOA database. Program student learning outcomes are measured with a variety of evaluation tools. For example, measures used by career programs are results of licensure and national certification exams. Students typically complete these exams in the months following program completion and results are reported to HCC. Transfer programs often use many sources of data to determine achievement of student learning outcomes. For example, the Music program assesses student progress at the end of the academic year in a departmental jury. Faculty report program progress to the SLOA Leadership Team in a standard format, using the Program Outcomes Guide (POG) on the SLOA website. Student performance on these program level assessments is shared with faculty and community advisory councils, in an effort to increase stakeholder awareness of student success and the College's commitment to accountability. Faculty use these data to improve student learning, through professional development, revision of curricula, or requisition of appropriate resources.

The six areas of study, which align with the Middle States Commission on Higher Education (MSCHE) and MHEC standards, that have been identified to ensure that students achieve the desired general education goals include English, Arts and Humanities, Information Literacy, Behavioral and Social Sciences, Mathematics, and Biological and Physical Sciences. Since General Education assessment attempts to evaluate a student's overall academic experience, multiple sources are used for each competency. Competencies are measured using multiple processes, instruments, or methods to assess expected outcomes. For brevity and convenience, a process will be described only once.

The SLOA Leadership Team worked with divisions in 2009 to examine and modify the General Education outcomes and the way these are assessed. The first step in this review was to revisit the outcomes. This recent review of the outcomes revealed that many were flawed, not assessable, or only measured lower level learning. In the past year, faculty have reviewed the general education outcomes and, in many cases, revised them.

I.   <u>**Competency: Written and Oral Communication**</u>

A.   **Definition:** The ability to express ideas orally and in writing

B.   **Level(s) at which competency is assessed:** Broad, cross discipline/program and course levels

C.   **Processes used to evaluate competency:**

1. Collegiate Assessment of Academic Proficiency (CAAP) – Also used to measure *Scientific and Quantitative Reasoning and Critical Analysis and Reasoning*
2. Measure of Academic Proficiency and Progress (MAPP) - Also used to measure *Scientific and Quantitative Reasoning*
3. Community College Survey of Student Engagement (CCSSE) - Used to measure all four competencies
4. Introduction to Sociology (SOC 101) capstone activity - Also used to measure *Critical Analysis and Reasoning*
5. English Composition (ENG 101) research paper rubric – See CAAP; Also discussion of this measure is found under *Critical Analysis and Reasoning*
6. Graphic Design Technology Program Portfolio – Discussion of this measure is found under *Technological Competency*.
7. Criminal Response Emergency Assessment Scenario (CREAS), a capstone interdisciplinary assessment activity in which graduating students from the registered nursing (RN), practical nursing (PN), radiography and medical imaging, paramedic emergency services (PES), and administration of justice (ADJ) programs participate - Used to measure all four competencies; Discussion of this measure is found under *Critical Analysis and Reasoning*.

D.   Describe results of assessment work related to this competency:

Collegiate Assessment of Academic Proficiency (CAAP)

One instrument that HCC uses to measure all general education outcomes is the Collegiate Assessment of Academic Proficiency (CAAP) test available through the American College Testing Program, Inc. (ACT). The CAAP test is a nationally normed assessment instrument which allows colleges and universities to evaluate the outcomes of general education programs. There are six independent test modules that can be administered to students to measure achievement levels either independently or as a group. From 2004 – 2009, the College administered the CAAP tests to student groups who had completed the majority of their general education courses. General education areas assessed were essay composition, mathematics, reading, critical thinking, science and writing skills.

Students did not take the critical thinking component until 2006. Annually since then, individual faculty volunteer class sections to take the critical thinking component of the CAAP exam. These faculty members use the results of this exam to develop and refine classroom activities and assignments which encourage and develop critical thinking skills in HCC students. The topic of developing critical thinking in students is very important, but provides many challenges for assessment. Critical thinking skills are developed in students over time while taking many courses; it is difficult to use CAAP data to identify one point in time where students obtain these skills. While the students who completed the critical thinking component of the CAAP exam scored at or slightly higher than the national average, there continues to be a

college-wide push to improve critical thinking in the classroom. The College's next goal is to reevaluate and revise the general education outcomes in order to highlight critical thinking skills across the curriculum and to assess these at the course level.

The national CAAP exam scaled score for composition is approximately two points higher than HCC's scaled score. English faculty members continue to work to improve student writing. The research paper serves as a common assessment to evaluate English 101. Faculty use a common rubric to grade these papers and are regularly examining data collected to refine the class. Norming sessions are periodically conducted with both full-time and adjunct faculty to insure common standards across English 101 sections. An administrative review of faculty assessment occurs every semester. Efforts to promote writing skill development have been initiated by faculty across the disciplines.

College Algebra (MAT 101) is the primary course students take to complete their mathematics general education requirement. Faculty members in College Algebra use two common assessments to measure student learning. One is a five question common assessment developed by full-time faculty which is given every semester to every student and the other is the mathematics component of the CAAP exam which is administered to a sample of classes every fall semester. HCC students have consistently scored approximately two points higher since Fall 2008.With the support of a National Center for Academic Transformation (NCAT) grant, the College Algebra faculty members redesigned the curriculum beginning in fall 2006. The goal of the redesign was to improve student learning while increasing student engagement and increasing retention.

The science department has systemically tested samples of all science courses which meet the general education requirement with the science component of the CAAP exam. The science module emphasizes scientific reasoning skills rather than memorization of content and uses different science areas (biology, chemistry, physics and physical science) to measure these skills. Overall, students from all the different general education science disciplines scored at or above the national average.

MAPP

In an effort to streamline and validate assessment of general education outcomes at HCC, the Measure of Academic Proficiency and Progress (MAPP) exam, available through the Educational Testing Service (ETS), was administered in the spring of 2006 - 2009. The MAPP is a single exam that measures reading, writing, mathematics and critical thinking in the context of the humanities, social sciences and natural sciences. The Voluntary System of Accountability (VSA) has selected MAPP as a way to measure general education outcomes.

HCC students who applied for graduation with an associate's degree were asked to volunteer to take the exam. Completing the exam was not mandatory for graduation. MAPP results on the following page. Although this data has been collected on a voluntary basis and may not accurately represent the entire student population, the same methods have been used to obtain volunteers for the past four years. It is interesting to note the slight increase in the mean

student score over the past four years. All years, except for 2006, have been above the national average.

2006-2009 MAPP Average of Individual Student Scores

Year	Scaled Score (400-500 possible)
2006	439.14 ± 14.86 (n=77)
2007	444.06 ± 17.51 (n=52)
2008	445.37 ± 20.34 (n=79)
2009	447.03 ± 21.07 (n=36)
Comparative Data: National Average of Sophomores	441.0 ± 17.9 (n=18,559)

When proficiency data is compared across years, with the exception of 2006, there is a slight increase in students who are proficient in higher order reading, writing and mathematics skills. While these results allow benchmarking of student General Education achievement, it is challenging to connect these general results with performance in one course. MAPP is no longer the primary method of assessing General Education outcomes. Examining these results has led the administration and the SLOA Leadership Team to the conclusion that it would be better to focus on achievement of General Education outcomes at the specific outcome level.

CCSSE
The Community College Survey of Student Engagement (CCSSE) is administered every other spring to randomly-selected classes. Participation in CCSSE has been used to benchmark student perceptions of engagement at the College since 2004. CCSSE results are shared with the College administration, as well as academic chairs and directors and faculty. When examining the students' perceptions of their educational growth at the College, HCC students reported less memorization of facts than other Maryland community colleges. However, they also perceived fewer activities in higher order thinking and less reading of assigned course readings than other Maryland community colleges. At the same time, students reported that their experience at the College contributed to their ability to ability to think critically and analytically. Significant informal discussion of these concerns occurred in Academic Council, as well as in the Curriculum Excellence project, an important multi-year College priority, which began in FY 12 and is continuing into FY 12. For next year, the emphasis will be on outcomes assessment and student perception of academic rigor in courses. Other goals of the project will continue to include a comprehensive review of various aspects of curriculum quality, with a greater focus on outcomes assessment to include courses in the general education. Student perception of

academic rigor in courses is a newly added focus based upon student perceptions regarding academic rigor in the 2008 and 2010 CCSSE survey.

Capstone: Introduction to Sociology (SOC 101)
       A "capstone" exercise is used to measure outcomes beyond course content to assess behavior and cognitive growth. This exercise involves a series of "real world" scenarios that student groups work on and complete during the final exam period. A normed rubric developed by faculty is used to grade this final assignment.

II.   Competency: Scientific and Quantitative Reasoning

A.   **Definition:** The ability to use numerical data and apply mathematical concepts appropriately, as well as the ability to access, process, analyze and synthesize scientific information

B.   **Level(s) at which competency is assessed:** Broad, cross discipline/program and course levels

C.   **Processes used to evaluate competency:**
1.   Collegiate Assessment of Academic Proficiency (CAAP) - See *Written and Oral Communication* for description.
2.   Measure of Academic Proficiency and Progress (MAPP) - See *Written and Oral Communication* for description.
3.   Community College Survey of Student Engagement (CCSSE) - See *Written and Oral Communication* for description.
4.   Human Anatomy and Physiology Society National Competency Exam for Human Anatomy and Physiology I (BIO 103) and II (BIO 104) – Also used to measure *Critical Analysis and Reasoning*
5.   Common five-question supplement to all final exams/rubric in College Algebra (MAT 101)
6.   Assessment Technologies Institute (ATI) Examinations - Practical Nursing
7.   National Council Licensure Examination – Practical Nursing (NCLEX-PN)
8.   Criminal Response Emergency Assessment Scenario (CREAS): Interdisciplinary Assessment Activity (Capstone) for Administration of Justice, Nursing and Paramedic Emergency Services students – Used to measure all competencies; *See Critical Analysis and Reasoning* for description of activity.
9.   American Chemical Society (ACS) exams: General Chemistry (CHM 101, 102)
10.   National Community College Benchmark Project (NCCBP) data

D.   Describe results of assessment work related to this competency:

Human Anatomy and Physiology Society (HAPS) National Competency Exam for Human Anatomy and Physiology I (BIO 103) and II (BIO 104)

Human Anatomy and Physiology I (BIO 103) and II (BIO 104) are high impact courses in the Division of Mathematics and Science. Student learning outcomes were written by faculty members in Fall 2004, using the learning objectives developed by the Human Anatomy and Physiology Society (HAPS). In Spring 2005, faculty developed a cumulative exam based on the HAPS learning objectives. All BIO 103 sections have taken this exam since Spring 2005. The HAPS National Competency Exam, which covers both BIO 103 and BIO 104, has been given to all students completing BIO 104 since Fall 2005. These results are also used by Health Sciences faculty to ensure that BIO 103 and 104 outcomes meet the needs of the Health Sciences curriculum.

On the HAPS exam, HCC students have consistently scored higher than the national mean for community colleges. There is a positive correlation between the HCC first semester exam and the HAPS cumulative exam, as well as between exam scores on both exams and course grades. Areas where student consistently struggled were identified and curriculum strengthened as a result.

Common Five-question Supplement to all Final Exams/Rubric in College Algebra (MAT 101)

College Algebra (MAT 101) Division uses a common five-question supplement to all final exams across all sections of the course. Since 2005, the process of using this supplement has been refined. Every student completes a comprehensive five-question supplement with their final course exam.

A normed rubric was developed by faculty in 2006 to give partial credit to students and to enable faculty to see where the students had difficulties in solving the problems. A positive correlation exists between scores on final exam supplement and course grades.

Practical Nursing (PN): Assessment Technologies Institute (ATI) Examinations and National Council Licensure Examination (NCLEX – PN)

ATI Testing Company is a resource in offering criteria that follows the NCLEX-PN examination plan. Since 2005, the PN program has used the nationally normed standardized ATI testing instrument to evaluate course content and the graduating students with a comprehensive predictor to determine probability of passing the NCLEX-PN exam. ATI examination criteria, found to be a reliable predictor of student success at HCC, are reviewed immediately after administration to determine any changes in course content and content delivery. The table below indicates the NCLEX-PN pass rate of HCC students compared to all PN graduates in Maryland, as reported by the Maryland Board of Nursing (MBON). Improvement in HCC scores can be seen since faculty began to review and compare test results to courses content and expected outcomes.

Practical Nursing Program
NCLEX Results

Admission Year	Total Graduates	Total Passed NCLEX-PN (All Students, First Attempt)	% Pass Rate NCLEX-PN Exam: HCC Graduates	% Pass Rate NCLEX-PN Exam: All Maryland
2008 - 09	21	18	95%	95%
2007 - 08	22	20	100%	100%
2006 - 07	17	17	100%	100%
2005 - 06	18	17	94%	95.45%
2004 - 05	25	21	84%	90.91%
2003 - 04	22	13	59%	86.67%

An example of strengthening course outcomes as a result of test scores, the PN faculty reviewed the curriculum, course content and clinical/laboratory criteria in 2008 and 2009 to determine if any changes are to be undertaken. They determined that that the experiences in the clinical laboratory needed to increase, along with the increase in the use of technology. Beginning in 2010, classes are allotted more open laboratory practice and experiences with the computerized mannequins to promote critical thinking in case scenarios.

Additionally, student learning outcomes were reviewed to correlate with the areas of content needing improvement in scoring on the ATI content mastery examinations. For example, the Pharmacology content examination scores indicated improvement in teaching cardiac medications in the lecture content. Faculty now provide more time and information on the cardiac medications using cardiac scenarios with use of clinical laboratory experiences using the computerized mannequins as well as additional assignments in cardiac medications affects and functions. The clinical adjunct faculty increased discussion of medications during medication administration in the clinical arena to provide the experience of applying lecture content to observation and data collection at the client's bedside.

Each spring the PN faculty with the Director of Nursing (DON) review the curriculum, document outcomes and clinical/lab criteria. The use of the ATI Testing standardized examination criteria are reviewed immediately after administration to determine any changes in course content and content delivery.

The RN Program also utilizes the ATI program to validate their curriculum outcomes and to seek improvement in the NCLEX-RN examination pass rates. Both the RN and the PN programs use the TEAS program, a nationally normed standardized test on English, Math, Reading, and Science. These scores are benchmarked to the select nursing students who will be successful in the nursing programs. Data is collected to compare the students GPA with the TEAS scores, comprehensive predictor results, and the NCLEX pass rates of the graduates.

American Chemical Society (ACS) exams: General Chemistry (CHM 101, 102)

The Chemistry program has a common assessment in place for each course. Introduction to College Chemistry has a common final exam that was developed at HCC. All sections of the course are required to administer the exam. The results are collected and analyzed by a full-time chemistry faculty member, who shares this information with the rest of the chemistry faculty. Individual faculty look at strengths and weaknesses and modify their teaching as a result of the exam. As a result of using the exam and meeting with all faculty teaching Introduction to College Chemistry, recommended course guidelines were developed and implemented. Students in CHM 101 and 102 complete standardized American Chemical Society Examinations for each semester.

The mean score of HCC students on the ACS exams are close to the national mean score. Since many of the current textbooks emphasize the molecular viewpoint, faculty updated the ACS exam in 2010 to a more current version. The item analysis of questions on the ACS exam helps pinpoint which topics need more work in class or lab.

National Community College Benchmark Project (NCCBP)

Since 2007, the College has participated in the National Community College Benchmark Project (NCCBP), a nationwide consortium of community colleges that report outcome and effectiveness data in such critical performance areas as percentage of withdrawals, percentage success, and transfer success. The College receives a report of the benchmark areas, which compares HCC results with those of other colleges, a summary of which is available on the SLOA website. Division chairs and directors use this information to determine areas of concern and to develop interventions to increase student achievement in those areas. For example, NCCBP data was used to develop a plan to decrease the number of walk-away "F" students in developmental mathematics and college algebra. Current plans are to expand the use of the NCCBP data to all appropriate areas of the College, and to incorporate available data into benchmarks for the key performance indicators contained in the of the Institutional Effectiveness model.

III.   Competency: Critical Analysis and Reasoning

A.   **Definition:** The ability to use technology to gather, evaluate, process and communicate information

B.   **Level(s) at which competency is assessed:** Broad, cross discipline/program and course levels

C.   **Processes used to evaluate competency:**
   1.   Collegiate Assessment of Academic Proficiency (CAAP) – See *Written and Oral Communication* for description of activity.
   2.   Capstone activity using scenarios and rubrics: Introduction to Sociology (SOC 101) – See *Written and Oral Communication* for description of activity.
   3.   Research paper rubric: English Composition (ENG 101)

4. High impact course assessment: Introduction to Information Technology (IST 102)
5. Human Anatomy and Physiology Society National Competency Exam for Human Anatomy and Physiology I (BIO 103) and II (BIO 104) – See *Scientific and Quantitative Reasoning* for description of activity.
6. Community College Survey of Student Engagement (CCSSE) - See *Written and Oral Communication* for description of activity.
7. Portfolio – Graphic Design Technology Program
8. External validation and departmental juries – Music
9. Criminal Response Emergency Assessment Scenario (CREAS): Interdisciplinary Assessment Activity (Capstone) for Administration of Justice, Nursing and Paramedic Emergency Services students

D.   Describe results of assessment work related to this competency:

Research Paper Rubric: English Composition (ENG 101)

Since 2006, the English Division has actively assessed student learning in ENG 101 and made progress toward better standardization among ENG 101 class sections and more clearly aligned outcomes and assessments in developmental English and ENG 101. The common assessment for ENG 101 is the argumentative research paper, which is graded using a common rubric. For several semesters, a random third of all ENG 101 research papers were collected for analysis. Along with the papers, faculty members submitted rubrics and questionnaires about the strengths and weaknesses of the papers. The data showed that for 38% of students, the actual writing quality was the weakest part of the research paper, and for 20% of the students, documentation and formatting were the weakest parts of the research paper. Only 10% of the students did not have a weakness in the research paper. Furthermore, the data showed a need for more standardization and consistency among instructors. To meet these needs, the Division developed an English Composition Instructors' Manual. The manual includes newly revised 2009 course outcomes/content objectives; a revised common grading rubric for essays and research papers; standardized requirements for ENG 101, including research essay guidelines and a pre and post diagnostic essay to determine student growth and achievement; HCC's composition philosophy; standards of a "C" paper, sample syllabi, etc. All faculty teaching ENG 101 receive a copy of this manual. Additionally, based upon finding of this measure, full-time faculty chose a new textbook that better fits the outcomes of ENG 101.

Also as a result of data collected through research papers, both full-time and part-time faculty participated in periodic norming sessions and "composition conversations." Through assessment of the collected research papers and collaboration during the composition conversations, faculty determined a need to foster better communication with the Developmental English faculty. As a result, faculty from both divisions collaborated on assessment procedures, rubrics, common challenges, and expectations at each

level of instruction. Comparing data from Spring 2009 and Fall 2009, the Student Success Center reported an increase in ENG 101 faculty satisfaction with the placement of students into 101.

Criminal Response Emergency Assessment Scenario (CREAS)

The disciplines of Nursing (NUR), Radiography / Medical Imaging (RAD), Paramedic Emergency Services (PES), and Administration of Justice (ADJ) take an integrated approach to teaching to the extent possible so that when students move into the workforce, they are familiar with working together as part of a cooperative team. HCC faculty annually hold a Criminal Response Emergency Assessment Scenario (CREAS) activity, in which graduating students from the registered nursing (RN), practical nursing (PN), and ADJ participate together for a day of mock mass casualty practical assessment based on real-life scenarios. The CREAS event includes a mock triage unit, which consists of an Urgent Care and an emergency room (ER). NUR students work in conjunction with RAD students to diagnose and treat more than 100 volunteer "patients" for a variety of ailments. Throughout the day, PES students continually bring in trauma victims by ambulance and at least one manikin patient is usually brought in via Medevac by Washington County flight paramedics. ADJ students settle domestic disputes in the ER, interview patients who have witnessed a crime, and handle a staged campus incident.

External Validation and Departmental Juries – Music

At the program level, all music majors are assessed at the end of each academic year in a departmental jury, which serves as external validation of the instructor's assessment of the student's progress. The student is assigned his or her applied level at this time. HCC belongs to the Council for Higher Education in Music, whose membership is comprised of most of the colleges and universities in Maryland with music programs. Regular meetings with counterparts from these member institutions, including the sharing and critiquing of syllabi, topical outlines and assessments helps to keep course level requirements and outcomes consistent throughout music programs in Maryland.

IV.   Competency: Technological Competency

A.   Definition: The ability to use technology to gather, evaluate, process and communicate information

B.   Level(s) at which competency is assessed: Broad, cross discipline/program and course levels

C.   Processes used to evaluate competency:
1.   Online common exams for content units: Introduction to Information Technology (IST 102)
2.   Common online assessment questions

3. Community College Survey of Student Engagement (CCSSE) – See *Written and Oral Communication* for description of activity.
4. Portfolio – Graphic Design Technology Program – See *Critical Analysis and Reasoning* for description of activity.
5. Interdisciplinary Assessment Activity (Capstone) - Mock mass casualty practical assessment for Administration of Justice, Nursing and Paramedic Emergency Services - See *Critical Analysis and Reasoning* for description.

D.   Describe results of assessment work related to this competency:

Introduction to Information Technology (IST 102)

Introduction to Information Technology (IST102) continues to be a high impact course. Several modifications have occurred in this course since 2006 due to ever-changing technology and overall course improvement. The application software was changed from Microsoft Office 2007 to 2010 and the operating system was upgraded to Windows 7.

In previous semesters, the Texas Information Literacy Tutorial (TILT) was used to introduce information literacy. However, this was replaced with a Financial Literacy component that was developed by HCC faculty using a government website. To insure that students were able to apply these skills, the course was modified to include modules on refinancing, loan amortization, and an understanding of credit options. Students were asked to apply these skills in an additional component in the required capstone project which is graded with a rubric.

In IST 102, students are required to take three online unit exams. All questions are drawn from a database that has been mapped to the IC3 certification. The course is revised as the national certification is updated. As a result, the original three outcomes for this course were re-evaluated and revised.

Common Online Assessment Questions

In order to ensure success in IST 102, students are required to complete an online assessment of their existing computer skills. A mandatory 70% is required to pass. If a score is lower, the one-credit IST100 Computer Basics course, which does not count towards a degree, is required to help insure student success.

Data from common HCC on-line assessment questions pertaining to information literacy are also collected. After giving these exams, faculty are considering the addition of common projects to the course as another outcomes measure. As a result of analysis,

One important result of the IST 102 SLOA project has been the development of an on-line computer skills placement exam. In 2006, faculty developed an on-line placement exam for IST 102, which is used in IST 100 (Basic Computer Skills) and IST 102 to develop cut-off scores for placement into IST 100.   Faculty review the results of both these assessments and make modifications to the course curriculum to improve student learning.

Portfolio – Graphic Design Technology Program

Since Spring 2006, the Graphic Design Technology (GDT) Advisory Committee, which is comprised of graphic design professionals from the community, reviews student portfolios with them using a rubric. The portfolio grading rubric was adjusted to equally divide the examples between Photoshop, Illustrator and InDesign. It includes web design and multimedia samples as well. This has made a significant difference in the quality of the program and the attainment of its learning outcomes. For example, when it was identified that the prints from the review were not of a high quality, HCC purchased a printer increases the depth and tonal range of the portfolio prints. Funds have been included in the GDT budget annually to keep the printer supplied with high quality paper and inks. Another year, focus was on illustrator graphics, typography and visual layout in the portfolios. Additionally, the Two –Dimensional design course content and outcomes were revised based upon advisory committee feedback through the portfolio review process as well. This provides additional opportunities for students to practice composition skills in a non-computer environment.

Part Three: Evolution of Assessment Activities

With its limited resources, the College focuses on its mission-based functions and related vision, carefully choosing strategically important directions that support all mission-based areas. The College's integrated planning, budgeting and evaluation model is the central process for the College's future growth and development. This "plan, do, assess, and adjust" model is the foundation for strengthening and continuously improving the institution. Major institutional change is being effected through the Institutional Effectiveness model and implementation of the Student Learning Outcomes Assessment Plan. The original SLOA Plan evolved into a model that guides the assessment process. As the College has continued to work to establish a culture of assessment and accountability, most faculty are now active participants in outcomes assessment work, with a goal to improve student learning, and by extension the effectiveness of the institution as a whole.

SLOA is a key performance indicator of the Institutional Effectiveness model which was implemented in FY 07. Key performance indicators are integrated in the College's 2012 Strategic Plan and its action plans. The following chart shows the relationship between institutional effectiveness and SLOA. Areas highlighted in red are components of SLOA.
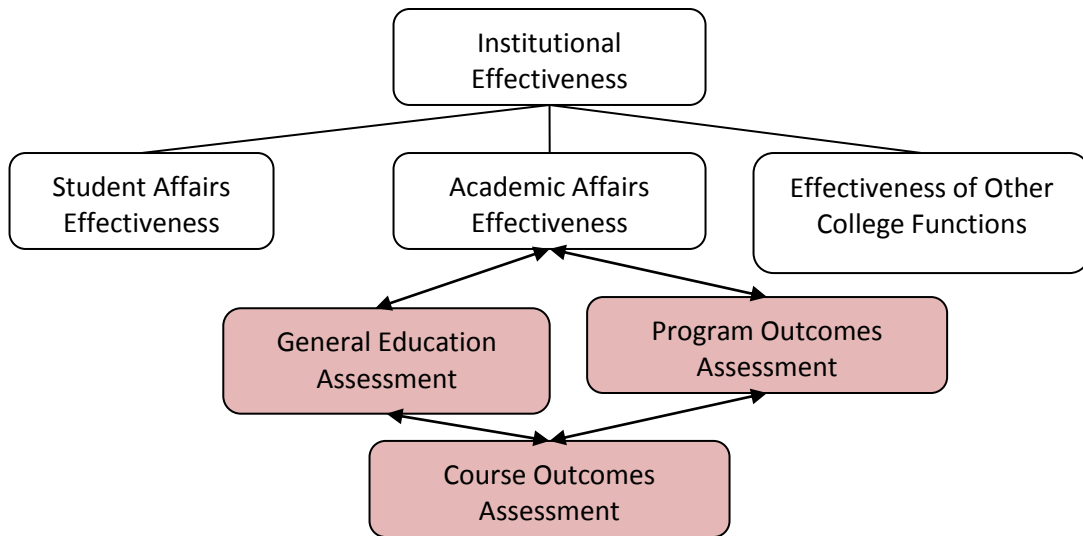
Institutional resources support SLOA in several ways. A budget is maintained for SLOA testing supplies and materials, faculty professional development, and consultants. Academic division chairs and directors also offer leadership to course- and program-level assessment. The Office of Planning and Institutional Effectiveness provides data support and serves as a repository for assessment information. Faculty and division chairs and directors routinely examine assessment data for ways to improve student learning. Whether improvement involves additional professional development, updated materials and equipment, or modifying curriculum, results are used in the unit planning and budgeting process as part of productivity reports and resource requests. Review of academic programs is also conducted in a systematic manner and used as part of planning and budgeting.

The SLOA Leadership team has accomplished much over the last few years, including:

- **Positive Communication**
  - *Teaching and Learning Newsletter* (http://www.hagerstowncc.edu/academics/outcomes-assessment): These newsletters are published once a semester and include examples of best practices in teaching and learning, as well as OA updates, for example expectations and deadlines.

  - *Monthly SLOA reports at academic division meetings and at Faculty Assembly*: These provide two opportunities when all faculty are expected to be present to discuss topics pertaining to SLOA at the division and College level.

  - *Professional development activities during Workshop Week*: The SLOA Leadership Team has presented and facilitated extensive activities during faculty professional development days. These include: poster presentations of best practices in SLOA on campus; course redesign

presentations; presentation of MAPP and CAAP data as well as critical thinking best practices; the NCCBP project and how it can apply to the College; and time for faculty teams to work on SLOA when a team member is available to answer questions.

- **Outcomes Assessment Training for New Faculty**: All new faculty are required to attend this training which takes place every fall semester. Training includes an introduction to SLOA and its role at the College; how to conceptualize and write outcomes; introduction to assessing outcomes; and introduction to the resources available for SLOA.

- **Facilitation of Faculty Development of Course and Program Level Outcomes Assessment**:   The SLOA Leadership Team works with individual faculty and groups of faculty to help them develop outcomes for their courses and programs. The team also provides guidance in developing assessments, collecting data, and using the data to improve teaching and learning. Often, the team must provide deadlines to faculty and encourage and urge faculty to work on outcomes assessment.

- **Development and Maintenance of an Outcomes Assessment Database** (http://www.hagerstowncc.edu/sloa): The database is a repository of course outcomes guide, program outcomes guide and matrices that faculty have completed. The team collects the information from the faculty and stores it in the database.

- **Facilitation of general education outcomes assessment**: The SLOA Leadership Team coordinates administration of the MAPP and CAAP exams with the faculty and Academic Testing Center. The team is also facilitating the revision of the general education outcomes and is in the process of developing local assessments.

- **Regular meetings with Vice-President of Academic Affairs, Academic Officers and College President, if deemed necessary**: These meetings are used to present SLOA progress and to discuss future goals.

- **Yearly Outcomes Assessment Report to the Board of Trustees**: Each year, the SLOA Leadership Team writes an annual progress report and presents it to Board of Trustees, providing an opportunity for communication between Board members and the team.

Outcomes assessment and accountability are part of the culture of the College. An important aspect of assessment and accountability is the realization that its establishment is a long term process, not a single event. Moreover, it must become an ongoing cycle of modification and improvement. Since 2006, the College has successfully established a system for maintaining positive momentum in its progress towards assessment and accountability. During the best economic times, the full realization of Student Learning Outcomes Assessment goals is a challenging and continuing endeavor. Over the past two academic years, HCC, as has

virtually every college, confronted a difficult fiscal climate. During that time, however, the College has continued to demonstrate strong support for the establishment of a culture of assessment and accountability. The College believes it has made significant progress in student learning outcomes assessment and intends to maintain its commitment to achieving that culture.

Measures	Communication Skills	Scientific and Quantitative Reasoning	Critical Analysis and Reasoning	Technological Competence
CAAP	X	X	X	x
MAAP	X	X	X	x
CCSSE				
HAPS				
ATI Testing				
CREAS				
ACS				
NCCBP				
MAT Redesign				
Common 5 questions – MAT 101				
SOC 101				
ENG 101 rubric				
IST 102				
GDT portfolio music				
Common online assessment				

Harford Community College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. **Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007.** The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

A summary of Harford Community College's student learning assessment activities is highlighted in the following pages. These activities align with Middle States Standards 7, 12 and 14 and Harford Community College's Strategic Plan. In addition, the organizational structure and institutional leadership for assessment activities are included.

Academic Program Review
Review of academic programs is a significant component of an overall educational effectiveness plan. Through self-analysis and peer review, program reviews lead to program improvements that are based on sustained information gathering and collaboration. They provide recommendations for needed resources and ensure superior educational programs that meet student and community needs. Program Reviews assess how well a program has achieved its objectives and outlines potential approaches to enhance this effort.   Program Reviews also address and fulfill accreditation requirements as prescribed by Middle States.

The Program Review Process sustains Harford Community College's (HCC) Strategic Themes:
  I.   Exemplifies educational excellence and effectiveness;
  II. Provides comprehensive support to advance students' success;
  III. Embraces a diverse culture of learning;
  IV. Engages and collaborates with education, business, government, and community;
  V. Develops resources and infrastructure to support its mission and vision;
  VI. Advances an understanding of its programs and opportunities.

Program Reviews also contain Assessment of Student Learning as recommended by Middle States' *Characteristics of Excellence, Standard 14: Assessment of Student Learning*, including:
  1. Summary of core course and program-level assessment activities since last program review.
  2. Summary of how the program meets the College's Eight Academic Outcomes.
  3. Summary of Student Learning Outcomes and Assessment Reports including evidence of improvement.

4. Summary and analysis of core course and program improvements as a result of assessment activities and findings since last program review; evidence of movement toward improvement as a result of these activities.
5. Summary and analysis of Employer Survey results for Career Programs.

Assessment of the Student Learning Outcomes Assessment & Improvement Plan
Harford Community College 2006-2010
The Assessment Task Force met in April 2008 to review Harford Community College's Student Learning Outcomes Assessment & Improvement Plan. The task force consisted of two faculty members, two deans and the assistant to the Vice President for Instruction. All members attended at least one Middle States Assessment Workshop. The Task Force decided early on in the assessment process to critique the plan in terms of the nine Middle States Expectations, as reported in the MSCHE document, "Assessing Student Learning and Institution Effectiveness."

Highlighted in the report are actions the Assessment Task Force recommended to address Middle States Expectations, including evidence of support, identified gaps, goals and suggested actions. The plan was discussed during several Deans' Group meetings, including a half-day retreat on assessment, and after three revisions, came to a consensus on the assessment plan in April 2009.

In the fall of 2010, two faculty members, a dean and the assistant to the VPI met to adjust the timeline of the Assessment of the Student Learning Outcomes Assessment & Improvement Plan to include projected assessment activities for the years 2010-2012.

Student Learning Outcomes Assessment
Each faculty member is required to submit a Student Learning Outcomes Assessment (SLOA) report to their dean. The SLOA report identifies the student learning objective from the course syllabus, how it is assessed, and identifies the HCC Academic Outcomes that are supported. TracDat software was purchased in 2009 to facilitate compiling assessment activities across the institution. Annual evaluations ensure faculty are responsible for participating in the assessment process. Assessment is also a factor in the tenure and promotion process. The administration believes it is important to communicate to faculty that assessment of student learning is supported across the entire institution, and faculty should not feel exposed or singled out.

Organizational Structure and Institutional Leadership for Assessment Activities at HCC

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                    Vice President for
                    Instruction
    ┌────────────────────┴──────────────────┐
  Learning Assessment          General Education
  Committee                    Committee
    ┌───────────┴──────────┬───────┘
  Assistant to the VP for       Deans
  Instruction
                                  │
                               Faculty

                    Vice President for Student
                    Development and Institutional
                    Effectiveness

                    Director-Institutional Research

  Coordinator- Assessment &
  Institutional Effectiveness
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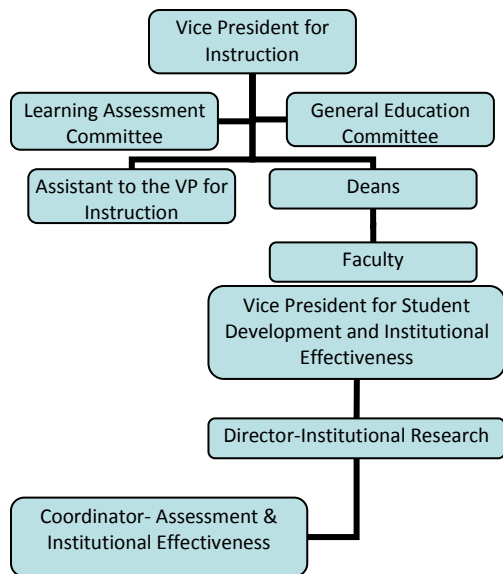
Part Two: Six Major Competency Areas

Harford Community College assesses student learning by aligning the course's student learning objectives to program goals or to one or more of the eight Academic Outcomes. The Student Learning Outcomes Assessment (SLOA) Reporting Form outlines the requirements for assessment activities.

For many of the assessment projects listed below, there are many **General Education** courses assessed. The mission of Harford Community College's General Education program is to foster the students' development of the core competencies, attitudes, and values necessary to pursue lifelong learning.   This foundation is integrated into all the degree programs and academic support areas at Harford Community College.   Upon completion of the General Education core requirements, students will possess the skills to acquire and apply knowledge across broad areas of study.   In addition, they will be able to demonstrate the skills basic to acquiring knowledge in the behavioral/social sciences, English composition, arts/humanities, mathematics, biological/physical sciences, and interdisciplinary and emerging issues.

Harford Community College's eight Academic Outcomes represent the skills, knowledge and abilities that students develop through their course work and other educational experiences at Harford Community College. Courses address one or more of the outcomes. Academic Outcomes are affected through course objectives and program goals. Harford Community College's eight Academic Outcomes include Communication, Critical Thinking, Science and Technology, Computational Skills, Information Literacy, Personal and Self-Management Skills, Interpersonal Skills, and Culture and Society.

In addition to the four required competencies, two additional competencies are included; Information Literacy and Personal and Self Management Skills.

I. Written and Oral Communication

A. Harford Community College's definition of competency:

Communication: The student will be able to use standard English to express and receive information using oral and nonverbal cues as well as standard written English.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Competency is assessed at the program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Rubrics, class assignments, formative and summative assessments, essay/journal assignments, blogs, and research papers are the processes used to evaluate competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

1. **Nursing & Allied Health Professions Division (NAHP)**
   The nursing faculty found that when assessing the communication skills, students were not able to utilize a grading rubric to produce a (passing) paper with a minimum grade of 75%. The grading rubric was developed by the faculty members to award points in the various sections rather than use a total grade. Students had four areas of difficulty, including APA style format errors, written composition errors, skipping entire sections of the paper and writing a nursing care plan. The nursing instructor provided additional in-class instruction, referred students to the Communications Skills Center and supplied the Center with the grading rubric. The faculty member reinforced the nursing care plan by reviewing the content in the clinical care area. Clearer directions to the rubric were created and specific weaknesses were further identified. In a subsequent term the rubric was clarified further and student learning improved: 94% of the students produced a (passing) paper with a minimum grade of 75%.

2. **Science, Technology, Engineering and Mathematics Division (STEM)**
   An assessment project in the STEM division questioned whether all STEM faculty have student assignments or assessments that require students to communicate. A strength identified from the assessment is that the academic and program outcome of communication is being addressed in STEM courses; faculty are giving the students many opportunities to develop communication skills in all courses via assignments/assessments, including homework, journal entries, short papers, research papers, oral presentations, classroom discussions, essays on exams and quizzes, and math proofs. Many faculty are also giving students feedback about their communications skills. A weakness identified is that the division does not currently have a common understanding of effective communication in the STEM field. A future goal is to have a common understanding of what effective communication in STEM related courses means, to continue to develop and incorporate ways for students to develop and demonstrate communication skills in their STEM courses,

and to develop appropriate methods of feedback to students so they can continue to improve in this area.

3. **Behavioral & Social Sciences Division**
   An assessment project in 6 different **General Education** History classes identified the student's ability to develop coherent and analytical papers, presentations, digital projects, and other products using historical sources. The "Presentation Assessment" project was in both face-to-face (f2f) and online formats. A variety of assignments were used to assess the students' written communication, critical thinking, and information literacy skills.

   The assessed students were history majors in each of the selected courses. Assessment criteria included grades and rubrics to evaluate the projects. In the U.S. History courses, the success rate was 88%; in the Western Civilization courses, the success rate was 80%. Based on the spring 2010 assessment results, the following are planned instructional changes:
   a. More detail and instruction on analyzing secondary and primary sources.
   b. Grading rubrics will be revised.
   c. Greater emphasis on "critical editing" skill building and evaluation.
   d. Revisions to the web-based research directions.
   e. Greater emphasis on proper citation.
   f. Introduce students to the Chicago Manual of Style.

4. **Business, Computing & Applied Technology (BCAT)**
   During FY09, the BCAT division piloted, along with academic advisors in Student Development and Institutional Effectiveness (SDIE), a career exploration component in BA 101 - Introduction to Business **(General Education)**. 100% of the students completed the initial components of the project. While analysis of the results indicated that the last 2 parts of the project, research and presentation, needed further development, the instructors were so encouraged by the results they expanded the career module to all BA 101 and CIS 102 - Introduction to Information Sciences **(General Education),** both introductory courses, in FY10. During the first semester, students were only given 5 weeks to complete the entire assignment. Feedback from student evaluations suggested that students would benefit from additional time to complete the project. As a result, the next semester students were given the project during the first week of the semester. Results improved, which suggests it is better to give an extended period of time to complete this assignment.

5. **Human Development**
   Students in the fall, 2008 and spring, 2009 semesters completed assignments, in HD 103 - Career and Life Planning, aimed at measuring their level of diversity awareness as it relates to the workplace. Films and group work were used to introduce the topic and each student responded in written form to direct questions. A strength of the assignment was that students demonstrated knowledge of diversity terms; a weakness identified students were not qualitatively relating personal experiences with diversity. The established benchmark was to have 75% of students, completing the diversity assignments, demonstrate an understanding of diversity issues in the workplace.

Ninety-four percent of students met the benchmark in 2008-09. However, qualitative data collected by instructors suggested that students were not necessarily responding with their true thoughts and opinions about diversity; rather, they parroted the terminology taught in the classroom.

In 2009-10 a diversity reaction essay was developed to elicit responses based on the students' personal experiences in diverse situations. The criterion was again met, this time by 92% of the students completing the assignment. Qualitatively, it was found that the responses were based on individual experience and not just parroting what was taught in the classroom. This same year, the diversity reaction essay assignment was restructured to elicit responses based on students' personal experiences with diversity.

6. **Visual, Performing & Applied Arts (VPAA)**
   An assessment project was designed to improve student written communication skills in Art 201- Survey of Art History I **(General Education)** and Art 202- Survey of Art History II **(General Education)**. As General Education courses, the Survey of Art History classes are at the 200 level and require a research and writing component. In addition, art history is a research based discipline and it is expected that students in art history courses will learn to apply written communication skills and research skills to the history of art.

   Many students, however, take these courses prior to successfully completing English 101- English Composition, which according to Harford Community College's course description is designed to help students become proficient in presenting and supporting ideas formed through research. These students entered the class at a significant disadvantage. Though they may be capable students, they do not have the skills to successfully meet the Student Learning Outcomes of the art history courses. It has been a goal of the instructor to provide students with the tools necessary to successfully meet these outcomes. The instructor created a two part research and writing assignment that was preceded by two shorter, preparatory, writing assignments, and devoted one class period to library skills, a class conducted by HCC library staff.

   Upon evaluating the class assignments it was found that the number of assignments that were not turned in and the number of students that were dropping the class was significant. The fact that non-participation rate went from 5% in the first writing assignment to 27% in the fourth writing assignment was alarming, as is the high withdrawal rate for the class. It appears that the students, who do not have the written communication skills to successfully meet the Student Learning Outcomes for the class, either dropped the class or simply did not complete the assignments. Discussion with other faculty, across numerous disciplines, indicates that this is a pervasive phenomenon that needs to be addressed campus wide.

   In order to test this hypothesis the instructor will document which students in these classes enter the course having successfully completed English 101. The instructor will also continue to administer the assessment with the added component of

collecting information from the entering students regarding their completion of English and Art History courses. What the instructor has come to realize is that they cannot successfully teach students research and writing skills and art history in a single semester. Trying to do so frustrates, discourages, and makes success in the course extremely unlikely for the students who do not have the written communication skills. This is evidenced in student evaluations of instruction, where the most common criticism of the class is something to the effect of "this is not an English class. You should not grade us on our writing."

The results of this assessment indicate that all General Education courses offered by the college, especially at the 200 level, should require successful completion of English Composition as a prerequisite in order for students to gain skills to successfully meet the Student Learning Outcomes and Program Goals.

II. Scientific and Quantitative Reasoning

A. Harford Community College's definition of competency:

Science and Technology: The student will be able to demonstrate an understanding of science and technology, their impact on society, daily life and the environment.

B. Level(s) at which the competency is assessed (e.g., institutional, program, course)

Competency is assessed at the division, program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Rubrics, class assignments, formative and summative assessments are the processes used to evaluate competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Science, Technology, Engineering and Mathematics Division (STEM)
All STEM faculty teaching a science lab class participated in a Lab Safety assessment project. The project focused on assessing the student's ability to demonstrate safe laboratory skills in multiple ways. Each student taking a laboratory course took a lab safety quiz during the semester to assess their knowledge of lab safety. Faculty also assessed student performance three times per semester; a common rubric was used and all critical measures of safe lab behavior were listed on the rubric. Faculty also recorded throughout the semester all incidents of lab safety violations that resulted in injury or the potential for injury. The ultimate benchmarks were to have all students earn a 95% or better on lab safety quizzes, 100% of all students demonstrated lab safety skills and to have no injuries or accidents occurring as a result of poor lab safety skills. The criteria

for the in-class observation/assessment and the list of incidents/accidents that were identified as 'benchmark' lab safety violations were identified on a common rubric.

The Lab Safety assessment has shown that the safety orientation the STEM division provides, across all lab classes, is effective in terms of student knowledge of lab safety protocols. The STEM division will continue to provide a safety orientation to all lab students. There are some areas where a few students in many classes disregarded the safety rules (food, open toe shoes, safe lab area and goggles). This creates the potential for an accident or injury. However, very few accidents and injuries have occurred over the three semesters. The assessment has provided us with important information that will help us improve our approach to teaching safe lab skills.

III. Critical Analysis and Reasoning

A. Harford Community College's definition of competency:

Critical Thinking: The student will be able to judge the plausibility of specific assertions, weigh evidence, assess the logical soundness of inferences, construct alternative hypotheses and render critical judgment.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Competency is assessed at the program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Rubrics, class assignments, formative and summative assessments, classroom participation, assigned homework, quizzes, chapter test, final exam, and test blueprints are the processes used to evaluate competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

1. **Visual, Performing & Applied Arts (VPAA)**
   A Photography instructor realized, after attending a MSCHE conference, that grades were not an indication of student learning, nor were grades assessments. He became a crusader for the use of rubrics after creating one to evaluate his students' work. Before creating the rubric, he knew rubrics described the criteria that would be assessed on an assignment; however, after using the rubric for his course assignments he discovered rubrics:
   a. Help students understand the instructor's expectations;

b. Inspire better student performance;
c. Make scoring easier and faster;
d. Make scoring more accurate, unbiased and consistent;
e. Improve communication with students;
f. Reduce arguments with students over grades.

The instructor concluded that while time-consuming to create, faculty expectations are clearer, and student performance is convincingly documented. The semester in which the rubrics were used, student's grades were actually lower than in past semesters, but the instructor felt that the rubric provided the means to improve the students' ability to critically think and learn. The instructor felt so strongly about his experience using rubrics, he shared his experience to all faculty during a professional development assembly.

2. **Science, Technology, Engineering and Mathematics Division (STEM)**
   The STEM division assessed the students' ability to apply computational skills in reasoning, estimation, problem-solving, and analysis in the two courses required in the Biology program, MATH 203 - Calculus I **(General Education)** and BIO 120- General Biology **(General Education)**.

   In BIO 120, the students' ability to solve genetics problems was examined. There were two assessment methods: a dedicated genetics quiz and a blueprinted exam. There was no pre-set benchmark. The fall and spring semesters were used to collect baseline data; the goal was to see if the current amount of time and types of exercises dedicated to teaching the topic were adequate. In both semesters, the majority of students (around 85% or more) earned a "C" or better on the first quiz; some students who did not pass the quiz, improved during the second assessment (the lecture exam). In the fall and spring semester two lecture and two lab periods were devoted to covering the material. Overall, student performance was satisfactory but there were opportunities for improvement of student learning.

   In General Biology, the change made as a result of this assessment was that additional homework will be assigned to give the students more opportunities to practice solving genetics problems or a lecture quiz will be added. The practice of using two lecture and two lab periods to teach the concepts will be maintained.

   In Calculus I, MATH 203, specific analytical problems were chosen to evaluate the student's ability to apply computational skills. The problems included the application of the extreme value theorem and the closed interval method to find absolute extreme values of the function, and finding the average velocity and instantaneous velocity from a given table of data. A rubric was used which clearly described how the student would meet the performance standard. Some changes in instructional methods were made as a result of the assessment in fall and reassessment occurred in the spring semester. Overall, a majority of students met the expectation; a few (around 13%) were approaching the expectation; and another 18% did not meet the expectation.

Based on the results of the Calculus I fall learning assessment, greater emphasis was placed on the troublesome topics during lectures in the spring semester. In addition, more practice problems were assigned. These actions appeared to improve student learning for the spring classes, as more students met the learning expectations.

3. **Behavioral & Social Sciences Division (BSS)**
   A. All PSY 101- General Psychology **(General Education)** students, taught by full-time faculty, were administered a common set of test items on research methods, brain, learning, abnormal psychology, psychological perspectives, and human development. Criteria were developed based on data from successive assessments. Students scored an average of 70% on the exam, across all sections. However, an item analysis of the test items revealed performance ranged from 21% correct on brain damage to 92% on research. After analyzing the results, additional assessment will be conducted for the following purposes:
      a. Identify strengths and weaknesses in student performance;
      b. Revise instruction in areas of weak performance;
      c. Review and revise test items if validity is an issue;
      d. After review and revision of test items, the assessment test will be used in adjunct faculty sections.

   B. Students in the Sociology program were assessed on their ability to apply basic concepts and theories of the discipline to various social structures. Three faculty members used various assessment methods (essay questions, multiple choice questions, and surveys), to assess the same program goal: The student will be able to apply basic concepts and theories of the discipline to various social structures. The faculty compiled and shared their results from the six sections of sociology courses assessed. Generally, 66% of the students demonstrated a good understanding of the sociological theories. This performance level was used to set the benchmark for performance on the student's ability to apply basic concepts and theories of the discipline to various social structures.

   The faculty plans to change the assessment methodology to obtain a larger population of majors in the assessment. The faculty learned the more advanced courses are better suited to assessing sociology majors since there are many non-majors in the introductory courses

   There were no changes made in instruction based on this data, but significant changes will be made in the assessment method based on the results of the first round assessment. The methodological changes are as follows:
      a. Faculty will develop a common test to be used in selected advanced sections to assess majors.
      b. The common test will be shared with adjunct faculty for assessment purposes.
      c. Faculty will administer a multiple choice test on theoretical knowledge applications to all students (majors and non-majors) to determine how well students using the course for general education credit are achieving the program goal of applying sociological theory.

4. **Business, Computing and Technology Division (BCAT)**

The BCAT division implemented a comprehensive assessment project in the BA101-Introduction to Business course. Approximately fifteen (15) sections of this course are taught each semester by adjunct and full-time faculty. Full-time faculty developed the initial Factory Location Project in FY08. Analysis of the results from the initial implementation of this project indicated that the use of rubrics would be beneficial for students and support the achievement of all components of the project tasks. Consequently, a project rubric was developed and incorporated into the FY09 project. After several revisions, the rubric was implemented into additional adjunct faculty class sections. Analysis of spring 2009 results indicated that most students (90%) were successfully completing the major components of the project. Faculty were satisfied that students had achieved the course Student Learning Objective (entrepreneurship) and related Academic Outcome (critical thinking). However, faculty believe there is an opportunity to further enhance the results with a revised, comprehensive rubric that will be presented to the students at the beginning of the activity and posted on the faculty website.

5. **Educational and Transitional Studies (ETS)**

An assessment project involved changing the curriculum in Math 001- Fundamentals of Mathematics to facilitate the math skills transferred from Math 001 to Math 002-Introductory Algebra to increase student success in Math 002. The curricular changes involved increasing the time allocated to signed numbers and basic algebraic operations in Math 001 while reducing the time allocated to rates, ratios, proportions, and percents, and increasing by one the number of quizzes given on signed numbers and basic algebraic operations.

For students that completed Math 001 and enrolled in Math 002, there was a significant increase in the proportion of students that demonstrated competence in evaluating numerical statements and comprehension of sets and properties of real numbers. Through observed performance of those students that successfully completed Math 001, there is a noted trend in improved performance in Math 002. Of those students that received a grade of A in Math 001, 88.9% of those students were successful in Math 002. Of those students that received a grade of B in Math 001, 64.3% were successful in Math 002, Those students that received a grade of C in Math 001 were at risk as only 17.4% were successful in Math 002.

IV. Technological Competency

A. Harford Community College's definition of competency:

Science and Technology: The student will be able to demonstrate an understanding of science and technology, their impact on society, daily life and the environment.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Competency is assessed at the program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Rubrics, class assignments, formative and summative assessments are the processes used to evaluate competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

eLearning
In the 2007 eLearning (formerly Distance Learning) Program Review, the creation of twenty-five new online courses and twenty-eight new hybrid courses were identified. Since 2007 the number of new online and hybrid courses has doubled. Student enrollment has increased from 1,191 in 2007 to 2,291 in 2011.

Also highlighted in the program review report was the fact that more instructors are using supplementary technology and are experimenting with simulation and games in their classes. The review discovered that faculty find students are more engaged in the learning process when technology is incorporated into instruction.

V. Information Literacy

A. Harford Community College definition of competency:

Information Literacy- The student will be able to recognize when information is needed and have the ability to locate, evaluate and use effectively the needed information from a variety of sources and formats.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Competency is assessed at the program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Quizzes, research papers, pre- and post-test questions, classroom and homework assignments are the processes used to evaluate competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

1. **Humanities Division**
    A. The Humanities Division requires that all adjunct faculty, teaching ENG 101-English Composition **(General Education)**, schedule two information literacy sessions, taught by librarians. In addition, many of the full-time faculty ask the librarians to teach these two sessions for their students. The assessment for ENG 101 is a 15-question quiz, which is administered at the end of the second session. The benchmark is that students answer each question with an accuracy rate of 80%. During Spring 2010, students reached or exceeded the benchmark on 13 of 15 questions asked. One question where the benchmark was not reached involves

asking students to correctly identify a journal article title in a citation from *Academic Search Premier*. This question has been problematic for some time. In the fall 2009 semester, 77% of students correctly identified the title. In the spring 2010 semester, 78% of students did so. The Instructional Services Librarian experimented with revising the wording of the question, but this did not have a positive impact. Although the responses to this question did not meet the benchmark, instructional faculty have not indicated that students have difficulty in correctly citing journal articles on their research papers.

B. To ensure that Harford Community College students are prepared for research writing when they matriculate to 4-year institutions, all students who take ENG 101 - English Composition (**General Education**), ENG102- English Composition and Literature, and ENG 109 – English Composition: Research Writing, are introduced to research writing and MLA documentation. The assessment projects in these courses verified that most students were achieving the goal.

In ENG 101, students used sources provided by the college's databases, to identify quality sources, and complete an annotated bibliography. They also learned to paraphrase materials from various sources. The three parts to writing a good research paper; gathering information; writing the paper using MLA style following the rules for in-text citations; using quotes and completing a works cited page, were identified and taught. The students used sources to provide background information; they learned to discuss concepts, used sources to give examples, and integrated sources into the text. Although students varied in their ability to grasp the skills taught, most students were able to find and integrate quality sources, particularly after evaluating their sources in a previously assigned annotated bibliography project.

In ENG 102, students were asked to provide background information, explain terms or concepts, and support their claims with facts, examples, and other evidence from their research. Students showed improvement from 68% satisfactory on the formative assessment to 91% satisfactory on the summative assessment. When asked to present academic or scholarly sources without losing their voice, students improved from 59% on the formative assessment to 82% on the summative assessment. Students improved from 68% satisfactory on the formative assessment to 91% satisfactory on the summative assessment when asked to cite the source of the quotations and borrowed ideas. Students also improved from 56% satisfactory on the formative assessment to 86% satisfactory on the summative assessment when asked to use direct quotation(s), or summarize/paraphrase correctly.

In ENG 109, the results of the assessment showed that 88% of the students satisfactorily used sources to provide background information or context and 88% of the students satisfactorily used sources to explain terms or concepts. However, only 21% of the students satisfactorily supported their claims with facts, examples, and other evidence from their research; only 33% of the students satisfactorily presented academic or scholarly sources without losing their voice,

including appropriate paraphrasing and avoiding the overuse of quotes; and only 33% of the students satisfactorily recognized opposing points of view before countering them.

In a second ENG 109 course, 95% of the students satisfactorily used sources to provide background information or context; 90% of the students satisfactorily used sources to explain terms or concepts; 55% of the students satisfactorily supported his or her claims with facts, examples, and other evidence from his or her research; 75% of the students satisfactorily presented academic or scholarly sources without losing their voice; and 70% of the students satisfactorily recognized opposing points of view before countering them.

In the May 2011 assessment meeting, faculty acknowledged that some students are still not adequately supporting their claims with facts or interpreting and summarizing their quotes in relation to their thesis, and agreed to put specific emphasis on these areas for next year's assessment project.

2. **Educational & Transitional Studies Division (ETS)**
    The Educational & Transitional Studies Division requires that all adjunct faculty teaching ENG 012 - Basic Writing classes schedule one information literacy session, taught by librarians. In addition, some of the full-time faculty also ask librarians to teach a session for their students. The assessment for ENG 012 during FY10 was a pre- and post-test consisting of 10 questions. The benchmark is that students answer each question with an accuracy rate of 80%. The benchmark was met on all but 3 of the 10 questions. Results in Spring 2010 improved over results in Fall 2009, in some cases by as much as 20%. Those that did not increase were already at a high rate of accuracy (97%). The questions that did not meet the benchmark involved:
    a) indentifying the purpose of quotation marks in searching;
    b) understanding that using the Boolean operator "AND" gives fewer results in searching;
    c) understanding that the online catalog rather than a library database is the tool to use to locate books.

VI. Personal and Self Management Skills

A. Harford Community College definition of competency:

Personal and Self Management - The student will be able to emphasize self direction and enhance self-reliance by establishing goals, developing objectives and implementing plans.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Competency is assessed at the program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Quizzes, classroom and homework assignments are the processes used to evaluate competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

1. **Health**

   The students in Health 101 - Contemporary Health Issues **(General Education)** and Health 102 - EMC, First Aid and Safety wrote SMART goals, in the areas of fitness, nutrition and stress management through journaling, exercise routines, and dietary practices, as an attempt to improve his or her state of wellness. Instructors lectured on implementing proper SMART goals, and provided examples of successful stress management goals. In addition, instructors used SMART goals to document and analyze the success of the goals written. A benchmark of 70% of students will write successful goals, was established. Instructors found that students were able to write SMART goals in the areas of fitness and nutrition. However, students had difficultly writing goals in the area of stress management.

   In 2009-10, data revealed 280 out of 394 students, or 71%, successfully developed stress management goals. The next step will be to make one of the three stress management goals a mandatory time management related goal since this has been identified as a need for students.

2. **Educational & Transitional Studies Division (ETS)**

   A. A leading contribution to the problem of students not completing transitional math courses is the lack of student initiative during individual practice (homework). Students that do not demonstrate effective time management, study skills, and active learning skills are not successful when presented with student learning objective assessment activities. Mathematics faculty felt it necessary to test the hypothesis that students that do not successfully complete homework assignments are generally unsuccessful in completing a developmental mathematics course.

   Common themes were identified concerning individual practice and independent learning in the transitional mathematics sequence: students, in general, are not assigned a sufficient number of problems during individual practice that are rigorously graded as those problems on the department assessment activities; the length of time between submission of assignments and feedback concerning performance on these assignments is too long to be useful; and students do not apportion sufficient time to individual practice, hence are not able to perform adequately on department assessment instruments. This in turn demonstrates that students have not mastered the required concepts for each course.

   Faculty implemented a software package, MyMathLab (MML) (Pearson Publication), over four 15-week semesters. The software package contained problems that directly correlate to student learning objectives in each of the courses involved. The program allowed instructors to track the amount of time spent and the number of problems that each student completed outside classroom instruction. Faculty compared student performance on department assessment

instruments with student performance in MML. In addition, they compared success rates of traditional assignments and MML assignments.

An analysis of the data collected indicated the following: a positive correlation exists between the number of students that successfully complete their homework and the number of students that successfully complete the course; no significant difference exists in the success rate between those students that successfully complete the traditional assignments and the MML assignments; a negative correlation exists between the number of students that do not successfully complete their assignments and the number of students that successfully complete the course regardless of what form of homework is given. In effect, regardless of what manner assignments are given, students that successfully complete assignments throughout the course are much more likely to complete the course successfully. Five hundred ten (510) students successfully completed assignments and 451 of those successfully completed the course. Conversely, 273 students did not successfully complete assignments and of those only 89 successfully completed the course.

B. The Associate of Arts in Teaching Degree (AAT) requires a 45 hour field placement experience. It was found that students were not demonstrating competence in the Student Learning Objective related to professional behavior within a school setting. After analyzing the problem, faculty initiated several processes to remedy the situation, including a formal, required pre-semester orientation program for students receiving field placements in EDUC 101- Introduction to Education, EDUC 107 - Introduction to Special Education, and EDUC 113 - Introduction to Early Childhood Education. During the scheduled mandatory field placement orientation meetings the field placement coordinator reviewed field placement requirements and students completed applications.

Results indicated the process changes were successful in improving student behavior. Before the required orientation was implemented 76% of students completed their field placements and 8% received incompletes. After the changes, 83% of students completed their field placements and only 3% received incompletes. Before the changes, 15% of students had mentor teachers who contacted HCC with complaints about the students, after the changes only 7% of students had mentor teachers contact HCC with complaints.

3. **College Life**
Students involved in College Life had the opportunity to earn a leadership certificate by attending various activities, workshops and seminars, and by compiling a co-curricular portfolio. Portfolios included a self-assessment tool completed by the student, a resume or transcript that reflects co-curricular involvement or participation in leadership programs, a written reflection, and the student's personal vision statement. Co-curricular portfolios were graded using a rubric. It is important to note that not all students who participated in the leadership certification program opted to create the portfolios. College Life staff set a goal of 60% successful completion for those students who participated in the rubric-evaluated portfolio

program. The goal was met with 63% of students who participated, successfully completing the program. Follow-up actions include re-focusing the portfolio on the creation of SMART goals to be scored using a rubric.

Part Three: Evolution of Assessment Activities

A summary of Harford Community College's student learning/institutional assessment activities, including modifications and adjustments since 2007, are listed below. These assessment activities have been recognized as impacting and/or improving teaching and learning.

I. **The Learning Assessment Committee (LAC)** was established in 2010. The purpose of HCC's Learning Assessment Committee is to affirm and improve student learning by providing the information, communication, and support needed by instructors to foster excellence in teaching, courses, and programs. The committee is comprised of faculty representatives from all divisions, a division dean, a representative from the Library, Student Development and Institutional Effectiveness, and the office of the Vice President for Instruction. The committee reports to the Faculty Advisory Committee and ultimately the Vice President for Instruction.

The Committee established four charges:
1. Mentor and advise faculty on assessment;
2. Assist with gathering, documenting, interpreting, and retaining information to assist with assessment;
3. Monitor assessment for the purpose of accreditation and satisfying Third Party Accreditation Agencies' assessment requirements;
4. Share information between and among members of the campus.

The accomplishments of the LAC in the first year included creating a template for HCC program goals, leading divisions on establishing goals for every program through a formal faculty professional development day activity, developing operational definitions for assessment terms, creating the Assessment Web Page to better inform faculty on assessment strategies and to sharing assessment materials with examples of evidence of student learning.

II. **Faculty Professional Development on Assessment**
1. Over the past fours years the Office of the Vice President for Instruction (VPI) has made a concerted effort to engage faculty and deans in the assessment of courses and programs. The VPI has afforded all seven deans and many faculty members an opportunity to attend at least one Middle States (MSCHE) assessment conference. In addition, the college provides professional development funds for all employees. Many faculty choose to use the funds to attend conferences on assessment. Every August a full day is dedicated to Faculty Professional Development (PD). The mission to engage more faculty in the assessment process has been successful, as the number of faculty who have contributed their knowledge and experience on assessment during PD, from 2007 to 2011, increased five-fold. In addition, in an effort to improve teaching and to ensure student learning is improving, a second Faculty Professional Development day was added in January, 2009 to accommodate the additional faculty who volunteered to present. January PD has continued through 2011.

2. The division of eLearning and Instructional Resources has offered many break-out sessions during Faculty Professional Development and sponsor "Tech and Talk," an afternoon of professional development, instructing faculty on how they can increase technology in their classrooms.

III. **Program Reviews/Program Goals**
One aspect of a program review is to review the syllabi of courses in a program. The course syllabus lists the student learning objectives and links them to the appropriate Academic Outcomes, ensuring students have the knowledge, skills and competencies valued by the college. As a result of the Program Review process, it was discovered that many of the academic programs did not have program goals. In January 2010 the Learning Assessment Committee, along with the Office of Instruction, sponsored a ½ day tutorial on developing program goals for every academic program. In January 2011 the program goals were established for all academic programs and incorporated into the college catalog. The ambition of the LAC is to map the student learning objectives with the program goals to ascertain the program's educational effectiveness.

Since May, 2007, more than half of the academic programs have been reviewed, including a review on Information Literacy, General Education and Distance Learning. Of special note, the Program Review for Information Literacy was recognized in 2009 as a model for another Maryland community college.

IV. **General Education Committee**
The General Education Committee was created in the January of 2010 after the General Education Program Review (2009) recommended it be established. The committee is comprised of faculty representatives from all divisions, a division dean, representatives from the Library, Student Development and Institutional Effectiveness division, and the office of the Vice President for Instruction. The committee reports to the Vice President for Instruction.

The mission of the General Education Committee is to provide leadership and guidance on General Education curriculum and assessment. One of the first charges of the committee

was to rewrite the General Education goals to make them student centered and measurable. This was completed in the spring of 2011. In addition the goals were reviewed to establish an alignment to the college's eight academic outcomes. The committee plans to map the new General Education goals to the General Education course codes, ensuring each General Education category supports a General Education goal.

Goals of the committee include:
1. Providing guidance to faculty on assessing the general education goals.
2. Providing guidance to faculty on reviewing and evaluating general education courses to ensure they align with the criteria listed in the curriculum guidelines.
3. Provide guidance to faculty and deans during the program review process to include a review of the general education courses specific to the program.

V. Quality Matters (QM)

Since 2007, thirty-two online instructors have had at least one course reviewed by Quality Matters (QM), an inter-institutional effort to improve the quality of online instruction in higher education in Maryland. Workshops are offered to faculty by the e-Learning staff, who explain the Quality Matters rubric and encourage faculty to review their online courses and develop course improvement plans. Currently, twenty-three online instructors have not been reviewed.

VI. Division Summaries on Assessment:

The role of the division dean is to provide leadership to faculty on the assessment of student learning. They monitor and mentor faculty to create effective assessment projects. Typically, each academic division identifies two or three Academic Outcomes or program goals to assess within the academic year. Every year the division dean writes a summary to the Vice President for Instruction elaborating on three or four assessment activities. As a consortium, the academic divisions aspire to assess all eight Academic Outcomes annually.

VI. Coordinator for Assessment and Institutional Effectiveness

The position for Coordinator for Assessment and Institutional Effectiveness was created in August, 2009 and reports to the Vice President for Student Development and Institutional Effectiveness. The Coordinator supports administrative and instructional activities related to assessment and institutional effectiveness, including activities related to strategic plan execution and efforts which support institutional improvement and improvements in teaching and learning. The Coordinator also provides leadership and support for all accreditation activities, working with instructional and non-instructional departments and units to assure that the College meets the assessment and institutional effectiveness requirements of the Middle States Commission on Higher Education. The Coordinator works closely with the Office of the Vice President for Instruction, the Institutional Research Office, the Faculty Assessment Committee, the College Advisory Council, and other units as necessary to further a culture of assessment at Harford Community College.

VII. Curriculum Work Group (CWG)

The College's curriculum approval process is completed through the Curriculum Work Group (CWG). The CWG meets monthly to evaluate curricular proposals for courses, programs and certificates. The group is comprised of one faculty member from each of the seven academic divisions, a dean representative and two advisors from Student Development and Institutional Effectiveness Division (SDIE). The Curriculum Guide provides instructions and forms for all curricular proposals including the creation of new programs and courses, as well as program and course modifications, General Education and Diversity justification. The guide is modeled after the MHEC requirements. The document is updated annually. Recent updates to the guide include the creation of a process for discontinuing programs, and the revision of the curricular process to improve communication between the Vice President for Instruction and the CWG.

Curriculum changes are the result of recommendations from program reviews, employer surveys, transfer articulation agreements, community and advisory committees, accrediting agency/approval constituents, and the need to update skills/technology. In addition to curricular changes, the CWG created a notification distribution list to ensure every essential person on campus is informed of the changes.

From 2007-2011 there have been approximately nine new certificates, four certificate modifications, one new program and nineteen program modifications. In addition, over the last four years, there have been forty-eight new courses added to the curriculum and sixty-one course modifications. Out of the total of 109 new or modified courses, nineteen are General Education courses.

Part Four: Appendix

Harford Community College
Student Learning Outcomes Assessment Reporting Form

APPENDIX A

Harford Community College
Student Learning Outcomes Assessment Reporting Form

Instructor: _____ **Course**: _____

Semester: _____ **Division**: _____

Date of Reassessment: _____

STUDENT LEARNING OBJECTIVE(S) A statement of what students are expected to know or be able to do upon completion of the course. [Refer to stated student learning objectives (formerly known as course objectives) as they appear on standard course forms and syllabi]	ASSESSMENT METHOD(S) The method(s) used (formative/summative) that will determine what was and was not learned and to what degree.	OUTCOME(S) OF ASSESSMENT ACTIVITY Respond to the three assessment questions: What was learned? To what degree was it learned? What was not learned by students?	OUTCOME(S) OF RE-ASSESSMENT ACTIVITY (if applicable) Respond to the three assessment questions: What was learned? To what degree was it learned? What was not learned by students?	ACTION(S) TO BE TAKEN Indicate if the instructional and/or assessment methods will be maintained or modified. Explain proposed modifications.	ACADEMIC OUTCOME(S) Identify the academic outcome(s) that the student learning objective supports.

STUDENT LEARNING OBJECTIVE(S)	ASSESSMENT METHOD(S)	OUTCOME(S) OF ASSESSMENT ACTIVITY	OUTCOME(S) OF RE-ASSESSMENT ACTIVITY (if applicable)	ACTION(S) TO BE TAKEN	ACADEMIC OUTCOME(S)
ENG 101 <mark>ENG 101</mark> Students will be able to: Provide support. This objective involves giving sufficient specific evidence to convince the reader of the validity of the thesis statement.	Illustration essay utilizing a specification sheet that identifies specific skills to be demonstrated.	Spec sheet indicates that the vast majority (14) of students were able to develop support paragraphs with adequate and appropriate material. However, some (6) did not have adequate materials in support paragraphs.	Review instructional method and materials related to developing ideas in support paragraphs. Locate another illustration model that more closely relates to preferred topic selections, such as life-changing event or popular culture.	Spec sheet indicates that the vast majority of students were able to develop support paragraphs with adequate and appropriate material. Very few did not have adequate development in support paragraphs.	Communication, critical thinking, information literacy.
MATH 203 Students will be able to: Solve problems using differential rules. This objective involves working problems in sufficient detail to show that formulas (rules) are understood and correctly applied.	Question and answer, board demonstrations by students, short quizzes prior to exam, and a comprehensive exam utilizing test blueprint. Adequacy of answers is judged based on choosing the proper rule(s) and correctly applying it.	Appropriate use of rules to compute derivatives was learned. Increasing difficulty of problems presented and rate of success on these problems will indicate degree of learning. Results indicate majority (15) of 20 students chose proper rule and applied it correctly. Some (5) did not demonstrate mastery of task.	N/A	Review student work to identify weak points and trends in error types; determine better methods to present material; look for "real-life examples to better relate concepts.	Critical thinking, computational skills, science and technology

STUDENT LEARNING OBJECTIVE(S)	ASSESSMENT METHOD(S)	OUTCOME(S) OF ASSESSMENT ACTIVITY	OUTCOME(S) OF RE-ASSESSMENT ACTIVITY (if applicable)	ACTION(S) TO BE TAKEN	ACADEMIC OUTCOME(S)
ENG 012 Upon completion of the course, students should be able to <u>use</u> proper grammar. (Bloom's Taxonomy: Application Level)	Graded worksheet assignments in which students correct peer written sentences containing grammatical errors and explain why the revision/correction was made. 2. Analysis of students' written paragraphs to determine specific grammatical errors	A vast majority (13/16) students were able to identify and correct grammatical errors involving sentence fragments, comma usage, spelling, capitalization, and subject-verb agreement. Several students (6/16) were not able to identify errors involving pronoun antecedent agreement.	N/A	Assessment method will be maintained. Instructional methodology will be modified to include the use of online material (instructional units, drill and practice exercises) related to pronoun-antecedent agreement.	Communication, Critical Thinking
BIO 103 To identify and explain the function of the organelles found in a human cell and to understand their role in the disease process.	Unit exams utilizing a test blueprint; written lab reports and exercises evaluated using instructor-designed rubric.	A majority of students (18/24) could explain the functions of organelles and explain their role in the disease process.	N/A	Maintain instructional practices in this area	Critical thinking, communication
To compare and contrast the gross and microscopic anatomy of the organs of the immune, integumentary, skeletal, muscular, and nervous systems.	Specific essays on unit exams evaluated using a rubric, written lab reports, and oral one-on-one quizzes in the lab.	A significant number of students (12/24) could compare and contrast all organ systems except for the immune system	N/A	Immune system is taught early in the course; provide review opportunities while teaching other systems by having students compare/contrast immune system with other systems as they are learning them.	Critical thinking; communication

Howard Community College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011
Howard Community College

Part One: Summary of Assessment Activities

Since it opened its doors in 1970, Howard Community College (HCC) has been committed to continuous improvement through data-influenced decision making. Guided by three strategic goals, seven general education competencies, and well-developed program and course objectives, assessment at HCC is not only valued and well-supported, but is embedded, systematic, and sustainable.

Learning outcomes assessment (LOA) at HCC is truly an institution-wide endeavor with leadership, guidance, and support from its board of trustees, president, vice presidents, planning, research, and organizational development (PROD) team, division chairs, faculty, staff, and students. The PROD team, which reports to the vice president of information technology, works with all the VPs and facilitates the design, implementation, analysis, and reporting across the campus and consists of an executive director of PROD, an associate director of PROD, an associate director of institutional research (IR), four research associates (two dedicated to faculty-led assessment projects), a research analyst (also supporting faculty-led projects), a research specialist, and one part-time staff member (see Appendix A). The size of the staff, alone, reflects the commitment and support of the institution to quality research and assessment.

Assessment occurs at every level of the college (course, program, division, and institution) and is tied to HCC's strategic initiatives (see Appendix B), general education competencies, and program and course objectives. Every full-time faculty member on campus is engaged in assessment each year, be it a one-year course-level teaching improvement project (TIP), or a more formal three-year LOA project. The vice president of academic affairs and her staff have created a five-year assessment plan and every year each division, assisted by PROD, begins two new course-level or one program/division-level formal LOA project(s). On average, 30 projects are underway each year on a three-year cycle. In addition to incorporating existing direct and indirect measures, for every project an attempt is made to find and use valid and reliable national or published measures, providing an opportunity for comparison and benchmarking. Approximately, one-third of the current projects use some form of external measure (i.e., survey, rubric, expert panel) or are benchmarked against the performance of other institutions and/or national norms. The remaining projects have developed locally-relevant instruments to measure institution-specific outcomes and variables. Assessment results from TIPs and formal LOA projects are used to evaluate and improve courses and programs, to inspire excellence in teaching, and to foster student success.

At the institution level, a variety of national and locally-developed measures are used to measure not only student progress on objectives and learning, but also student engagement and satisfaction. To evaluate its credit courses and student progress on relevant objectives, HCC uses

the Individual Development and Educational Assessment (IDEA) survey, developed and scored by the Kansas State University (KSU). The IDEA survey is administered in all courses taught by new and probationary faculty (full- and part-time) and approximately 50% of the continuing faculty each semester. Results are reported in three levels: institutional, divisional, and individual course levels. Overall results are reviewed by the vice president for academic affairs who reviews these results with the division chairs. Division chairs in turn share division and course data with their faculty. Results are discussed and used to identify areas of strength and areas in need of improvement. IDEA results can be the basis for a new assessment project, for curricular revision, or for a teaching improvement or faculty promotion project. IDEA results inform discussion, decision making, and practice.

To measure its "value-added" at the institution level, HCC administers the Council for the Aid to Education's (CAE) Community College Learning Assessment (CCLA) bi-annually. Summary data is included in the "Critical Analysis and Reasoning" section. Using reports from FY2008 and FY2010, senior leadership has begun to monitor trends in student progress in critical thinking, analytical reasoning, problem solving, and written communication. These institution-level data have prompted further evaluation at other levels to foster improvement.

Engagement at HCC, and other Maryland community college campuses, is evaluated using the Community College Survey of Student Engagement (CCSSE). Students at the college have participated in the CCSSE bi-annually since 2006. When asked to evaluate their "*…entire educational experience at this college*", 40.4% of students rated it as "Excellent", ranking second in the state. The CCSSE provides an opportunity to measure a college's results against all other colleges in the nation who have participated in the survey (658 community colleges in 2010), all medium community colleges participating (163), and all 16 Maryland community colleges. The items on the survey are aggregated into five major indicators of institutional effectiveness: Active and Collaborative Learning, Student Effort, Academic Challenge, Student-Faculty Interaction, and Support for Learners. On each of these measures, HCC has consistently scored at or above the benchmark with scores higher than the average benchmark scores of all community colleges, medium community colleges, and Maryland community colleges.

HCC has administered the Yearly Evaluation of Services by Students (YESS) survey annually since 1991 providing students the opportunity to rate their satisfaction with college services, instruction, and other aspects of campus environment and campus life. Each spring, students in randomly selected class sections are asked to participate in the survey. Faculty members administer the survey in class or ask students to return it at a later class session. In spring 2010, 95 sections (1,348 students) returned completed surveys, for a response rate of 55%. The results are used to recognize units that provide high quality service, to set goals for the coming year, to allocate resources, and to focus on improvement activities.

This report focuses on the evaluation of seven general education competencies, four identified by Middle States and the Maryland Higher Education Commission (MHEC) as critical for student success (written and oral communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency) and three additional competencies assessed at HCC (information literacy, global awareness, and appreciation of the arts). The following sections of this report will examine each competency in turn, providing examples of the ways in which these competencies are measured at HCC, offering results from these assessments, and outlining the ways in which these results are used to improve student learning.

Part Two: Four Major Competency Areas

I. Written and Oral Communication

A. Institution's definition of competency

At Howard Community College, the written and oral communication competency is defined as a student's ability "to express ideas effectively both orally and in writing."

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Since the 2007 SLOAR report, the college has begun, and in some cases completed, one division-level, seven program-level, and eight course-level three-year learning outcomes assessment projects (see Appendix C), incorporating measures of student competency in written and oral communication.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct and indirect measures have been used throughout the projects to assess written and oral communication. Direct measures include course-embedded assignments scored with a standard rubric, score gains between entry and exit on tests and writing samples, and expert observations/ratings of student field work. Indirect assessment measures include student and faculty focus groups, locally designed tests and assignments with blueprints outlining what is being assessed, student grades and passing rates in assessed courses, and grades on course assignments not scored with a rubric. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided below (sub-section D).

D. Describe the results of the assessment work related to this competency.

English as a Second Language (ESL) Program Review: This project is in its third year of the three-year assessment cycle. The goal of this outcomes assessment project is to explore the success of a cohort of ESL students those successfully completing (C grade or better) two or more ESL courses in FY-2007, in subsequent writing intensive courses (e.g., college-level ENGL courses, PSYC courses, HIST courses, etc.) across campus and to improve instruction in the program to better prepare them for college-level coursework. Cohort tracking and faculty and student focus groups were the main forms of assessment. Most recently, as a pilot, the faculty have started to focus on critical thinking demonstrated in the students' writing assignments.

    Findings: Cohort tracking information showed that ESL students have a similar or better success rates as compared to the overall success rates of writing intensive courses. ESL students in the FY-2007 cohort who went on to take writing intensive courses the following year, have on average a 92% success rate (ABCD) in subsequent courses. Faculty focus groups revealed student preparedness in areas of study habits, knowledge of grammar and punctuation, knowledge of essay structure, and desire to improve writing. Some areas identified as needing improvement include: reading comprehension, critical thinking skills, information literacy, and vocabulary. Students, however, had an opposing viewpoint. They felt underprepared for their college-level English and writing intensive courses, especially in areas of grammar and comprehension. The preliminary findings from the critical thinking pilot project using a critical thinking rubric (scores ranging from 8-32) from the Foundation for Critical Thinking reveal that students completing at least one ESL course (mean score = 17.54) perform as well as those placing into college-level English (mean score = 18.50) on critical thinking as demonstrated in a college-level English course assignment.

    Changes made: The following are changes made to date as a result of the project and further assessments (e.g., exploring levels of critical thinking competency using a standard rubric, etc.) are underway: updating course objectives and syllabi to specifically include information literacy topics (i.e., plagiarism), a greater focus on discussion of academic topics and listening comprehension/note-taking skills, and altering the proportion of grades from in-class writing assignments; and formation of a faculty committee to develop a scope and sequence for the information literacy skills in the ESL program.

Composition Program (ENGL-121 & ENGL-122) Course Review: This project completed its assessment cycle. The goal of this outcomes assessment project was to assess the impact of the second writing course (ENGL-122) on student success in selected general education courses (nursing courses) that require substantial amounts of academic writing and research. Cohort tracking of course grades and pre-/post-assessments were the main forms of assessment.

 Findings: Cohort tracking information showed that there was no statistically significant relationship between grades in ENGL-121 and ENGL-122 and grades in any of the five writing intensive nursing courses (p>0.5). Data obtained from pre- and post-assessments in ENGL 122 and in selected Gen Ed nursing courses requiring significant writing also showed no impact.

Sample data from one semester: English 122 and Nursing Grades – Cross Tabulation

ENGL-122 Grades		Nursing Grades				
		A	B	C	D	Total
A	Count	1	13	4	1	19
	%	5.3%	68.4%	21.1%	5.3%	100.0%
B	Count	3	15	6	0	24
	%	12.5%	62.5%	25.0%	.0%	100.0%
C	Count	1	1	0	0	2
	%	50.0%	50.0%	.0%	.0%	100.0%
D	Count	0	1	0	0	1
	%	.0%	100.0%	.0%	.0%	100.0%
W	Count	0	2	0	0	2
	%	.0%	100.0%	.0%	.0%	100.0%
Total	Count	5	32	10	1	48
	%	10.4%	66.7%	20.8%	2.1%	100.0%

 Changes made: As a result ENGL 122 was dropped from General Education Core.

Business and Computer Systems Division Review: This project is in its third year of the three-year assessment cycle. The goal of this outcomes assessment project is to determine and assess student mastery of ten division-level outcomes, as determined by a panel of local businesses, across the division. Curriculum mapping, grades on particular projects and assignments related to specific outcomes, and external grading on a standard rubric of course-embedded assignments were the main forms of assessment. Data collection is still underway.

 Preliminary findings: Results related to communicating effectively reveal that on average students perform at a satisfactory level [mean = 2.10 (using 4-point scale 0=contains no or minimal elements to 3= meets all elements in professional manner)], and those with more than 45 credits, nearing completion, perform at a higher level (mean = 2.31). Grades earned were also compared to rubric performance and mirrored levels of communication mastery.

Results for Outcome 2 - "Communicate effectively and deliver professional oral and written presentation(s) in various business settings"
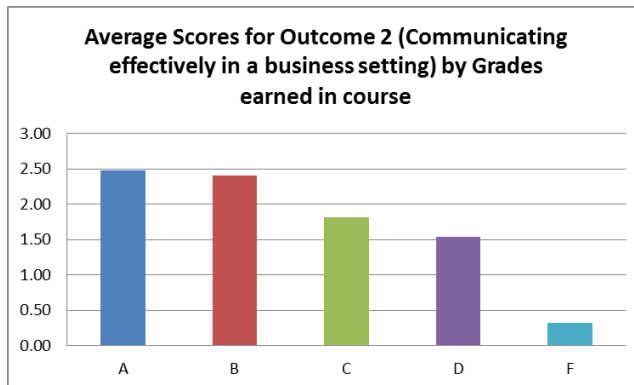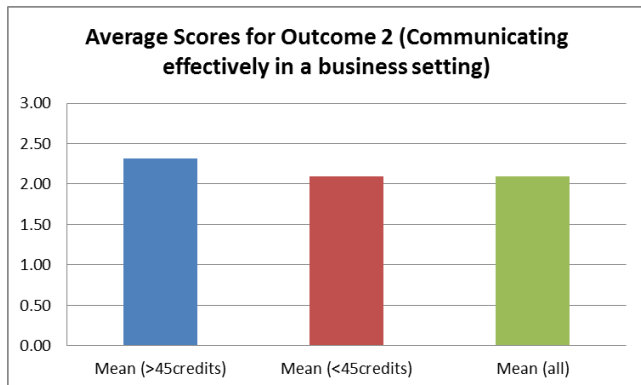
Results for all eight (8) of the ten (10) division-level outcomes.
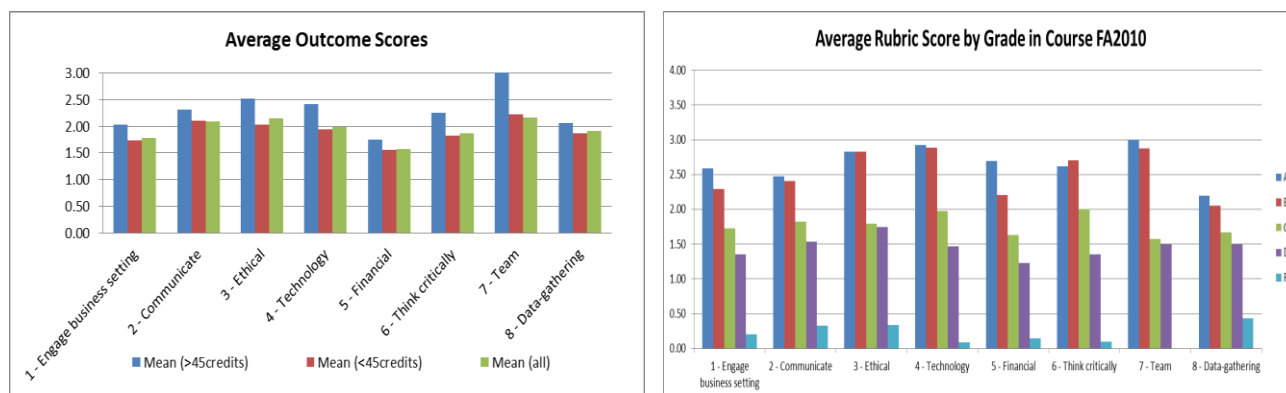
Average Outcome Scores

Average Rubric Score by Grade in Course FA2010

Changes made: The following are changes made to date as a result of the project and further assessments (e.g., exploring levels of mastery of remaining outcomes) are underway: mapping of course-level objectives to division-level outcomes and addition and standardization of course-embedded measures of outcomes where appropriate.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

At Howard Community College, the scientific and quantitative reasoning competency is defined as a student's ability to "perform mathematical operations at a college level and apply these skills."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

In the past four years, the college has begun, and in some cases completed, two program-level and ten course-level three-year learning outcomes assessment projects (see Appendix C), incorporating measures of student competency in scientific and quantitative reasoning. Additionally at the institution level, as part of the college's strategic plan goal #1 (see Appendix B), success in mathematics developmental education and persistence and success in subsequent college-level courses are systematically assessed.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct and indirect measures have been used throughout the projects to assess scientific and quantitative reasoning. Direct measures include pass rates on certification exams, score gains between entry and exit tests and course grades. Indirect assessment measures include student interviews, locally designed tests and assignments with blueprints outlining what is being assessed, and passing rates in assessed courses. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided below (sub-section D).

D. Describe the results of the assessment work related to this competency.

Basic Algebra and Geometry (MATH-061) Course Review: This project has completed its three-year assessment cycle. The goal of this outcomes assessment project was to examine the impact of a pilot course on student success and confidence and to increase student success in MATH-061 and in its subsequent course, Integrated Algebra and Geometry I (MATH-064). Changes to the course were implemented in a sub-set of sections (experimental group), while the remaining sections served as a control group. Some examples of changes to the course involved: the creation of required lecture lessons requiring 100% basic skill proficiency, automated homework and pretests using the Hawkes certificate program, and the creation of CE 6 classes for every pilot section which contained the ModuMath videos to track student usage. Assessment measures included performance on an entry and exit survey measuring attitude and math skills and course grades.

Findings: There was statistically significant variation in the performance of the pilot and control groups ($p<.001$) on the post-test. Since there was no statistically significant variation in the performance

of the pilot and control groups in the pre-survey, the performance variation on the post test can be safely attributed to the 'treatment effect' i.e., changed course material. However, both groups improved from pre- to post-test ($p<.05$). Question-level analyses also revealed variations in improvement. Additional analyses revealed, 66% of those who passed (A, B, C) MATH-061, also passed (A, B, C) their math course the following semester.

Comparative Performance of Pilot and Control Groups on the Pre- and Post-Survey

	Pre Survey		Post Survey	
	Pilot	**Control**	**Pilot**	**Control**
Mean	6.91	6.74	9.3	7.62
Standard Deviation	2.32	2.76	2.3	2.69

Changes made: The following are changes made as a result of the project: homework certificates were maintained for all but one of the algebra lessons; a hard copy for the Quick Checks and pre-tests for each unit were put back into the packets; to earn a little more time in the course for students to work, we dropped the prescriptive test and two lessons from the sequence of lessons; two of the units were reordered; basic arithmetic skills are now being taught through teacher lecture during the first week of classes; instructors are also required to lecture on the word problem section of the course, solving equations and again in the lessons regarding work with lines; and the option to retake any exam at the end of the semester was added.

Fundamentals of General Chemistry (CHEM-103) Course Review: This project has completed its three-year assessment cycle. The goal of this outcomes assessment project was to determine if students are learning the course objectives at an appropriate level and what changes need to be implemented to enhance learning. The general chemistry portion of the national American Chemical Society (ACS) exam was given as the final exam in the course, overall scores were compared to national norms, and question-level analyses informed instructional changes. An exploration of success in a concurrent math course also informed possible areas of improvement. Student success on the chemistry portion of the nursing entrance exam was assessed.

Findings: Students consistently scored higher than the national average on the ACS exam. However, after question-level analyses, it was determined that students had less success on quantitative questions. This finding led to an exploration of success in concurrent math course. Students who passed their math course, regardless of the level, were also more likely to score higher than the national average on the ACS exam. Additionally, 65% of students who took the nursing exam passed the chemistry portion.
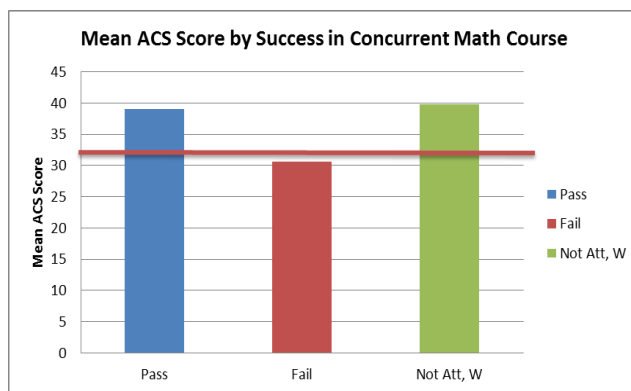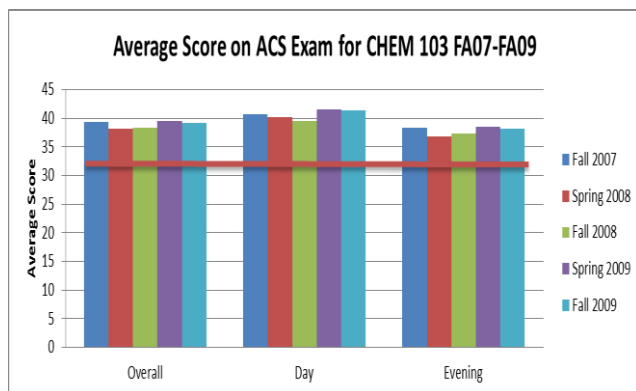

Changes made: The following changes were made as a result of the project: an online homework program will be introduced (Mastering Chemistry), a cumulative review of the course content and related materials have been developed and added to the end of the semester, and more class time is spent on solving problems involving more difficult concepts and group problem solving.

Elementary Education Sequence Program Review: This project is in its second year of the three-year assessment cycle. The goal of this outcomes assessment project is to examine student success on the Praxis I teacher certification exam after completion of course and student success in course. Course

grades and scores on the Praxis I Math are the main forms of assessment. Data collection is still underway.

Preliminary findings: Beginning in Fall 2009 and adding each subsequent semester, the cohort of students are being tracked on course grades in the elementary education sequence, their scores on the Praxis I Math, and when in the sequence do they take the exam. Preliminary findings indicate that about 69% of students who have taken the certification exam have scored at or above the state minimum requirement of 177, and that they take the exam sometime after MATH-127 (including during or after MATH-128).
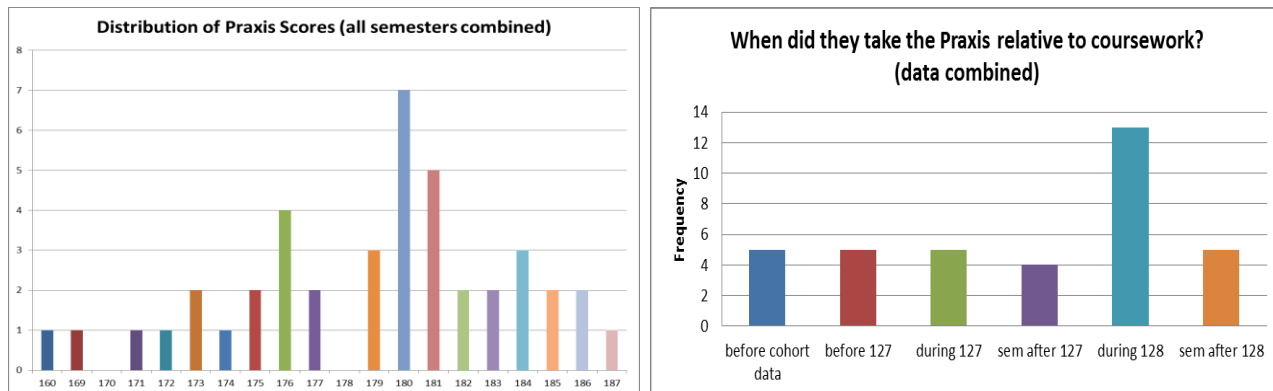
Changes made: Because of the ongoing nature of this project, no specific changes have been made to date.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

At Howard Community College, the critical analyses and reasoning competency is defined as a student's ability to "demonstrate that they value and utilize open-mindedness, inquiry, rational assessment of data and text."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The college has begun, and in some cases completed, nine program-level and 16 course-level three-year learning outcomes assessment projects since 2007 (see Appendix C), incorporating measures of critical analysis and reasoning. Additionally, at the institution level, the Community College Learning Assessment (CCLA) has been administered twice, and will be re-administered in FY-2012.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct and indirect measures have been used throughout the projects to assess critical analysis and reasoning. Direct measures include rubric assessment of student work, critical thinking surveys, and score gains between entry and exit tests. Indirect assessment measures include course grades and pass rates. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided below (sub-section D).

D. Describe the results of the assessment work related to this competency.

Ideas in Mathematics (MATH-122) Course Review: This project has completed its three-year assessment cycle. The goal of this outcomes assessment project was to examine the content of the course as compared to comparable courses in the state and to assess improvements in critical thinking and appreciation of mathematics as a result of taking the course. A home-grown survey was used to assess student perceptions of critical thinking and their appreciation for mathematics. Projects were embedded in the course, either based on game theory or financial literacy, emphasizing critical thinking skills. Final exam, project, and course grades were used as indicators of success.

Findings: Section differences in project, final exam, and course grades were explored. Over the course of the project, section differences in project, final exam, and course grades diminished, and overall success rates in the course increased to levels nearing the overall college rate.

Changes made: The following are changes made as a result of the project: game theory and financial literacy have become the two main themes of the course; journaling has been added to the course to solicit feedback from the students and to promote reflective learning; an instructor packet has been created including course objectives, sample homework and projects for each theme, pacing charts, and teaching tips; course test, projects and final exam have been reviewed and edited; and a greater emphasis assigned to critical thinking throughout the course.

Principles of Macroeconomics (ECON-101) Course Review: This project is in year two of its three-year assessment cycle. The goal of this outcomes assessment project is to assess student critical thinking skills and content knowledge, establishing consistency across sections of the course. The faculty developed a critical thinking assessment tool incorporating the use of select YouTube videos and multiple choice questions to evaluate both content-specific knowledge and critical thinking skills. The assessment is given as a pre-/post-test design and an analysis of change scores is conducted.

Preliminary findings: Student scores in all pilot sections improved for both the general knowledge and the critical thinking questions from pre-test to post-test. Scores improved the most for the general knowledge test. A revision of the critical thinking questions and administration in all sections of the course are currently underway.

Average scores across sections	Pre-test	Post-test	Change
Content Knowledge	37.74	66.92	+29.18
Critical Thinking	38.50	55.36	+16.86

Changes made: The project is currently underway; the coordinator, however, has conducted discussions with faculty around embedding critical thinking skills into the course. By administering the assessment to all sections of the course, specific section-based recommendations will be made after the results are fully analyzed.

Community College Learning Assessment (CCLA) Institution-level Review: The CCLA examines how the institution as a whole contributes to student development by measuring gains in critical thinking, analytic reasoning, problem solving, and written communication. The CCLA also offers national comparative data from other two-year and four-year institutions. Howard Community College (HCC) piloted the CCLA in the 2007-2008 academic year with first-year and exiting students. In the 2009-2010 academic year these efforts were repeated, assessing 124 first-year students and 110 exiting students. Students randomly took either the Performance Task or the Analytic Writing Task, the latter consisting of two parts: Make-an-Argument and Critique-an-Argument. After completing the CCLA, students took the Scholastic Level Exam (SLE). Scores were converted to allow for comparisons with other institutions that require SAT scores. The college plans to re-administer the CCLA in 2011-2012 to have three years of trend data before making any specific changes.

Preliminary findings: HCC's first-year and exiting students' total scores improved with the greatest gains in the areas of critiquing an argument and analytic writing. Modest gains were also made in the area of making an argument and areas assessed by the performance task.

See charts on next page.

Mean Scores and Growth Estimates for first-year and exiting students in the 2009-2010 CCLA sample and at Howard Community College

	First-year Students			Exiting Students			HCC Growth Estimates	
	Your School	All Schools*		Your School	All Schools*		Score Change	Effect Size
Performance Task	1001	995		1076	1100		75	0.51
Analytic Writing Tasks	1024	1067		1138	1171		114	0.78
Make-an-Argument	1043	1073		1125	1159		82	0.43
Critique-an-Argument	1001	1058		1150	1178		149	0.89
Total CCLA score	**1012**	**1031**		**1107**	**1135**		**95**	**0.65**
SAT score	**966**	**951**		**977**	**973**		**NA**	**NA**

*Limited to 2-year schools where at least 25 students had both CCLA and SAT scores

Effect size comparisons with other CCLA institutions
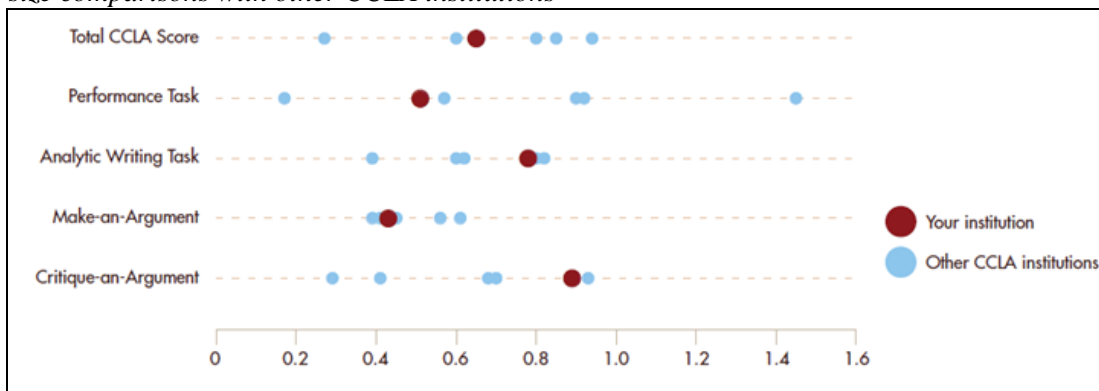
IV. Technological Competency

A. Institution's definition of competency

At Howard Community College, the critical analyses and reasoning competency is defined as a student's ability to "display technological competence."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Since 2007, the college has begun, and in some cases completed, five program-level and 15 course-level three-year learning outcomes assessment projects (see Appendix C), incorporating measures of technological competence.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct and indirect measures have been used throughout the projects to assess critical analysis and reasoning. Direct measures include rubric assessment of student work, score gains between entry and exit tests, external evaluation of skills, performance on certification exams, and objective mapping to exam questions and performance. Indirect assessment measures include course grades and pass rates. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided in (sub-section D).

D. Describe the results of the assessment work related to this competency.

Introduction to Computer Aided Drafting and Design (CADD-101) Course Review: This project is in year two of its three-year assessment cycle. The goal of this outcomes assessment project is to facilitate the effective integration of a new building information modeling (BIM) software, Revit, into the existing

curriculum by exploring the time needed to teach the new concepts, the time to allot for students to complete the assignments, the content required for students to grasp the basic concepts, measurement of student mastery/success (i.e., grading and testing), and the potential need for the development of a new course. An external focus group of three industry professionals was assembled to assist in the design of new learning modules; software and hardware requirements were examined and new learning modules were developed for design-specific applications. The industry professionals developed a list of instructional recommendations.

Preliminary findings: The lengths of in-class time required to teach the material depends on the student's prior design knowledge. As such, at least an hour of class time must be allocated for each concept. Additionally, the current tutorials and text do not address design concept, but instead focus on the capability of the tool.

Changes made: The following actions have been taken to date as a result of the project and further assessments (e.g., reassessment of learning after inclusion of manual, implementation and assessment in lower-level course) are underway: the industry expert and the instructor are developing a condensed manual of multi-discipline design and concepts for use in the classroom.

Digital Media Program Review: This project has completed the three-year assessment cycle. The goal of this outcomes assessment project was to examine students' progression and mastery of skills through the curriculum. Specifically, following completion of the exit courses, consistent and skillful use of typography, color, imagery, message and concept, and layout should be demonstrated in the students' portfolios. An external grader and a standard rubric were used for assessment of pre-assessments (from lower-level courses) and post-assessments (from upper-level courses).

Findings: Students became more proficient in the use of all five skills after taking the progression of courses in the program, from lower-level to upper-level courses. However, further analyses showed that some courses, through their assignments, focus more specifically on a sub-set of skills and not others. Color and imagery are the highest scoring categories, followed, in descending order, by message & concept, layout, and typography. This is acceptable since many of the classes are foundational, and the higher level skills (concept, layout, typography) are covered in great detail at the 300 and 400 levels. Skill scores on projects by class are satisfactory, except for one course.
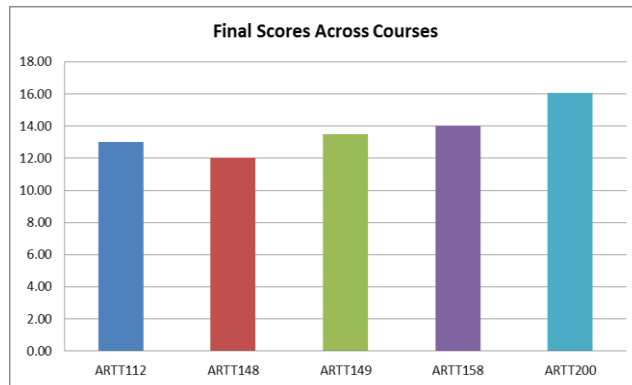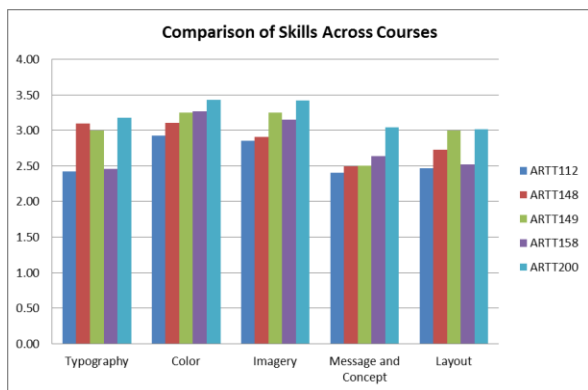
Changes made: The following are changes made as a result of the project: a new adjunct instructor of design was hired to teach ARTT-200; Adobe Indesign is now being taught in ARTT-200 and substantial course-level changes are being implemented; the changes in ARTT-200 have also prompted changes in ARTT-204; extra time is being afforded in the initial creative stages of logo and stationary design; and assessment with the standard rubric will continue.

Additional Competencies

V. Information Literacy

A. Institution's definition of competency

At Howard Community College, the information literacy competency is defined as a student's ability to "recognize when information is needed and to locate, evaluate, and effectively use that information to solve complex, theoretical, and practical problems."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The college has begun, and in some cases completed, one program-level and nine course-level three-year learning outcomes assessment projects (see Appendix C).

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The assessment projects include both direct and indirect measures. Direct measures include score gains between entry and exit tests, external evaluation of skills, and objective mapping to exam questions and performance. Indirect assessment measures include course grades and pass rates. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided below (sub-section D).

D. Describe the results of the assessment work related to this competency.

Accelerated College Composition (ENGL-121) Course Review: This project is in year two of the three-year assessment cycle. The goal of this outcomes assessment project is to assess changes in Energy Leadership and its relationship to course success. Students in the accelerated course are those who place in the highest level of developmental English, but because of their score are qualified for this special program to complete college-level English. The course entails a coaching component based on the energy leadership scores at the beginning of the semester. Additionally, post-writing assessments, assignment grades, and course grades are explored.

Preliminary Findings: Statistically significant correlations exist between the pre- and post-Energy Leadership survey results and overall grade, particularly for questions related to locus of control. Additionally, post-writing assignment surveys revealed that students felt that they were being heard by their instructor and their peers (active listening) and were receiving praise and encouragement. However scores for engagement were consistently lower, although remaining above 3.75 out of 5 the whole semester.
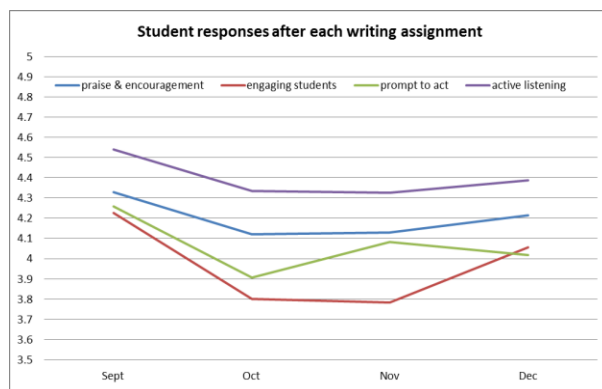
Changes made: The findings are currently being replicated before changes are made to the course.

VI. Global Awareness

A. Institution's definition of competency

At Howard Community College, the global awareness competency is defined as a student's ability to "factor in global perspectives on issues and understand the interaction among self, society, and the environment."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Since 2007, the college has begun, and in some cases completed, one division-level, one program-level and seven course-level three-year learning outcomes assessment projects (see Appendix C), incorporating measures of global awareness.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct and indirect measures have been used throughout the projects to assess global awareness. Direct measures include rubric assessment of student work, score gains between entry and exit tests, external evaluation of skills and objective mapping to exam questions and performance. Indirect assessment measures include course grades and pass rates. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided below (sub-section D).

D. Describe the results of the assessment work related to this competency.

Global Health (PUBH-280) Course Review: This project is in year two of the three-year assessment cycle. The goal of this outcomes assessment project was to align the course with its equivalent course at UMBC and compare success rates of the students. Course, exam, and unit map grades are compared

Preliminary Findings: Students at HCC scored slightly lower on each of the four unit exams than the University of Maryland Baltimore Campus (UMBC) students, but only by a margin of one to two questions. HCC students scored higher than the UMBC students on both the Asia and Americas map and slightly lower on the Africa map quiz. Scores on the Europe map quiz showed the greatest mean score difference between HCC and UMBC students. Extra credit points may be the cause of the differences.
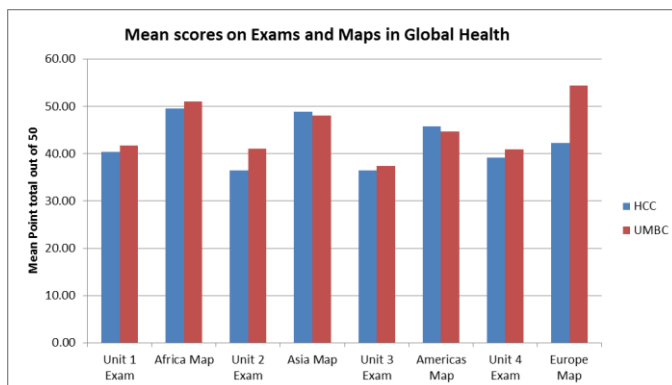
Changes made: No course improvements have been made to date. Course improvement, if warranted, will take place at the conclusion of the assessment based upon analyses findings.

American History to 1877 (HIST-111) Course Review: This project is in year three of the three-year assessment cycle. The goal of this outcomes assessment project was to examine map and geographical knowledge through the use of enhanced technologies. Control and experimental groups were assessed using a home-grown map survey. The experimental sections emphasized geographical awareness.

Findings: Data from the control group suggests that without additional classroom focus on geographical awareness, student learning in this area is inconsistent. The data suggest changes in the experimental sections resulted in increased geographical awareness of Colonial America and the decades of the 1840s and 1850s in the experimental sections. The Improvement in the latter category was more pronounced. Little progress was made on the Civil War era map.

Changes made: All sections of HIST-111 will emphasize geographical awareness and all sections will be re-evaluated.

VII. Appreciation of the Arts

A. Institution's definition of competency

At Howard Community College, the appreciation of the arts competency is defined as a student's ability to "demonstrate a perceptual awareness of and aesthetic sensitivity to the arts."

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The college has begun, and in some cases completed, four program-level and two course-level three-year learning outcomes assessment projects (see Appendix C), in courses and programs aligned with this General Education competency.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The assessment projects include both direct and indirect measures. Direct measures include rubric assessment of student work, external evaluation of skills, and objective mapping to exam questions and performance. Indirect assessment measures include course grades and pass rates. See Appendix C for a full list of changes made as a result of the assessment endeavors; a few detailed examples are provided below (sub-section D).

D. Describe the results of the assessment work related to this competency.

Music Theory I-IV (MUSC-110/111/210/211) Course Review: This project is in year three of the three-year assessment cycle. The goal of this outcomes assessment project was to study existing modules of Practica Musica to identify implementation strategies to improve its efficacy.

Findings: All instructors must go through the entire Practica Musica program in order to understand what the students have to accomplish with the software. The coordination of the classroom material with keyboard in the lab is vital. The feedback from students, especially those who do not have a keyboard background, is that they can visualize things much better once they see the patterns on the keyboard and hear them.

Changes made: The following are changes made to date as a result of the project: a list of strategies has been developed to help instructors understand how to approach the teaching of the ear-training aspect of the lab; theory and lab concepts are taught in tandem to promote connections across the courses; some of the Practica Musica modules have been removed due to technological problems; more practice quizzes have been added prior to the weekly Practica Musica quiz.

Acting Program Review: This project has completed its three-year assessment cycle. The goals of this outcomes assessment project were to determine the profile of students studying acting at HCC, to compare the acting curriculum to other Maryland colleges, and to begin standardizing the course content across sections. Qualitative (i.e., systematic exploration of curricula from other colleges, faculty interviews, etc.) and quantitative (i.e., rubric scoring, success rates, surveys, etc.) methodologies were employed.

Findings: Data showed that 90% of acting students were non-theatre majors. Approximately one-third of those enrolled in Acting I were not ready for college-level English and more likely to fail the course. Additionally, survey data revealed reasons for student enrollment (e.g., "needed a fine arts class to graduate").

Changes made: The following are changes made as a result of the project: adopted textbook with matching syllabus for Acting I; created an Introduction to Acting course with no pre-requisite; placed an English (college-level ready) pre-requisite on Acting I; new standard rubrics are used for midterm and final presentations; rehearsal space made available for students; and a resource site created for faculty and students.

Part Three: Evolution of Assessment Activities

Since opening its doors in 1970, Howard Community College (HCC) has a long history of assessment. As described above in detail, all assessment endeavors on campus impact student experience in and out of the classroom. Teaching improvement projects, formal learning outcomes assessment projects, course-level evaluations, assessments of student engagement and satisfaction, and value-added measures are all used to evaluate and improve courses and programs, to inspire excellence in teaching, and to foster student success.

More recently, since 2007, assessment practices have been refined and measures have been added (e.g., Community College Learning Assessment) to the battery of existing measures (e.g., Individual Development and Educational Assessment, Community College Survey of Student Engagement, Yearly Evaluation of Student Services). The college has recently purchased and implemented Business Objects data analytic software to enable real-time retrieval of grade distribution and student retention information from the institutional database. This tool enables the president's team, research staff, division chairs, and faculty across the campus to conduct more up-to-date, immediate and on-going assessment of various measures of student learning on real-time basis for various segmentation of student groups. Accessibility and versatility of the application will also enable us to approach student learning in more systematic manners with much greater efficiency as well.

The process of evaluating two courses or one program per division each year for a three-year assessment cycle and its linkages with the general education competencies has not significantly changed since the last SLOAR submission. However, the two new research associates, both with doctorate degrees, have incorporated national and peer-reviewed measures when possible and used more sophisticated data analyses to explore improvements in learning in division, program, and course-level projects. Systematic planning and record-keeping processes have also been implemented. Each division now submits a five-year assessment plan outlining the courses and programs to be assessed. Additionally, record-keeping processes are in place to track all past and current learning outcomes assessment projects (Appendix C is a portion of the entire matrix), including changes made as a result of each endeavor.
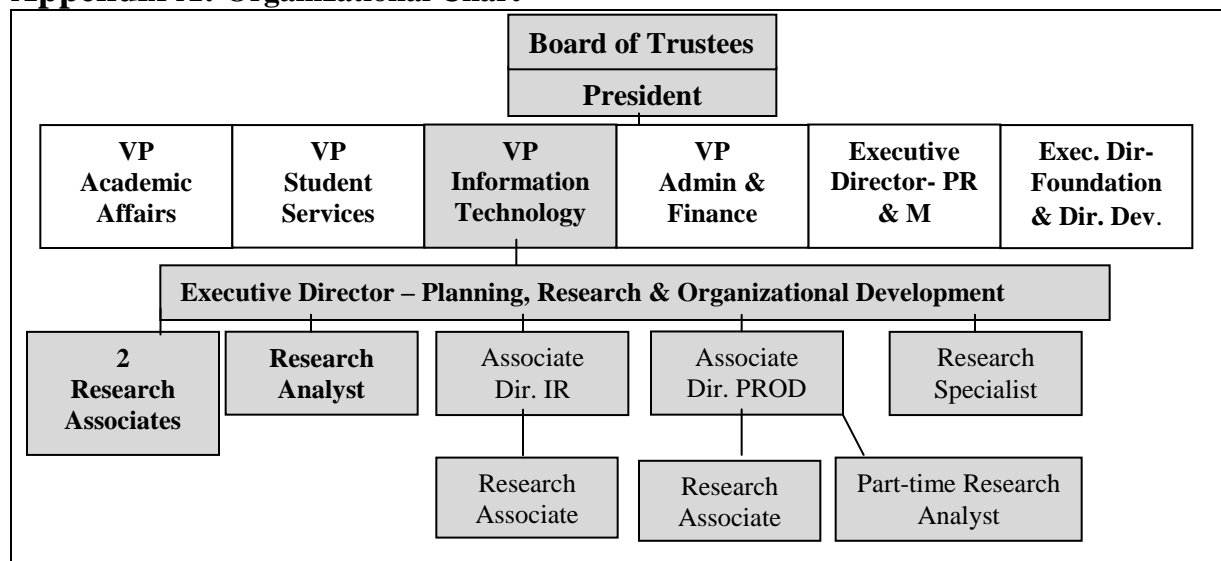
The communication of assessment results has also improved in the past few years. In addition to sharing their results with faculty in their divisions, faculty engaged in learning outcomes assessment projects have multiple opportunities to share their results with the campus community through presentations to the board of trustees, participation in a learning outcomes assessment panel discussion during faculty development weeks, poster presentations during Innovation Fair, and invited convocation presentations.

The increase in satisfaction with learning outcomes assessment is apparent through data from the annual employee *Quality Evaluation of Service Trends* (QuEST) survey. Learning outcomes assessment at HCC has not only gained visibility, but faculty and staff satisfaction with LOA services has steadily increased.
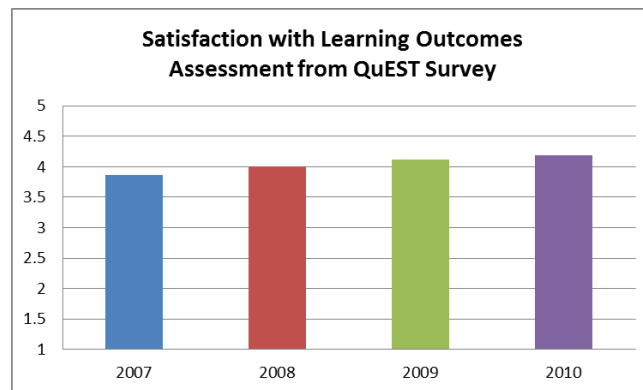
Appendix A: Organizational Chart

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                        │  Board of Trustees   │
                        ├──────────────────────┤
                        │     President        │
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VP Academic Affairs	VP Student Services	VP Information Technology	VP Admin & Finance	Executive Director- PR & M	Exec. Dir- Foundation & Dir. Dev.

Executive Director – Planning, Research & Organizational Development

2 Research Associates	Research Analyst	Associate Dir. IR	Associate Dir. PROD	Research Specialist

		Research Associate	Research Associate	Part-time Research Analyst

Appendix B: Howard Community College's Strategic Goal #1

Strategic Goal #1. Student Success and Lifelong Learning		
1.1	*Increase percentage of developmental completers, 4 years after entry to HCC, from 35.8% (fall 2003 cohort) to 40%* (fall 2006 cohort).*	
	Lead	**Action Plans for 2009–2011**
1.1A	VPSS VPAA	Implement College Readiness Program by testing 11th grade English "regular" students enrolled at all (12) HCPSS high schools and assisting student who fall short of being college ready.
1.1B	VPAA	Investigate best practice peers and formulate a plan to increase number of developmental completers.
1.2	*Increase student successful-persistence rate after 4 years for all students from 73.2% (fall 2003 cohort) to 80%* (fall 2006 cohort).*	
1.2A	VPSS	Study impact of new academic standing policy.
1.2B	VPSS	Design an early warning tracking system to allow faculty and staff to flag at-risk students, notify appropriate personnel, and connect students to appropriate resources.
1.2C	VPAA	Develop outcomes for First Year Experience (FYE) courses and select metrics to track improved student learning.
1.3	*Increase student graduation and transfer rate after 4 years for all students from 51.9% (fall 2003 cohort) to 60%* (fall 2006 cohort).*	
1.3A	VPAA	Identify gateway courses and pilot interventions to improve student success utilizing best practices from the *Achieve the Dream* project and others.
1.3B	VPAA	Revamp the general education core and track impact on degree completion.

Appendix C: Learning Outcomes Assessment Projects Since 2007

Division	Program/ Course	Focus of Study	Dates	Major Finding(s) to date	Changes Made	General Education Goals
Arts & Humanities	Digital Media Program	Examine students' progression through curriculum; benchmark w/4-yr programs	2006-present	In progress in final year.	Preliminary findings indicate the need for course revisions at the 200 level.	Critical Thinking, Technology, Apprec of Arts
English & World Languages	ENGL 121/122	Assess the impact of 122 on student writing after composition sequence and in subsequent general education courses	2007-09	Data obtained from pre- and post-tests in ENGL 122 and in selected Gen Ed nursing courses requiring significant writing shows no impact.	ENGL 122 dropped from General Education Core.	Written & Oral Comm
Arts & Humanities	Acting Program	Create an assessment rubric to determine if all students exit with same skills	2007-10	New course, standard syllabi and additional resources needed to enhance program.	Created assessment rubric, created new course, created new e-learning environment, implemented standard syllabi	Written & Oral Comm, Critical Thinking, Apprec of Arts
Business & Computers	BMGT 130	Assess curriculum content and expectations and student achievement in reference to these elements	2007-10	Study in progress	Study in progress	Written & Oral Comm, Technology, Global Aware
Math	MATH 061	To examine the impact of a pilot course on student success and confidence. Also to increase student success in MATH-061 AND in subsequent course MATH-064.	2007-10	Fall 2007 - Pilot to include instruction on fractions and require mastery learning on some topics. Negative response from students and faculty led to further adjustments. Spring 2008 - pilot modified to include mini-lessons on word problems and remove mastery learning component.	Spring pilot expanded to all sections in Fall 2008. Greater satisfaction among faculty in teaching word problem unit.	Math, Technology
Math	MATH 121	Examine viability of MATH 121 as a prereq for MATH 145	2007-10	MATH121 does not need to be a prerequisite for MATH145. Comparisons to other community college comparable courses.	Content for MATH 121 has been reviewed and streamlined. Merger with MATH 131 being considered..	Math, Critical Thinking, Technology
Science & Tech	CHEM 103	Determine if students are learning course objectives and what changes need to be implemented to enhance learning	2007-10	Interim Report: Examination of the data from the first three semesters of the LOA project (Fall 2007, Spring 2008 and Fall 2008), allowed for identification of the most frequently missed questions on the American Chemical Society (ACS) assessment exam. Average HCC student scores in all sections (day, evening, fall, spring) were above the national average.	In the spring 2009 semester, a set of practice questions was created and distributed to students. These step-by-step guided practice questions included important concepts needed to answer the six most frequently missed questions on the assessment exam. When the spring 2009 exam results are analyzed, and students continue to score above the national mean.	Math
Science & Tech	PHYS 101	Examine whether course sufficiently prepare students for CVT program.	2007-10	Students enrolled in the CVT program completed a standardized exam; 100% of the students exceeded the national norm on the math portion and 87.5% of the students exceeded the national norm on the science sections	A math pretest was developed and implemented to determine which math concepts required additional focus in PHYS 101; additional media sources will be implemented in PHYS 101 to support Unit II and Unit III topics	Math
Health Sciences	EXSC-209	Assess if and to what degree students are achieving theoretical and practical objectives of the course.	2007-10	No statistical difference between 3 modalities of instruction.	Development of 3 different methods of teaching the course (face-to-face, online, hybrid)	Information Lit
Social Sciences & Teacher Education	Rouse Scholars Program	Evaluation of the Rouse Scholars Program	2007-present	Study in progress	In progress	Written & Oral Comm, Critical Thinking
Business &	HMGT 120	Evaluate student	2008-	Success in course satisfactory in all	Faculty workshops will be directed	Technology,

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Computers		performance in simulated and actual settings. Look at success rates in course.	10	sections; discrepancies in grading from external reviewer and differences in elements that constitute grade	at consistency of scoring. Global Aware
Math	MATH 105	Ensure course is meeting requirements for EMT and nursing students	2008-10	Slight positive mean grade changes over the course of the project, and particularly for nursing or EMT students as a result of the packet improvements	Materials were reviewed by nursing and EMT faculty and approved. Math
Arts & Humanities	Music Theory I-IV	Study modules to identify improvement strategies. Compare student performance with/without intervention. Look at success rate in course sequence.	2008-present	In progress	In progress Critical Thinking, Technology, Apprec of Arts
Business & Computers	Division Review	Determining the validity of exit behaviors in existing programs. To what degree and manner do the GenEd courses and discipline courses contribute to achieving these behaviors.	2008-present	Data collection predominated with initial assessment of individual programs.	Study in progress Written & Oral Comm, Critical Thinking, Technology, Global Aware
English & World Languages	Developmental Reading Program	Determine factors affecting students' chances for success in reading	2008-present	Discovered positive correlation between placement scores and final grades	Identified appropriate ENGL 093 placement score and developed non-credit academic pathway for those below (REACH). Ongoing assessment of REACH. Written & Oral Comm
English & World Languages	ESL Program	Determine the success of ESL students in subsequent writing intensive courses	2008-present	Year 1 findings indicate ESL students have higher success rates in writing intensive courses than non-ESL students.	In Year 2, will form focus groups of students, faculty, and staff to pinpoint which factors influence ESL student success. From Year 1 and Year 2 data, will be able to determine how these factors might translate into better teaching and learning in the classroom. Written & Oral Comm, Critical Thinking
Math	MATH 122	Review the MATH 122 course across other colleges and within HCC in terms of course objectives, kinds of projects and their weightage and resultant impact on performance	2008-present	Colleges in MD vary greatly in content and style of this course. There are also inconsistencies at HCC. Final exam grades have a negative impact on student success rates. Students had a greater appreciation for math when projects were based on a theme such as sustainability.	Request review of state guidelines for this course at math affinity group meeting. Create and disseminate materials such as homework assignments, sample projects, and review for exams to increase standardization. Math, Critical Thinking
Science & Tech	BIOL 107	Investigate curriculum at key transfer institutions, identify problem areas, design intervention and assess feasibility of an externally benchmarked assessment	2008-present	Interim Report: First year findings: In an effort to reduce math anxiety and to improve performance, extra math tutoring sessions were offered to students. The intervention did not improve student performance on a quantitative question included on the final exam.	Changes planned for 2009-10: 1. Difficult course content will be rescheduled for the beginning rather than the end of the semester. More detailed information will be included regarding membrane transport and enzymes. 2. Less class time will be spent on chemistry and chemistry homework will be assigned. 3. An article from a science journal will be assigned with study questions and will be included in a unit exam. Critical Thinking
Science & Tech	CCNA certification	Investigate success rate of the students on the CISCO certification exam and impact of the transition to the 4 course program	2008-present	In Progress	In Progress Technology

Health Sciences	Mini-Nursing Program	After streamlining data output, identify performance gaps in newer curriculum sequence and create intervention	2008-present	In progress.	In progress.	Critical Thinking
Health Sciences	PUBH 280	Compare HCC and UMBC Global Health course students	2008-present	In progress	In progress	Global Aware
Social Sciences & Teacher Education	Strategic Plan Objective Action Plan Metrics 1.2 1.3	Work to develop baseline data to assist any pilot team working to improve student performance at HCC	2008-present	Have assembled GPS and Pass rate to provide baseline data.	In progress	
Social Sciences & Teacher Education	HMDV 200	Assessment of critical thinking changes from pre- to post-test	2008-present	In progress.	In progress	Critical Thinking
Arts & Humanities	Dance program	Systematic review of outcomes and objectives with similar classes in comparable and transfer institutions	2009-present	In progress	In progress	Apprec of Arts
Business & Computers	Gateway courses (ACCT111, BMGT100, CMSY110, CMSY129)	Explore possible reasons for low success rates in Gateway courses and implement systematic changes to increase student success and retention	2009-present	In progress	In progress	Written & Oral Comm, Math, Critical Thinking, Technology
English & World Languages	ENGL 121	Assessing changes in Energy Leadership and it's relationship to course success	2009-present	In progress	In progress	Written & Oral Comm, Critical Thinking, Technology, Information Lit
English & World Languages	FYEX 100	Examine the correlation between brain research compatible instructional strategies in First Year Experience and changes in students' locus of control to increase student success and retention	2009-present	Using the Adult Nowicki-Strickland Locus of Control Scale (ANSIE) with a researcher- created Instructional Strategies Survey (ISS) and a Course Practices Survey (CPS) in 21 sections of FYEX 100, M.G. found that student perceptions of a larger amount of brain-research compatible instructional strategies correlated with a greater change in their locus of control ($r=.19$, $p<.05$).	In progress	Written & Oral Comm, Critical Thinking, Information Lit, Global Aware
Math	Elementary Education Sequence	Examine student success on Praxis I certification exam after completion of course and student success in course through expert panel review	2009-present	In progress	In progress	Written & Oral Comm, Math, Critical Thinking, Technology, Information Lit
Science & Tech	CADD 101	Create, implement, and review teaching modules for new software with expert consultation.	2009-present	In progress	In progress	Critical Thinking, Technology, Information Lit, Apprec of Arts
Science & Tech	ELEC 107	Review and examine the math prerequisite level and develop proficiency testing tools specific to	2009-present	In progress	In progress	Technology

		statewide standards and certification exams.				
Social Sciences & Teacher Education	ECON 101	Assess student critical thinking skills and content knowledge and determine consistency across sections of course.	2009-present	In progress	In progress	Critical Thinking, Global Aware
Social Sciences & Teacher Education	EDUC 110	Align course with state standards by qualtitatively and quantitatively exploring course requirements and student success.	2009-present	In progress	In progress	Written & Oral Comm, Critical Thinking, Technology, Information Lit
Social Sciences & Teacher Education	HIST 111	Examine the utilities of map and geographical knowledge through the use of enhanced technologies	2009-present	In progress	In progress	Critical Thinking, Technology, Information Lit, Global Aware
Arts & Humanities	Musical Theatre Program	Review sequence program courses to measure student success, acquisition of skills, and application of skills. Measure student mastery as compared to expectations and standards of transfer institutions.	2010-present	In progress	In progress	Apprec of Arts
Business & Computers	CMSY 129	Improvement of course success rates	2010-present	In progress	In progress	Written & Oral Comm, Critical Thinking, Technology, Information Lit
Business & Computers	CMSY 141	Assessment of student mastery of course objectives	2010-present	In progress	In progress	Critical Thinking, Technology, Information Lit
Business & Computers	FNPL 101	Assessment of the mastery of course objectives	2010-present	In progress	In progress	Written & Oral Comm, Math, Critical Thinking, Technology, Information Lit
English & World Languages	World Languages Program	Assess and incorporate findings regarding attitude in motivation into teaching and student-centered learning	2010-present	In progress	In progress	Written & Oral Comm, Critical Thinking, Technology, Global Aware
Math	MATH 067	Understanding student reasons for leaving MATH 067 and retention to MATH 070	2010-present	In progress	In progress	Math
Math	MATH 070	Relation between MATH 070 success and success in subsequent Math course	2010-present	In progress	In progress	Math
Science & Tech	BIOL 102	Under reveiw by Chair.	2010-present	In progress	In progress	Technology

Science & Tech	GEOL 107	Exploring differences between online and traditional formats	2010-present	In progress	In progress	Critical Thinking
Science & Tech	PHYS 107	Assessment of student mastery of course objectives	2010-present	In progress	In progress	Math
Health Sciences	NURS LPN & EMSP transition course	Under review by Chair.	2010-present	In progress	In progress	Critical Thinking
Social Sciences & Teacher Education	EDUC 200	Exploring changes in thought about inclusion of special education students in general education classrooms	2010-present	In progress	In progress	Written & Oral Comm, Critical Thinking, Global Aware
Social Sciences & Teacher Education	POLI 101	Measuring how well students are familiar with and understand the U.S. Constitution	2010-present	In progress	In progress	Critical Thinking

Montgomery College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities
Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Montgomery College's primary Student Learning Outcomes Assessment process is a faculty driven, course based approach that emphasizes authentic, course embedded assessments and college-wide participation. The College-wide Outcomes Assessment team(COAT), under the auspices of the Office of Planning and Institutional Effectiveness, oversees and guides the course assessment processes, but discipline faculty are responsible for determining which student learning outcomes (SLO's) to assess and developing assessment instruments as well as determining recommendations and action plans to use assessment data. The COAT is comprised of a faculty coordinator, a faculty committee drawn from each campus and a variety of disciplines, the Vice-President for Planning and Institutional Effectiveness and support members of her staff which include members from the Office of Institutional Research and Analysis (OIRA).

Our established assessment procedure currently requires courses with the largest enrollments, including any course that has 10 or more sections per semester, to participate in assessment at least every five years. At the current time the five year assessment schedule includes 81 courses from 28 different disciplines. In the average semester, these 81 courses comprise approximately 60% of all course enrollments (62.4% in Fall 2010 and 59.9% in Spring 2011). Additionally, we invite courses to repeat assessments more frequently or to volunteer to participate in the assessment cycle if they are not currently required.

Currently, the typical assessment cycle takes place over a two year time frame including a planning semester, a pilot semester, an implementation semester and a recommendations semester. This cycle allows for participation and conversations across the three campuses and the entire discipline. Discipline workgroups are charged with working collaboratively with the discipline, and all faculty teaching the course including part-time faculty, with determining what to assess, how to assess it and how to utilize the assessment data. In the Fall of 2011, we are eliminating the planning semester and thus shortening the assessment process to 3 semesters.

Courses typically complete a direct assessment of student performance on three SLO's and sometimes include indirect assessment of other important issues relating to student performance in the course. General Education courses which are part of the required assessment cycle are required to assess their two primary general education competencies, selected by the discipline, as part of their SLO assessment. During the implementation semester, all sections of a course are expected to participate using the common assessment and scoring instrument. If a course does not have a threshold of 85% sections participating, the course will repeat the implementation semester. Once the assessment is complete, the discipline develops specific, action oriented recommendations based on the student performance data submitted by the discipline.

The COAT provides support and guidance throughout this process by helping the discipline develop assessment plans and instruments, providing specific feedback on the assessment plans submitted by the disciplines, and providing feedback

and guidance during the recommendation process. The OIRA group compiles the data and provides some analysis of the student performance including comparisons of student performance and final grades, enrollment patterns and other standard data points. OIRA also provides expertise and guidance on interpretation of data. Assessment plans and recommendations are approved by the discipline lead dean; lead Vice-President/ Provost and the Senior Vice President for Academic and Student Services.

Under the guidance of the Middle States standards 7, 12 and 14, we are currently working with the General Education committee to expand our assessment process to include all courses with General Education designation. The General Education assessment expansion is under development and will be incorporated into the General Education course review process. In this assessment process, courses which do not fall into the current required course assessment cycle will be expected to complete course embedded assessments of their selected primary competencies using college-wide rubrics. Student performance data based on this assessment will be incorporated into the General Education course review process and will be compiled and reported based on each competency on a five year cycle.

Currently, the specifics of the General Education assessment and review process are being finalized. After the College revised it General Education program 2 years ago, all courses were asked to reapply for General Education status and indicate which two competencies (or one competency and one area of proficiency) the course primarily incorporates. An analysis of the results of the General Education reapplication process indicated that three of the competencies, Critical Analysis and Reasoning, Scientific and Quantitative Reasoning ,and Effective Communication were over represented, and two, Information Literacy and Technological competency, were underrepresented in the program. As a result, the COAT and the General Education Committee are working together to collect a more accurate picture of the extent to which each General Education course addresses each competency. This information will be used to develop an assessment and review cycle that will allow the College to assess students' performance on all the competencies.

Ultimately all General Education courses, regardless of enrollment, will be required to design and implement an assessment instrument to assess the General Education competencies in their course. College-wide rubrics have been developed for Written and Oral Communication as well as Critical Analysis and Reasoning. All courses will be using the same rubrics (and thus the same categories and scoring guidelines) so that we can compare students across the College in a variety of courses using the same rubrics. In the Fall of 2011, 8 courses from a variety of disciplines will be piloting the rubrics and process.

In addition to course based outcomes assessment, we are implementing procedures for program outcomes assessment. Outcomes for all programs are available in the College catalog. Over the past year, each degree, certificate, and letter of recognition was asked to match their outcomes to the required courses in the program. We are using our College Area Review process to create a venue for the development of programmatic outcomes assessment.

College Area Review is a comprehensive self-evaluative process of all academic areas and administrative units. The overarching goal of CAR is to provide critical college-wide information for strategic planning, assist in establishing priorities for resource allocation, and measure overall institutional effectiveness. The process involves all College stakeholders; administrators, vice presidents, unit managers, unit directors, deans, faculty, staff and students. In addition, an online survey is administered to selected students to solicit their input regarding their course work. As our budget allows, we have also solicited input from external peer reviewers in particular disciplines. CAR operates on a five year cycle, reviewing on average fifteen academic units per academic year and three administrative units per calendar year.

In the next College Area Review cycle, each program that offers a degree will develop a plan for program assessment that best fits its program.   In the year subsequent to the College Area Review, the College-wide Outcomes Assessment Team will coordinate with the program to implement the program assessment that has been developed.

The information obtained through assessment activities is shared college-wide with faculty workgroups, deans, chairs, Vice- Presidents/Provosts. We continue to examine ways to engage and inform the College community about institutional effectiveness and assessment activities.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

Competency in written and oral communication includes the ability to communicate effectively in verbal and written language, the ability to use a variety of modern information resources and supporting technologies, the ability to differentiate content from style of presentation, and the ability to suit content and style to the purpose of communication.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

This competency is assessed at the course and program level. Many courses in our full outcomes assessment cycle have Written and Oral Communication as their primary competency, including our English foundation courses (EN102 and EN109) and speech foundation course (SP108).

Additionally, all 9 courses that are piloting our General Education assessment in the Fall of 2011 have chosen Written and Oral Communication as one of their competencies.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

In the past, we have let courses develop their own communication assessments. We have now developed rubrics for written communication and oral communication to be used in all General Education assessments, although each course will determine an appropriate assessment instrument. Written communication will be assessed for Content, Organization, Style and Expression, Grammar and Mechanics and Academic Integrity. Oral Communication will be assessed for Content, Organization, Delivery, Interpersonal Skills and Listening Behavior. The collegewide rubrics were developed in collaboration with the faculty and adapted from various sources including the Association of American Colleges and Universities' Rubrics, the Washington State Critical Thinking Rubric and Sinclair Community College's Oral Communication rubric. Course based faculty, in collaboration with the COAT, can adapt the descriptive language of the collegewide rubric to better reflect the assessment instrument, but the measures must remain the same. The collegewide rubrics are appended to this report.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The last major assessment of college level writing and oral communication skills at Montgomery College took place in the 2006 academic year and was reported in our last SLOAR report.

Over the past two years, all of our ESOL and developmental reading and writing courses have started the assessment process. Some courses were in the recommendations semester in the Spring of 2011, while others are in the pilot stage.

In the Fall of 2011, our English foundation courses will be starting the assessment cycle and will be developing an assessment tool to be used college-wide.

Additionally, Montgomery College requires a Speech foundation course, and both courses that satisfy this requirement SP108 (Intro to Human Communication) and SP112 (Business and Professional Communication) will be starting the assessment process in the Fall of 2011 and collecting data during the 2012 academic year.

Montgomery College has an extensive Writing in the Disciplines program. In December 2008, a survey of College faculty was administered with 182 respondents. Sixty percent of faculty indicated that they "frequently" assign writing and about 30% said they "usually" do. About 70% of respondents provide grading criteria and/or rubrics for writing assignments and direct students to College support services for writing. Additionally, more than 35% said that students tend to plagiarize. More than 80% of Business and Computer Science faculty report that plagiarism presents challenges for writing in their courses. Montgomery College has been using Turnitin.com for several semesters. It has been used as a teaching tool to educate students about plagiarism.

II. Scientific and Quantitative Reasoning

    A. Institution's definition of competency

Competency in scientific and quantitative reasoning includes the ability to locate, identify, collect, organize, analyze and interpret data, and the ability to use mathematics and the scientific method of inquiry to make decisions, where appropriate.

    B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

This competency is assessed at the course and program level. All of the mathematics foundation courses and science distribution courses have selected Scientific and Quantitative reasoning as one of their primary competencies.

    C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The Outcomes Assessment team is in the process of developing a college-wide rubric for Scientific and Quantitative Reasoning and we hope to have a draft in place by the end of the Fall 2011 semester.

In the interim, courses that assess this competency develop their own assessments and scoring guidelines.

    D. Describe the results of the assessment work related to this competency.
        Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

In the past 3 years, the only course that has assessed Scientific and Quantitative Reasoning is our MA110 course, Survey of College Mathematics. Students were presented with a linear programming problem that they had to analyze and translate into mathematical terminology by defining the variables, making a table, writing the objective function, and writing all constraint inequalities. Students were most successful in making a table summarizing the data (90% success rate) and the other 3 tasks all had success rates between 60 and 70%. Additionally, students of full-time instructors fared better than students of part-time instructors.

As a result, the discipline proposed that they provide more support/structure for adjunct faculty teaching MA 110. They determined they needed to create and maintain a resource center web -site(s) for MA 110 instructors. This could feature sample tests as well as other resources and ideas on how to present the course material.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Critical analysis and reasoning include the application of higher order analytic and creative cognitive processes to arrive at reasoned and supportable conclusions, to synthesize and apply knowledge within and across courses and disciplines, and to develop creative solutions.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

This competency is assessed at the course and program level. Most of our General Education courses, 203 out of 216 (94%), list Critical Analysis and Reasoning as either their primary or secondary competency.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

In the past, we have let courses develop their own Critical Analysis assessments. We have now developed a Collegewide rubric for Critical Analysis to be used in all future General Education assessments, although each course will determine an appropriate assessment instrument. Critical Analysis will be assessed for Identification and Explanation of issues, Analysis and Evaluation, and Interpretation and Drawing Conclusions. The Collegewide rubrics were developed in collaboration with the faculty and adapted from various sources including The Foundation for Critical Thinking's definitions and rubrics for critical thinking, Peter Falcione's *Holistic Critical Thinking Rubric*, Washington State University's *Critical Thinking Project*, and the Association of American Colleges and Universities' *Critical Thinking VALUE Rubric*. Course based faculty, in collaboration with the COAT, can adapt the descriptive language of the Collegewide rubric to better reflect the assessment instrument, but the measures must remain the same. The Collegewide rubrics are appended to this report.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Up until Fall of 2011, workgroups were allowed to develop their own Critical Analysis and Reasoning activities with guidance from the College-wide Outcomes Assessment Team. Because almost all General Education courses have this competency as either their primary or secondary competency, many courses have chosen to assess this competency. A notable project involving critical analysis and reasoning is Montgomery College's partnering with other schools in piloting the SCALE UP model for teaching non-engineering physics and introductory chemistry courses. SCALE UP (Student-Centered Active Learning Environment in Undergraduate Programs) is a national program to engage students more thoughtfully in the critical reasoning process. Students are instructed in the techniques critical analysis and problem solving and then expected to work in small groups of 3-4 students daily on "tangibles" and "ponderables."

IV. Technological Competency

A. Institution's definition of competency

Technological competency includes the ability to use computer technology and appropriate software applications to produce documentation, quantitative data presentations and functional graphical presentations appropriate to various academic and professional settings.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

This competency is assessed at the course and program level. Technological competency is the most underreported competency at Montgomery College. Only 2 General Education classes have indicated that it is one of their top 2 competencies. As indicated previously, faculty are being asked in the spring and Summer of 2011 to identify all of the competencies addressed in their General Education courses so that we can more properly assess this dimension of the General Education program.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The Outcomes Assessment team is in the process of developing a rubric for Technological Competency and we hope to have a draft in place by the end of the Fall 2011 semester.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

In the Fall of 2009, Introduction to Engineering Design (ES100) began the Outcomes Assessment Cycle. This is one of the courses that indicated the technological competency area as one of its main focuses. The course workgroup chose to assess the outcome of demonstrating knowledge of the operation of a parametric computer-aided design system (Pro/Engineer) and use it to create parts, assemblies, and drawings. A project was selected in which the students created a drawing of a Rocket Car using Pro/Engineer software.

In the Fall of 2010, the assessment tool was used in all ES100 classes, and data was collected about the performance of 269 students. The faculty workgroup indicated in their recommendations that expectations for this project were met by the students. In order to continue to meet expectations, the faculty are going to create an online textbook and search for ways to better share information among instructors of the course.

Additional Competencies

Because institutional mission and goals differ, institutions may wish to report on assessment activities beyond the four major competency areas. However, this is not mandatory; institutions may report on up to three additional competencies.

V. Information Literacy

A. Institution's definition of competency

Information literacy includes the ability to identify, locate and effectively use information from various print and electronic sources.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

This competency is assessed at the course and program level. Our English foundation courses list Information Literacy as their secondary competency. In addition one speech foundation course, nine health foundation courses, and 3 behavioral and social science distribution courses list information literacy as one of their top 2 competencies. We expect that in the review process undertaken in the Spring and Summer of 2011 we will find out that almost all General Education courses will indicate that they incorporate some instruction on information literacy.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

In the 2008 academic year, the Outcomes Assessment team undertook a project to solidify the Information Literacy standard. A group of faculty and staff, including a librarian, developed a draft version of Information Literacy standards which was then vetted with the College community through the governance structure. We are now in the process of taking these standards and developing a rubric for Information Literacy.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

In the 2007 SLOAR, assessment work for Information Literacy was presented. Since that time, the Outcomes Assessment group has been focused on refining the standards and doing education on Information Literacy in multiple ways.

In the Spring Semester of 2008 and again in the Fall of 2008, a series of faculty workshops was offered on Information Literacy in conjunction with the Montgomery College Center for Teaching and Learning.

After the development of the Information Literacy Rubric, we anticipate doing more direct assessment in the Fall of 2012.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

Mathematics

Over the past several years, the Mathematics discipline has developed a plan for overhauling the developmental math curriculum based on student progress outcome and student learning outcomes results.

The current sequence of developmental math coursework has two separate courses for Prealgebra (MA 090) and Elementary Algebra (MA 091). The success rate in both classes is around 50%, and students have been ill-prepared for the next courses. For example, students who passed MA091 with a B were subsequently successful in their next course only 40% of the time, and students who earned a C were only successful in their next course 25% of the time.

Beginning Fall 2011, students will take one course, Mathematics Prep (MA094) which covers the learning outcomes for both courses and is based on a self-paced mastery learning model. Students will be allowed to work at their own pace in a laboratory setting with instructors providing support. Planning for this new approach has been two years in development.

In addition, based on the success of another project undertaken at Montgomery College students will have more options for completing a college level math course. In 2006, in response to state direction to find alternative paths for students to complete their mathematics foundation requirement, a course was created that combined a developmental Intermediate Algebra course and a Mathematical Ideas course into a one semester, 5 hour, course. Students were more successful in this course than either of the courses individually. As part of the math redesign, that course will be offered more widely, and a similar course combining Intermediate Algebra and Statistics into one semester is being developed.

In the 2012 academic year, students who are placed into the developmental math sequence will be able to complete 2 courses in what used to take a minimum of 4 courses to achieve.

Recommendations

At the conclusion of each assessment cycle, course workgroups are asked to write recommendations based on their findings. These recommendations are then approved by the College-wide Outcomes Assessment Team, Lead Dean, Lead Vice -President/Provost and Senior Vice President for Academic and Student Services.

At one year intervals after submitting recommendations, course workgroups are asked to supply information about the status of their recommendations. These status updates are then reviewed by the team, deans, and senior administrators to address concerns and needs raised by the recommendation updates.

What follows is a partial Listing of recommendations and updates submitted over the past 3 years by courses in our outcomes assessment cycle.

Course	Recommendations	Update
EC201 – Principles of Econ I (Macroeconomics)	1. More attention (class time, homework assignments, etc.) should be given to help students learn how to <u>apply</u> the Aggregate Supply and Demand model to explain how unemployment and inflation may occur and how government policy could mitigate these problems. We do <u>not</u> recommend that more time be allocated to the general topic of Aggregate Supply and Demand. Rather, we recommend that more emphasis be placed on the application of the model and less on the theoretical underpinnings of the model. 2. We should ensure that all faculty teaching EC 201 are covering the basic model of supply and demand with a primary intent being to help students understand the more advanced Aggregate Supply and Demand model addressed later in the course.	Instructors at Germantown are now employing a student friendly online tutorial that helps teach the Aggregate Supply and Demand (AD/AS) model. This tutorial has been shared with the other campuses.

Course	Recommendations	Update
PH 203 – General Physics I (non-engineering)	1. Continue to use the laboratory reports and quizzes to gauge students understanding of the core concepts. 2. Continue to keep the part-time faculty aware of the course objectives and how they relate to the overall outcomes assessment process.	1. We continued to use laboratory reports and quizzes to assess the students understanding of the core concepts. The results from the reports and quizzes allowed us to identify students whot were not performing up to expectations. The students were given the opportunity to practice with the equipment that they were expected to use in future laboratories. 2. Our part-time faculty come to our regularly scheduled department meetings. We remain in contact with them throughout the semester to assure that everyone is aligned with the course objectives.
BI204 – Human Anatomy and Physiology I	1. Full-time and part-time BI 204 faculty will meet/communicate prior to semester start to share pedagogical strategies and support for improving SLOs. 2. Continue to include critical analysis and reasoning activities in BI 204 curriculum and share critical analysis and reasoning activities among full and part-time A&P faculty.	1. Full-time faculty are meeting with adjuncts at the start of the semester to discuss implementation of the OA process and the importance of recording and reporting results. Strategies to improve student outcomes are discussed. In addition, an explanatory email reviewing the process is sent to each instructor along with an Excel spreadsheet designed to facilitate record keeping. 2. Faculty are encouraged to present BI 204 topics in a way that fosters discussion and helps students develop analytical and reasoning skills. The inclusion of critical thinking questions on all exams is strongly promoted and coordinators are reviewing exams of new adjuncts to verify their use and to offer constructive critiques. Case studies are increasingly being used in lecture to stimulate discussion and promote critical thinking. In lab, exercises that challenge students to apply the information they have learned are becoming an increasingly important focus.

As described previously, we are currently undertaking a project to assess all General Education courses rather than just the large classes that we focus on now. In the Fall of 2010, there were 37,623 enrollments in General Education courses. Of those enrollments, 70% were in the high enrollment General Education courses currently served by our assessment cycle.

In addition, all courses will have to use the developed rubrics to perform their General Education assessment. The data collected in this way will be shared with the entire college community as well as the General Education and Curriculum Committees that oversee this area.

Since our last SLOAR report, the college has undergone a revision to the General Education program as well as requiring all courses to reapply for General Education status. All courses will now have to periodically reapply to keep their status. When applying, faculty will indicate at least 2 General Education competencies covered by the course.

In the Spring of 2011, all degrees, certificates and letters of recognition (182 programs in all) were required to submit documentation of how their courses aligned with their program outcomes. Specifically, faculty were asked to identify in which courses each program outcome was introduced, practiced, or mastered. Using this information going forward, each program will be required to submit an assessment plan indicating in which course or courses in the last semesters of their program they will assess their program outcomes. The outcomes assessment team will then assist the faculty in implementing the assessment plan, collecting the data, analyzing the assessment results, and writing recommendations based on the results of the assessment.

We will be implementing the program outcome assessment piece with each program as it comes up through the College's program review process, CAR, in which all programs and areas are evaluated at least once every 5 years.

Appendix A – Information Literacy Standards

Information Literacy- Draft Standards and Expectations

Information Literacy involves a series of skills and abilities that take a lifetime to learn, and Montgomery College and the State of Maryland recognize these skills as essential for a well educated student. The following standards and indicators have been adapted from the Association of College and Research Libraries' (ACRL) "Information Literacy Competency Standards for Higher Education" to reflect the Montgomery College expectations. Students will have the opportunity to develop Information Literacy skills by taking both General Education designated courses and non-Gen Ed courses that give students the opportunity to learn and practice Information Literacy skills.

Standard 1: **Know**

The information literate student determines the nature and extent of the information needed, so the student will be able to

- develop and revise a plan of action to complete a research assignment or activity, including a realistic time frame.
- articulate a research question appropriate for the assignment or activity.
- determine the availability of, and gather, the appropriate source materials.
- identify and use strategies, such as a log or journal, to organize and maintain information and source materials throughout the project.
- identify and develop new skills, such as technology and research skills, when needed to complete a research assignment or activity.

Standard 2: **Access**

The information literate student is able to access needed information effectively and efficiently, so the student will be able to:
- identify appropriate types and formats of source material needed to complete a research assignment or activity.
- employ efficient and effective approaches for collecting source material.
- identify gaps in his or her knowledge, skills, or resources and refine research strategies and/or develops new skills, as necessary.

Standard 3: **Evaluate**

The information literate student evaluates information and sources critically and incorporates selected information into his or her knowledgebase and value system, so the student will be able to:
- critically evaluate information for currency, objectivity, and validity of source content.
- analyze and interpret information to determine validity and relevance to the research question.
- seek critical feedback for ideas from peers and instructors.
- determine whether his or her research question is relevant to the assignment or activity, valid, and effective, and revise the question as needed.

Standard 4: **Use**

The information literate student, individually, or as a member of a group, uses information effectively to accomplish a specific purpose, so the student will be able to:
- summarize information and identify concepts to be paraphrased or quoted.

- select and integrate new and prior information, including the use of quotations and paraphrases, in a manner that supports the purposes of the assignment or activity.
- use appropriate supplemental information, including graphics or data, in a manner that supports the purpose of the assignment or activity.

Standard 5**: Ethics**

The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally, so the student will be able to:
- correctly identify documents and resources that are protected by copyright or are otherwise considered to be intellectual property.
- understand what constitutes plagiarism and not use resources or materials without proper attribution.
- accept responsibility for the ideas presented in and the quality and origin of the final product.

Appendix B – Written and Oral Communication Rubrics

Montgomery College General Education Assessment Rubric: Effective Communication, Writing

Montgomery College's Effective Communication, Writing Rubric is based on the Montgomery College General Education Writing Standards, the State of Maryland's expectations for a "C" paper, Washington State University's Integrated Critical Thinking Rubric, and the Association of American Colleges and Universities' *Written Communication VALUE Rubric*.

Effective Communication: includes the ability to communicate effectively in verbal and written language, the ability to use a variety of modern information resources and supporting technologies, the ability to differentiate content from style of presentation, and the ability to suit content and style to the purpose of the communication.				
General Education Written Communication includes	**Skillful Written Communication (3)**	**Satisfactory Written Communication (2)**	**Unsatisfactory Written Communication(1)**	**Not Applicable (0)**
Content	☐ Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work, and ☐ Exceeds the discipline and assignment expectations, meeting all specified requirements, such as subject, organization, and length and ☐ Integrates and responds to alternate points of view while accurately presenting and fully attributing sources of information, as appropriate.	☐ Uses appropriate and relevant content to develop and explore ideas through most of the work, and ☐ Fulfills the discipline and assignment expectations, meeting all specified requirements, such as subject, organization, and length; ☐ Accurately presents and fully attributes sources of information	☐ Uses limited content to develop and explore simple ideas, and ☐ May not fulfill the discipline and assignment expectations, meeting all specified requirements, such as subject, organization, and length; ☐ May present inaccurate information, or inaccurately present and/or fail to attribute sources of information	☐ Assessment task does not reflect these characteristics for student performance.
Organization	☐ May exceed discipline and assignment expectations for organization; ☐ Uses an advanced organizational pattern that maintains focus and unity throughout the text while furthering the central idea and skillfully using the following organizational devices to connect ideas throughout the text: thesis statement, topic sentences, opening and closing paragraphs and transitions throughout the assignment.	☐ Follows the discipline and assignment expectations for organization; ☐ Maintains focus and unity throughout the assignment; while supporting a central idea, or thesis, using some of the following organizational devices to connect ideas throughout the text: thesis statement, topic sentences, opening and closing paragraphs, and transitions throughout most of the assignment.	☐ May not follow the discipline or assignment expectations for organization; ☐ May not have a clear central idea or thesis or may lack focus and unity and may include irrelevant and unrelated ideas; ☐ May lack organizational devices such as a central idea, topic sentences, opening and closing paragraphs or transitions which results in a lack of connection among ideas or focus.	☐ Assessment task does not reflect these characteristics for student performance
Style and Expression	☐ Uses a superior style (tone, word choice, sentence patterns) for the discipline, assignment, audience and purpose, and ☐ Clearly communicates ideas and may be nuanced or eloquent.	☐ Consistently uses effective style (tone, word choice, sentence patterns) for its discipline, assignment, audience, and purpose; ☐ Clearly communicates ideas.	☐ Uses a style (tone, word choice, and sentence patterns) that is not appropriate for discipline, assignment, audience or purpose and may be inconsistent; ☐ Fails to communicate ideas effectively and may obscure meaning.	☐ Assessment task does not reflect these characteristics for student performance

Grammar and Mechanics	☐ Follows conventions of standard written U.S English and is free of errors in grammar, mechanics, punctuation and usage.	☐ Follows the conventions of standard written U.S. English and is generally free of errors (grammar, mechanics, punctuation, and usage) that impede meaning or distract the reader.	☐ Work has persistent errors in grammar, mechanics, punctuation and usage that impede meaning.	☐ Assessment task does not reflect these characteristics for student performance
Academic Integrity	☐ Reflects current academic practices for use of sources and documentation established by professional associations, such as the Modern Language Association, the American Psychological Association or other discipline specific professional organization.	☐ Reflects current academic practices for use of sources and documentation established by professional associations, such as the Modern Language Association, the American Psychological Association or other discipline specific professional organization.	☐ Does not reflect current academic practices of use of sources and documentation established by professional associations, such as the Modern Language Association, the American Psychological Association or other discipline specific professional organization.	☐ Assessment task does not reflect these characteristics for student performance

Montgomery College General Education Assessment Rubric: Effective Communication, Oral Communication

Montgomery College's Effective Communication, Oral Communication Rubric is based on the Association of American Colleges and Universities' *Oral Communication VALUE Rubric,* and Sinclair Community College's Oral Communication rubric.

Effective Communication: includes the ability to communicate effectively in verbal and written language, the ability to use a variety of modern information resources and supporting technologies, the ability to differentiate content from style of presentation, and the ability to suit content and style to the purpose of the communication.			
General Education Oral Communication includes	**Skillful Oral Communication (3)**	**Satisfactory Oral Communication (2)**	**Unsatisfactory Oral Communication(1)**	**Not Applicable (0)**
Content	☐ Has a compelling and well developed (precisely stated, appropriately repeated, memorable, and strongly supported) central message and purpose ☐ Includes a variety of types of materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make appropriate reference to information or analysis which significantly supports the central message or establishes the presenter's credibility/authority on the topic.	☐ Has a clear and understandable central message and purpose. ☐ Includes supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make appropriate reference to information or analysis which generally supports the presentation or establishes the presenter's credibility/authority on the topic.	☐ Has a central message and purpose that is difficult to be deduced, and may not be explicitly clear or developed in the presentation ☐ Includes supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) which insufficiently reference information or analysis and minimally support the presentation or establish the presenter's credibility/authority on the topic.	☐ Assessment task does not reflect this characteristic for student performance
Organization	☐ Uses an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) that is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	☐ Uses an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) that is clearly and consistently observable within the presentation.	☐ Uses an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) that is intermittently observable or not observable within the presentation.	☐ Assessment task does not reflect this characteristic for student performance.
Delivery	☐ Uses verbal and non-verbal delivery techniques (posture, gesture, eye contact, and vocal expressiveness) that make the presentation compelling, and make the speaker appear polished and confident. ☐ Uses visual aids that provide significant impact in making key points.	☐ Uses verbal and non-verbal delivery techniques (posture, gesture, eye contact, and vocal expressiveness) that make the presentation interesting, and make the speaker appear comfortable. ☐ Uses visual aids that enhance and provide emphasis in making key points.	☐ Uses verbal and non-verbal delivery techniques (posture, gesture, eye contact, and vocal expressiveness) that detract from the understandability of the presentation, and make the speaker appear uncomfortable. ☐ Uses visual aids that are unimaginative and/or distracting	☐ Assessment task does not reflect this characteristic for student performance
Interpersonal Skills	☐ Consistently demonstrates effective and appropriate interpersonal skills (questioning, paraphrasing, descriptive language, empathy, negotiation, conflict management, supporting non-verbal cues).	☐ Occasionally demonstrates effective and appropriate interpersonal skills (questioning, paraphrasing, descriptive language, empathy, negotiation, conflict management, supporting non-verbal cues).	☐ Rarely demonstrates effective and appropriate interpersonal skills (questioning, paraphrasing, descriptive language, empathy, negotiation, conflict management, supporting non-verbal cues).	☐ Assessment task does not reflect this characteristic for student performance
Listening Behaviors	☐ Consistently uses attentive, respectful listening behaviors in oral communication situations.	☐ Uses some effective listening behaviors in oral communication situations.	☐ Fails to consistently use effective listening behaviors in oral communication situations.	☐ Assessment task does not reflect this characteristic for student performance

Appendix B – Critical Analysis and Reasoning Rubrics

Montgomery College General Education Assessment Rubric: Critical Analysis

Montgomery College's Critical Analysis and Reasoning Rubric is adapted from The Foundation for Critical Thinking's definitions and rubrics for critical thinking, Peter Falcione's *Holistic Critical Thinking Rubric*, Washington State University's *Critical Thinking Project*, and the Association of American Colleges and Universities' *Critical Thinking VALUE Rubric*.

| **Critical analysis and reasoning:** the application of higher order analytic and creative cognitive processes to arrive at reasoned and supportable conclusions, to synthesize and apply knowledge within and across courses and disciplines, and to develop creative solutions.				
Critical Analysis and Reasoning Includes:	**Skillful Critical Analysis and Reasoning (3)**	**Emergent Critical Analysis and Reasoning (2)**	**No Demonstrated Critical Analysis and Reasoning (1)**	**Not Applicable**
Identification and explanation of issues	☐ Poses relevant and insightful questions ☐ Accurately identifies and provides a well-developed summary of the problem or question including context ☐ Identifies and uses appropriate sources which reflect a range of positions regarding the problem or question.	☐ Poses appropriate question, ☐ Identifies the problem or questions, but does not provide sufficient context ☐ Identifies and uses a limited range of sources relating to the problem or question.	☐ Fails to pose an appropriate question ☐ Does not identify or explain the problem or questions, and/or fails to summarize or explain the context ☐ Represents the issues inaccurately ☐ Does not identify appropriate sources, and/or sources reflect bias or only one perspective on the issue.	☐ Assessment task does not reflect these characteristics for student performance.
Analysis and evaluation	☐ Responds to sources impartially, with thoughtful analysis and evaluation of content and context ☐ Demonstrates an advanced ability to analyze and evaluate information including distinguishing between fact and opinion and acknowledging alternative points of view ☐ Recognizes and avoids logical fallacies ☐ Justifies key results and procedures, explains assumptions and reasons.	☐ Responds to sources impartially, with thoughtful analysis and evaluation of content and context ☐ Demonstrates ability to analyze and evaluate information including distinguishing between fact and opinion and acknowledging alternative points of view, but analysis and evaluation may be superficial or flawed ☐ Recognizes and avoids logical fallacies ☐ Does not provide a completely accurate justification of results and procedures and/or does not fully explain assumptions and reasons.	☐ Evaluation and analysis of sources is superficial and/or reflect bias ☐ Does not recognize or avoid logical fallacies ☐ Does not provide a completely accurate justification of results and procedures and/or does not fully explain assumptions and reasons.	☐ Assessment task does not reflect these characteristics for student performance

Interpretation/Drawing Conclusions	☐ Takes risks by questioning sources and/or generates alternate or novel explanations supported by evidence as appropriate ☐ Synthesizes ideas; makes connections or identifies connections within sources in an advanced way ☐ Avoids oversimplification ☐ Presents a thoughtful, nuanced, reasonable and factually accurate conclusion based on sound logic, information and evidence at hand ☐ Demonstrates open-mindedness and self-awareness ☐ Recognizes the limits of conclusions.	☐ Takes limited risk by questioning sources and/or generates alternate or novel explanations supported by evidence, as appropriate ☐ Provides limited synthesis or ideas, may only summarize source information; makes few connections within sources ☐ Generally avoids oversimplification ☐ Presents reasonable and factually accurate conclusion based on sound logic, information and evidence at hand ☐ Demonstrates some open-mindedness and self-awareness ☐ Generally, recognizes the limits of conclusions.	☐ Accepts sources without questioning ☐ Summarizes sources information ☐ Does not make or identify connections within sources ☐ May oversimplify ☐ May only present a summary of sources ☐ Conclusion may be simplistic or logically flawed or based on limited evidence ☐ Conclusion reflects excessive bias, close mindedness and/or lack of self-awareness ☐ Does not recognize the limits of conclusions.	☐ Assessment task does not reflect these characteristics for student performance

Identification and Explanation of Issues (Describes "Satisfactory"): This dimension refers to the student's overall ability to understand and articulate a problem or a question and develop a response based on more than the student's own ideas; to evaluate this dimension, look for the student to identify and summarize the problem or question and/or pose an appropriate question, as well as to explain the context of a problem including multiple perspectives.

Analysis and Evaluation (Describes "Satisfactory"): This dimension refers to the student's overall ability to understand, analyze and evaluate information and ideas; to evaluate this dimension, look for the student to accurately analyze and evaluate information, ideas and sources—distinguishing between fact and opinion, relevance to the issue and acknowledging a variety of viewpoints, and make logical and, factually accurate conclusions based on sound evidence and information available.

Interprets and Draws Conclusions (Describes "Satisfactory"): This dimension refers to the student's overall ability to interpret information and develop sound conclusions; to evaluate this dimension look for the student to demonstrate some evidence of rethinking or refinement of ideas; interpret information in the context of the question or problem; synthesize ideas and/or make connections between ideas in sources, and recognize the limits of their conclusions.
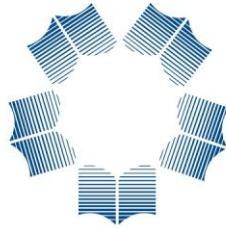
Prince George's Community College

Report to
Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Part One: Summary of Assessment Activities

2007-2010
From 2007-2010 Prince George's Community College's (PGCC) assessment of student learning outcomes focused primarily on course outcomes and general education learning outcomes. The course assessment process consisted of three phases: planning, implementation, and analysis of results. Although the analysis of results phase was the only one that provided quantitative data regarding student performance on course outcomes, many qualitative results were gathered in the planning phase, and ultimately affected student learning. For instance, the committee overseeing course assessment at PGCC, the Academic Outcomes Assessment Committee (AOAC), required that all courses demonstrate how competency in "critical analysis and reasoning" would be measured through course activities and assignments. Thus, the faculty revised course outcomes to ensure that critical analysis and reasoning were embedded in the course outcomes. Also during this time PGCC conducted regular measurement of general education learning outcomes (*also called core or institutional outcomes*) using the Education Testing Service's Measure of Academic Proficiency and Progress (MAPP). The MAPP was used as a post test to assess select general education proficiencies of students completing degrees and/or certificates. It was also used as a pre-test to determine potential gains by comparing incoming students' MAPP performance to that of graduating students' MAPP performance. During the 2009-2010 academic year, in-depth examination of the MAPP content was performed, suggesting the MAPP was not adequately measuring the general education outcomes as they were defined by PGCC. Concurrently, in 2009-2010 all credit courses were mapped to the college's general education outcomes. This mapping process followed a revision of those outcomes in 2008 - 2009 and was done to assess whether students were provided sufficient opportunities to meet the outcomes as stated. In April 2009, the Academic Council, the governing arm of Academic Affairs, established the Academic Affairs Assessment Committee to provide global academic assessment.

2010-2011
After reviewing the content of the MAPP test more carefully, a subcommittee of the Academic Council (the academic governance body) determined that the reported MAPP outcomes were not well aligned with the general education or core learning outcomes at PGCC. Also, examination of the Program Review process demonstrated that a closer connection between program and course outcomes was needed to obtain direct measurement of program outcomes. (It should be

noted, however, that when programs conclude with a requisite licensure or credentialing exam, results of those examination processes were being used for direct assessment of program outcomes.) In the Fall of 2010, the newly hired Academic Affairs Assessment Coordinator began working with the Academic Affairs Assessment Committee and the Academic Council to identify an assessment model that would bring the three tiers of outcome measurement (course, program, and general education/core/institutional) into alignment. Throughout the 2010-2011 academic year a complete curriculum mapping process was engaged in across campus with all faculty involved with the goal of ensuring a tight alignment between course outcomes, program outcomes, and core learning outcomes (PGCC's institution-wide learning outcomes). This year-long process has brought about numerous modifications to course and program outcomes. It is expected that bringing these three tiers of learning outcomes into better alignment across all academic programs will actually assist students as they progress through coursework. The newly embodied assessment practices and the impact they have had on the campus are more fully explained in "Section 3" below under the "evolution" of the assessment system at PGCC.

I. Written and Oral Communication

A. Institution's definition of competency

At Prince George's Community College (PGCC), competency in written and oral communication is demonstrated by:

- writing that contains clear and concise sentences; unified, coherent, and well-developed paragraphs; and a logical organizational structure. It should also reflect an awareness of audience and be appropriate for the assignment's rhetorical situation. Grammar and usage rules should be applied correctly, and appropriate diction should be used.
- oral communication, in which a student uses Standard English, adheres to standard grammar and usage rules, uses appropriate diction and non-verbal cues, organizes ideas logically, and takes into account the audience and rhetorical situation.

In addition, written and oral communication at PGCC is supported by the comprehension and analysis of college-level reading materials. This means that students can identify the main idea and the details/evidence of the text and understand or be able to infer the meaning of the language in the text. Furthermore, students can analyze college-level material, which means they can identify the purpose, point of view, tone, and main points of a text and infer meaning and draw conclusions. Students should also be able to assess the quality of the evidence presented and its relevance to their purpose.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Under the revised assessment plan, student learning outcomes, including written and oral communication, are measured at PGCC through assessments embedded in courses. Direct measurement of student performance is obtained in this manner. The new alignment of these course assessments to departmental and institution-wide outcomes will allow the single direct measure from the course to be aggregated across courses in the program to provide evidence of written and oral communication across the program. Through a similar process, institution-wide aggregation will demonstrate the overall student body competency in written and oral communication.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Under the revised assessment plan, assessment at PGCC is conducted through assessments which are embedded in courses. Therefore, written and oral communication is primarily assessed through written assignments or presentations conducted in the classroom. Written and oral communication is assessed through four measureable objectives (core learning outcomes, CLOs):

1. Write in standard English at the college level
2. Speak in standard English at the college level
3. Read and comprehend college-level material
4. Read and analyze college-level materials

The CLOs primarily address institution-wide general education outcomes, but these have been aligned with coursework throughout programs. So measurement of proficiency on these four

measureable objectives is conducted in courses throughout programs, and now can be aggregated to provide information about program and institution effectiveness.

D. Describe the results of the assessment work related to this competency.
The revised assessment plan will provide richer and more complete data on program and general education outcomes; however, the previous assessment plan provided multiple exemplars of using course-level data to improve student learning.

For example, in 2007 the History Department examined HST 1310 (Ancient and Medieval History) and in 2008 examined HST 1410 (History of the United States I). Both of these analyses focused on the use of written essays as a means to assess students' understanding of historical material. The assessment process revealed that in both courses students were indeed demonstrating their abilities through a series of written essays. However, students were not consistently completing all of the essays in the sequence. Furthermore, students struggled with writing cogent essays in the time allotted. Changes were made to provide students more time and engage students in the essays.

Another example is provided from SPH 101: Introduction to Speech Communication. For the full assessment, nine sections of SPH 1010 were chosen and the faculty administered an 18-item test with a rubric that assessed domains like speech delivery, content, non-verbal communication, etc. This round of assessment revealed a need to improve the instrument so that more reliable scores could be obtained across faculty. Also, the need to expand teaching in some areas like speech content was recognized as an area that needed more instructional time to improve student performance.

The Developmental English faculty examined DVE 001-Developmental English through assessing a common writing assignment using a rubric. The students' papers were evaluated on content, structure/organization, and grammar/mechanics. Compared to previous analysis conducted in this course in past years, the impact of some instructional changes were evident. For example, students improved significantly on using transitions, which was one of the most common errors in previous analyses. At the same time, other errors demonstrated continued difficulty, including spelling and fragments. Based on these results, the faculty has offered several suggestions for course improvements such as reviewing fragments more regularly as part of the course and having more regular assignments in the learning laboratory where students would use software designed to improve spelling.

A final example is provided by the English department which held a year-long discussion regarding the difficulty students have generating theses in the English 1020 when compared to English 1010. Data demonstrated that students were performing very poorly in this area on common rubrics. An examination of the data between the 1010 and 1020 class led to this year-long discussion and further clarification of the 1020 course outcomes. The result was that the English 1020 course outcomes were adjusted to focus more on writing and less on literature. The outcome from this discussion was disseminated to all instructors of EGL 1020. Subsequently, a greater focus on writing skills in the EGL 1020 classroom showed an increase on the four-point rubric from an average of 2.3 to an average of 3.0 for "Thesis, Organization, & Support."

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

At Prince George's Community College, competency in scientific and quantitative reasoning is demonstrated by

- the ability to use multiple approaches (e.g., numerical, graphical, symbolic, and verbal) and multiple problem solving tools (e.g., symbolic/algebraic notation, graphs, and tables) to identify, analyze, and solve mathematical problems.
- and the ability to apply the scientific method of inquiry to draw conclusions and to use scientific theories to explain physical phenomena or occurrences, and explain the impact of scientific theories, discoveries, and technological changes on society.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Under the revised assessment plan, the assessment of scientific and quantitative reasoning is measured at PGCC through assessments embedded in courses. Through this manner, direct measurement of student performance is obtained. The new alignment of these course assessments to departmental and institution-wide outcomes will allow the single direct measure from the course to be aggregated across courses in the program to provide evidence of scientific and quantitative reasoning across programs. Through a similar process, institution-wide aggregation will demonstrate the overall student body competency in scientific and quantitative reasoning.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Under the revised assessment plan, assessment at PGCC is conducted through assessments that are embedded in courses. Therefore, scientific and quantitative reasoning are primarily assessed through math exams and exams given in science or behavioral science courses. Scientific and quantitative reasoning is assessed through four CLOs:

1. Comprehend mathematical concepts and methods
2. Engage in qualitative and quantitative reasoning to interpret, analyze, and solve problems
3. Analyze issues using appropriate evidence, employing the principles of the biological, physical, and behavioral sciences
4. Apply the principles of the social science

The CLOs primarily address institution-wide general education outcomes, but now these have been aligned with course outcomes and program outcomes. So measurement of proficiency on these four measureable objectives is conducted in courses throughout programs, and now can be aggregated to provide information about program and institution effectiveness

D. Describe the results of the assessment work related to this competency.

The revised assessment plan will provide richer and more complete data on program and general education outcomes; however, the previous assessment plan provided multiple exemplars of using course-level data to improve student learning.

For example, in 2007 the Accounting Department examined ACC 201 (Intermediate Accounting) and found that students struggled on the final examination. Review of the final demonstrated that the assessment was not necessarily well aligned to the units being taught. Through better

aligning the teaching with the learning outcomes for the course, students improved in their performance. In addition, students struggled with "cash flow" on the assessment. This may be due to inadequate preparation on balance sheets and income statement in the previous class.

Another example is provided by science faculty who teach PSC 101, Introduction to Astronomy. A common assessment was given ascertaining students' understanding of the planets, gravity, spectral windows, and falsifiability. The results demonstrated that students did significantly better on questions of a purely conceptual nature than they did on those which involved both conceptual knowledge and a certain level of numerical literacy. While this is not surprising given that PSC 1010 is meant to be a largely non-mathematical course in the sense that the solving of equations is rarely required, and the primary emphasis is on conceptual understanding. Still, the students' performance suggests that the students struggle in understanding even the meaning of numerical data and of physical laws embodied in equations. Based on these data, the faculty who teach the course considered some changes to help students better understand the mathematical concepts.

In 2007, the math faculty examined MAT 112: Finite Mathematics using six common questions across all sections. Analysis of the data showed that students were demonstrating their ability in two outcomes, but were not adequately performing on three other outcomes for the course. An examination of the syllabus and review of faculty course schedules demonstrated that the amount of time spent on these three was significantly less than the amount of time spent on the two outcomes with identified adequate performance. The faculty discussed developing computer assignments related to these three outcomes to provide students with more exposure to this material.

A final example of course level data is that in 2008 the Math Department engaged in an analysis of MAT 1350: College Algebra. Student outcomes were measured using exams, projects, and assignments. Specific student learning outcomes in the course were identified as not being strongly demonstrated by students, potentially because of lack of time to cover this material in the course. To enhance student exposure to materials, increased student requirements in online software modules that accompany the course materials was added.

Course mapping in the 2009-2010 academic year provided evidence that the outcome "analyze issues using appropriate evidence, employing the principles of the biological, physical, and behavioral sciences" was addressed only in the lab science. The current *curriculum* mapping process is engaged in re-examining this issue and exploring ways to provide students with multiple exposures to this content throughout the curriculum.

III. Critical Analysis and Reasoning

A. Institution's definition of competency
At Prince George's Community College, competency in written and oral communication is demonstrated by

- the ability to solve problems effectively by considering multiple viewpoints and by identifying the nature of problems through analysis, synthesis, and evaluation of arguments and evidence.

- the ability to determine the implications of evidence in order to construct sound inferences, interpretations, and reasoned conclusions.

- the ability to reflect on one's own thinking processes and express them in a variety of ways (e.g., verbal, visual, kinesthetic, tactile, etc.).

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
Under the revised assessment plan, the assessment of critical analysis and reasoning is measured at PGCC through assessments embedded in courses. The direct measurement of student performance is obtained in this manner. The new alignment of these course assessments to departmental and institution-wide outcomes will allow the single direct measure from the course to be aggregated across courses in the program to provide evidence of critical analysis and reasoning across the programs. Through a similar process, institution-wide aggregation will demonstrate the overall student body competency in critical analysis and reasoning.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
Under the revised assessment plan, assessment at PGCC is conducted through assessments that are embedded in courses. Therefore, critical analysis and reasoning have been imbedded throughout the curriculum and can be assessed through a wide range of student products. Critical analysis and reasoning is assessed through one CLO:

Reason abstractly and think critically

The CLO primarily address institution-wide general education outcomes, but recently these have been aligned with course outcomes and program outcomes. So measurement of proficiency on this CLO is conducted in courses throughout programs, and now can be aggregated to provide information about program and institutional effectiveness.

D. Describe the results of the assessment work related to this competency.
The revised assessment plan will provide richer and more complete data on program and general education outcomes, however, the previous assessment plan provided multiple exemplars of using course-level data to improve student learning.

One example comes from the Math faculty who examined MAT 114, Introduction to Statistics. A common assessment and rubric was developed. The assessment was administered to all students enrolled in the course and evaluated by members of the Probability and Statistics Committee. The findings showed that students were relatively successful in mathematical operations but struggled with formulating proper hypothesis testing. Statistics requires a

significantly greater amount of critical analysis and reasoning for students to identify the proper process and derive an appropriate conclusion. Changes to the course included restructuring the syllabus to provide greater time to go over the critical thinking skills necessary to accurately engage in hypothesis testing. Additionally, a review of the textbooks being used and the amount of time spent on hypothesis testing were examined.

IV. Technological Competency

    A. Institution's definition of competency

At Prince George's Community College, competency in technology is demonstrated by

- the ability to effectively use technological tools to discover, evaluate, and effectively synthesize needed information.
- appropriate use of technological tools to search for and utilize academically sound information available through library services and computer labs.
- the ability to use available application software to create tools to perform a variety of problem solving activities and communicate those solutions.

    B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Under the revised assessment plan, the assessment of technological competency is measured at PGCC through assessments embedded in courses. Through this manner, direct measurement of student performance is obtained. The new alignment of these course assessments to departmental and institution-wide outcomes will allow the single direct measure from the course to be aggregated across courses in the program to provide evidence of technological competency across the program. Through a similar process, institution-wide aggregation will demonstrate the overall student body competency in technology.

    C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Under the revised assessment plan, assessment at PGCC is conducted through assessments that are embedded in courses. Therefore, technological competency is primarily assessed through assignments demonstrating students' ability to obtain information and display information using technology. Technological Competency is assessed through three CLOs:

1. Recognize the need for information
2. Locate, evaluate, and effectively synthesize needed information
3. Utilize computer software and other technologies to enhance college-level learning, communication, and visual literacy

The CLOs primarily address institution-wide general education outcomes, but these have been aligned with coursework throughout programs. So measurement of proficiency on these three measureable objectives is conducted in courses throughout programs, and now can be aggregated to provide information about program and institution effectiveness.

    D. Describe the results of the assessment work related to this competency.

The course mapping process conducted in 2009 and the curriculum mapping conducted in 2010 revealed that the use of technology is a regular component of many courses on campus. However, the faculty has not regularly assessed students on their ability to obtain information through technology and use it effectively. One of the goals of the new assessment alignment is to ensure coverage of all outcomes and direct measurement of them across a range of courses.

The last few years have seen a myriad of transformations to assessment activities occurring at PGCC. Over the years, the PGCC faculty has been engaged in a number of assessment activities, including the creation of common outcomes for all courses (course outcomes). These outcomes appear on all syllabi in a given course and help faculty develop the course. In addition, PGCC has program outcomes for all degree programs and core learning or general education outcomes (CLOs) that are the institution-wide student learning outcomes. Additionally, PGCC has regularly focused on assessment at the course level and institutional assessment of CLOs using the MAPP. The use of these data streams has always focused on improving student learning outcomes through direct measurement of student performance.

Until the Spring 2010 semester, the Academic Outcomes Assessment Committee (AOAC), which reported to the chief academic officer, oversaw all aspects of course-level assessment. The AOAC asked each department to select a course for assessment, creating common assessments for the course, and implementing the assessment with a sample of the students taking the course. Using this technique, various individual courses were improved as have been noted above. However, the connection of those course improvements to larger scale improvements (i.e., program outcomes, and institutional outcomes) was not inherently evident. In the Fall of 2009, the Academic Affairs Assessment Committee, representing all academic divisions, was created to oversee the assessment of student learning outcomes (SLO) at the program and institutional level. This committee reports directly to both the chief academic officer and the Academic Council, the academic governing body.

While the creation of a second committee brought more personnel into the assessment process, it did not unify the assessment process or define the impact of course-level assessment on program outcomes and core learning outcomes. Furthermore, oversight of the assessment of student learning outcomes was handled largely through a faculty member who was provided limited release time, and did not afford enough hours of oversight of assessment of SLOs on campus.

To rectify these issues, the college fully supported the assessment process by hiring a full-time assessment coordinator (Academic Affairs Assessment Coordinator) in July 2010, and providing release time to two faculty members throughout the 2010-2011 academic year to assist in the development of an integrated assessment plan. The primary charge from the academic vice president was to bring course, program, and institutional assessment of SLOs into a comprehensive "system" of assessment that would be used across all academic programs.

Building upon assessment processes already present on campus, the Academic Affairs Assessment Coordinator engaged the entire faculty in October during College Enrichment Day (CED). This entire day was set aside to move assessment efforts forward. Under the direction of the Academic Affairs Assessment Coordinator, CED 2010 kicked-off the process of having every department on campus working on curriculum mapping at least one program. CED 2010 was focused on sequencing courses and producing a four semester "map" of recommended courses for each semester in at least one program per department. By December 2010, 41 Associate and Certificate programs were sequenced. All sequences were inserted into a custom Access-based database system created by the Office of Planning, Assessment, and Institutional Research (OPAIR) staff.

During the January 2010 "start-up" meeting, three hours of departmental time were dedicated to the curriculum mapping process. This time was aimed at alignment of course outcomes, to program outcomes, to core learning outcomes. Every department focused on the courses recommended in the program that was sequenced at CED 2010. Following curriculum mapping processes, course outcomes were examined for flow across the curriculum, and then aligned to other outcomes that were also met in the course (i.e., program outcomes and core learning outcomes). All matrices were input into the already generated custom database and combined with course sequence data.

Thus, for over half of the degree programs on campus, and many certificates, course outcomes are now clearly aligned with program outcomes and core learning outcomes. The remaining degree and certificate programs will be sequenced and aligned in the 2011-2012 academic year.

While the faculty worked on the foundation for comprehensive assessment, the system to unify assessment on campus was being developed. The Academic Affairs Assessment Coordinator was directly responsible for shepherding this effort with focused input by the Academic Affairs Assessment Committee. Once drafted, the assessment plan was shared and modified based on feedback from Deans, Chairs, Faculty and the Academic Council. This assessment system focuses on embedded common assessments that remain as a standard element of courses. The focus of this assessment model is to use direct measurement of performance on course outcomes as the basis for all future analyses. Then, since the course outcomes are aligned to program and institution-level outcomes, these course outcomes can be aggregated to view student performance at the program and institution levels. Included in the system is a regular reporting cycle in which departmental assessment teams will be formed in every department to contribute to the oversight of assessment and improvement of courses and programs. In addition, the system defines the oversight of assessment of student learning on campus and brings all SLO assessment underneath a single committee on campus, which is responsible for student learning outcomes at all levels. The assessment system document has been vetted through the Academic Affairs Assessment Committee, reviewed by the departmental chairs and faculty senate, and was approved by the academic governing body, the Academic Council, in April 2011.

Finally, support for this assessment process has been established through the commitment to obtain the necessary data collection and tracking software needed to bring the assessment system to full fruition. The software selection committee was created in February 2011 and held its first meeting in March. Software selection will occur in May and June, with purchase of a software package budgeted for July 2011.

Fall 2011 will begin the initial steps to implementing this new assessment process. Once fully implemented, PGCC will have a powerful mechanism to monitor student academic development across courses. This system seamlessly connects SLOs across course, program, and institution. Additionally, this system will be able to monitor the impact of improvements made at each of these levels as well, and furthermore aid in the identification of areas which need improvement.

Wor-Wic Community College

Wor-Wic Community College
Student Learning Outcomes Assessment Report (SLOAR) 2011

Part One: Summary of Assessment Activities

Summary of Significant Institution Assessment Activities since 2007 SLOAR Report

Fiscal Year 2009
1. The academic program and administrative department assessment process was revised based on a modified version of the Nichols' model to better streamline assessment processes and the reporting requirements for annual program reviews. The Nichols' model, created by James O. Nichols (1995), is recognized for its columnar format which aligns learning and institution goals with assessment criteria and procedures, the results of the assessment measures, and use of assessment results to improve learning and institution effectiveness.

2. The institution assessment committee developed and approved rubrics to assess the annual program reviews, provided feedback to department heads and directors on their assessment efforts, and identified any steps of the assessment processes where the college needs overall improvement. (Areas that are identified as needing improvement are addressed by the director of assessment through professional development workshops and meeting with individual department heads, directors, and course coordinators.)

3. The institution assessment committee developed a coordinated timeline to better demonstrate the integration of assessment with strategic planning and budgeting processes.

Fiscal Year 2010
1. The board of trustees approved the purchase of a subscription to TracDat, an online assessment management system to further streamline the assessment process, better integrate the information with strategic planning and budgeting processes, and improve the storage and retrieval of historical and current assessment data. In addition, this tool will assist in the reporting requirements for accreditation purposes.

2. "Brown-bag" lunch sessions were added to the professional development offerings for faculty and staff to informally share their experiences with best practices in assessment on such topics as measuring non-academic outcomes, measuring affective outcomes, and using assessment results to improve learning.

3. The institution assessment committee completed its first assessment of assessment based on the rubrics created the prior year. The results of this assessment demonstrated that 70 percent of the criteria on the rubrics were achieved by 70 percent or more of the academic programs and administrative departments which met the benchmark set by the committee.

Fiscal Year 2011
1. The TracDat assessment management system (AMS) was fully implemented for the first time. All assessment processes were transferred to TracDat including identifying program goals/course objectives, listing means of assessment and benchmarks, analyzing results and uploading supporting data, creating action plans for improvement, and describing progress on action plans.

2. The General Education Assessment Committee began revision of general education objectives and identifying sub-skills. This is a four year project to propose revisions to two objectives per year. Sub-skills will help to further clarify expected student outcomes related to the general education objective.

3. Three assessment professional development workshops were held for faculty and staff. One workshop focused on defining and measuring critical thinking skills as well as suggestions for helping students learn these skills. A second workshop focused on developing quality multiple choice tests, forming questions to measure higher order thinking skills, and how to use results for improvement. A third workshop

examined the institution's recent Community College Survey of Student Engagement results and how faculty and staff can utilize that information for improvement.

Assessment Guidelines

Assessment at Wor-Wic is conducted every year as part of the annual program review process. In addition, every five years, the programs conduct a more comprehensive review of their respective majors, which involves greater emphasis on trend data, a strengths-weaknesses-opportunities-threat analysis, an environmental scan, and review of resources. The guidelines for completing the annual and five-year comprehensive reviews were updated during fiscal year 2009 by the assessment committee with input from the various divisions at the college through their committee representatives. The tracking and recording of the various components of the assessment process is completed through the commercial assessment management system, TracDat.

At the institution level, assessment of the general education program is coordinated by the Director of Assessment. At the program and course levels, assessment of academic programs and courses is conducted by the program department head and course coordinators. The process is the same for all three levels, each with their own unique set of learning goals, means of assessment (to measure student achievement of the learning goals), and benchmarks (i.e. established criteria for success). At the end of each fiscal year, the results from the means of assessment are analyzed and any means of assessment which did not meet its benchmark requires an action plan for improvement. Course-level assessment results and action plans are submitted to the department head for review, and approval and both course- and program-level assessment results and action plans are submitted to the divisional dean for their review and approval. Once the deans have approved the content of the reports, the reports are submitted to the Vice President of Academic and Student Affairs (VPASA) and the Director of Assessment. The Director of Assessment then conducts a review of the assessment reports and provides formal feedback to department heads for reporting criteria which are successful and also those which need improvement (i.e. assessing assessment). This process is cyclical and renews every fiscal year.

Institution Activities Aligning with Middle States Standards 7, 12, and 14

According to the Middle State's Characteristics of Excellence (2009), there are four steps in the planning-assessment cycle: (1) developing clearly articulated goals; (2) designing strategies to achieve those goals; (3) assessing achievement of those key goals; and (4) using the results of those assessments to improve learning, programs and services (p. 63). Wor-Wic Community College is in compliance with all phases of the planning-assessment cycle as (1) there are established and clearly articulated learning goals at all three levels of the college: institution, program, and course; (2) learning strategies are in place to achieve those goals, are identified on every course syllabus, and all course objectives are linked to institution level general education objectives; (3) assessment occurs at all three levels of the college for learning goals; and finally (4) results are analyzed every year to determine if benchmarks were met and action plans for improvement are created as warranted. In addition, under Standard 12 of The Characteristics of Excellence, Middle States identifies specific student learning outcomes for all of its member institutions, including: written communication, speech communication, quantitative reasoning, scientific reasoning, information literacy, technological competence, and critical analysis and reasoning (p. 49). The eight general education objectives of WWCC encompass all of the Middle States' learning outcomes. Therefore, the learning assessment process at Wor-Wic is in alignment with the requirements of Middle States for Standards 7-Institutional Assessment, 12-General Education, and 14-Assessment of Student Learning.

Assessment Organizational Structure

The organizational structure of student learning assessment at all three levels of the College (institution, program, and course) is as follows:

Level	Institution	Program	Course
Responsible	VPASA	VPASA	VPASA

Person(s)	Director of Assessment Gen. Ed. Assessment Committee	Division Dean Department Head Program Faculty	Division Dean Department Head Course Coordinator Course Faculty
Learning Goals	General Education Objectives	Program Learning Goals	Course Objectives
Means of Assessment (MOA)	Collegiate Assessment of Academic Proficiency (CAAP) Modules Course Embedded	Course Embedded CAAP Results distributed by major	Final Exam Analysis Course Embedded
Benchmarks	CAAP Module=College Mean > CAAP National Mean Course Embedded=Varies based on MOA	Course Embedded=Varies based on MOA CAAP majors' mean >= either the WWCC mean or national mean for 2 year institutions	Final Exam Analysis=70% pass rate by course objective Course Embedded= Varies based on MOA

Institution Leadership for Assessment Activities

The responsibility for the leadership for assessment activities lies with the office of the Director of Assessment under the direction of the Vice President for Academic and Student Affairs (VPASA). This position reports directly to the VPASA. The duties of the Director of Assessment include: (1) oversight of the assessment process for the institution, (2) supporting faculty and staff with the various phases of the assessment process such as developing learning goals, means of assessment, data collection and analysis, and use of results for improvement, (3) chairing both the assessment committee and the general education assessment committee, and (4) coordinating accreditation activities.

The first of the two committees is the assessment committee, which supports the development and implementation of outcomes assessment techniques and processes that lead to institution effectiveness. This committee is comprised of four faculty representatives (two each from the occupational and the general education divisions); five administrative staff representatives (one each from student services, administrative services, continuing education and workforce development, the director of institutional research and planning [who is also a member of the institutional affairs division], and the director of the media center); the director of assessment (chair); and the vice president for academic and student affairs (ex-officio). The committee meets monthly from September to June.

The general education assessment committee is charged with implementing the general education assessment process and making recommendations for improvement based on assessment results, new testing development, and technological advancements. This committee consists of eight faculty members, four each from the two academic divisions. The committee meets two times per semester and also has the primary responsibility for administering the institution's standardized general education assessment, the Collegiate Assessment of Academic Proficiency (CAAP). In addition to administering the CAAP exam, this committee also recommends policy changes, investigates different methods for assessing the institution's eight general education objectives, and annually analyzes results from the CAAP to determine if improvement action plans are warranted.

At the program and course levels, faculty also assume responsibility for leading assessment. All academic programs are lead by a department head who is responsible for annually reporting on results for program level goals and coordinating with department faculty to discuss results and formulate action plans for improvement. At the course level, all courses have a coordinator or co-coordinators who are responsible for annually reporting assessment results on course objectives. Course coordinators confer with faculty who teach the course to discuss results and create any action plans for improvement.

Part Two: Four Major Competency Areas

I. Written and Oral Communication

A. Institution's definition of competency

Wor-Wic Community College has, as one of its eight general education objectives, an objective to address the written and oral communication skills of its students: students will be able to "express ideas effectively through oral and written communication."

B. Level(s) at which the competency is assessed (e.g., department, program, course)

These general education competencies are **directly** assessed at two levels: institution and course. At the institution level, pending graduates are assessed. At the course level, students enrolled in *ENG 101 Fundamentals of English I* are assessed for writing skills. For oral communication skills, students in *ENG 151 Fundamentals of English II*, *ENG 203S Studies in Literature II (Short Story)*, and *ENG 204 African-American Literature*, and *SPH 101 Fundamentals of Oral Communication* and *SPH 201 Instructional Communication* are assessed. For the program level, results from the institution and course assessments are aggregated by student major, averaged, and then disseminated to department heads.

This general education competency is also **indirectly** assessed at the institution level with feedback on surveys from recent graduates and their employers. In addition, every other year, a random sample of current students provides indirect survey feedback on this competency as described below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct-Institution

Pending graduates at the college must complete a general education assessment as a requirement for graduation. At the institution level, written communication skills, beginning with fiscal year 2010, are assessed bi-annually using the writing module of the Collegiate Assessment of Academic Proficiency (CAAP). To be eligible for this assessment, students must have completed 45 credits or more toward their degree requirements. This module was previously administered to graduates for fiscal years 2003, 2007, 2008 and is currently being administered for fiscal year 2011.

Program

Results from the CAAP conducted at the institution level are aggregated and averaged by student major. The average score by major is then reported to the department heads so they can compare their program majors' outcomes with college averages and/or national norms.

Results from the ENG 101 final essay, conducted at the course level, are aggregated by student major. The average score by major is then reported to department heads so they can compare their majors' outcomes with the college average.

Direct-Classroom

For **written** communication skills at the course level, for the first time for fiscal year 2010, the final essay from the ENG 101 course was selected as the instrument to measure students' writing skills at the course level. The final essay consists of an argumentative paper, 4-6 pages in length, which is evaluated by two raters using a diagnostic rubric containing twelve different criteria. Raters are trained bi-annually with a rubric norming session, and inter-rater reliability checks on the results have demonstrated high correlation among the raters (.86). For any essay whereby two raters have a low level of agreement, a third rater scores the essay. The students' identities remain anonymous for this process and the ENG 101 course co-coordinators ensure that students are not evaluated by their own course instructors. The rubric results are then aggregated for all students in ENG 101 to identify a performance outcome score for each rubric criterion. The rubric has a rating scale of 0-4, with (4) exceeding expectations, (3-2) meeting expectations, (1) approaching expectations, and (0) not meeting expectations. The benchmark to determine success is 70% of students will earn a score of 2 or better for each criterion. The results are reviewed by the co-course coordinators and appropriate faculty to determine if an improvement action is warranted based on the results.

For **oral** communication skills, for the first time during fiscal year 2010, a common rubric to score an oral presentation was used for students in ENG 151, 203S, and 204. The rubric has four criteria:

content, organization, visual aids, and delivery. Faculty who used the rubric conducted a norming session to ensure scoring consistency across raters. The benchmark for this assessment was 70% of students will meet or exceed each rubric criterion. The results are reviewed by the course coordinators and appropriate faculty to determine if an improvement action is warranted based on the results.

In addition to the use of a common rubric to measure oral communication skills, one objective of the speech courses (SPH 101, 201) requires the students to demonstrate increased confidence with public speaking as a result of using strategies of organization and stress reduction which students learn in the course. Given this objective is classified in the affective learning domain, it is best measured by a pre-post student self-assessment. The pre-post self-assessment method is being used for the first time for fiscal year 2011 so results will not be available for this report. The use of a *post-only* self-assessment for this objective was initiated for fiscal year 2010. The fiscal year 2010 self-assessment instrument required the students to rate themselves on five criteria on a 5-point Likert scale from strongly disagree to strongly agree. The benchmark for this instrument is 70% of students or better will agree or strongly agree with all criteria. Results are aggregated for all sections of each course, and the course coordinator reviews the results with appropriate faculty to determine if an improvement action is warranted based on the results.

Indirect-Institution

At the institution level, several indirect measures of oral and written communication proficiency are used. These measures require the students to self-assess their written and oral communication abilities or employers to assess WWCC graduates whom they employ. The instruments which indirectly measure students' proficiency in written and oral communication include: (1) the Community College Survey of Student Engagement (CCSSE) (cf. survey item numbers 12c "writing effectively" and 12d "speaking clearly and effectively"), (2) the Graduate Students Survey (students contacted one year after graduating), an in-house created survey (cf. item "mastery of writing skills as a result of attending WWCC"), and (3) the Employer Satisfaction Survey, an in-house created survey (cf. items "preparation of employees writing skills" and "oral communication skills"). The benchmarks for these instruments are identified in the chart found in Section D below. The results of these various surveys are shared with the members of the General Education Assessment Committee for review and creation of improvement plans if warranted.

D. Describe the results of the assessment work related to this competency.

The results of the above measures are as follows:

Instrument	Date (last FY)	Benchmark	Result
CAAP Writing Module	FY 2009	WWCC Mean >= National Mean (62.0) for 2-year institutions	Benchmark Met WWCC Mean (63.2)
ENG 101 Final Essay	FY 2010	70% of students will earn a score >= 2 for each of 12 rubric criterion	Benchmark Partially Met Two of 12 criteria did not meet the 70% benchmark: Refutation (65%) and In-text Citations (67%)
Oral Presentation Rubric	FY 2010	70% of students will meet or exceed each rubric criterion (content, organization, visual aids, and delivery)	Benchmark Met All 4 criteria exceeded the benchmark (96%, 98%, 99%, and 91% respectively)
Speech Self-Assessment	FY 2010	70% of students will rate themselves as agree/strongly agree for each criterion (confidence, organization, public speaking, preparation, and anxiety strategies)	Benchmark Met All 5 criteria exceeded the benchmark (88%, 88%, 81%, 81%, 75% respectively)
CCSSE (Q 12.c) (writing clearly and effectively)	FY 2009	WWCC mean >= MD community colleges/CCSSE cohort means (2.75/ 2.696)	Benchmark Met WWCC mean=2.76
CCSSE (Q 12.d) (speaking clearly and effectively)	FY 2009	WWCC mean >= MD community colleges/CCSSE cohort mean (2.65/2.60)	Benchmark Met WWCC mean=2.70

Graduate Survey (writing skills)	FY 2010	40% of respondents will rate WWCC's contribution to improving proficiency as "a great deal"	Benchmark Met 55% of respondents rated their improvement for writing skills as "a great deal"
Employer Survey (writing skills)	FY 2010 (FY 2008 graduates)	80% of respondents will rate WWCC employees as good or higher	Benchmark Met 96% of employers rated FY 2008 graduates as having good or very good writing skills
Employer Survey (oral communication skills)	FY 2010 (FY 2008 graduates)	80% of respondents will rate WWCC employees as good or higher	Benchmark Met 93% of employers rated FY 2009 graduates as having good or very good oral communication skills

Based on the results of the above measures, only one means of assessment warranted an action plan which was the ENG 101 final essay results (refutation and in-text citations) which did not meet the benchmark. In order to help improve students' ability to correctly construct in-text citations, the ENG 101 instructors decided to discontinue the use of Media Center training in favor of an on-line tutorial to give students more hand's on practice with citations and MLA style guidelines. For refutation, all instructors will require students to read chapters 18 and 19 in the McWhorter textbook and include 1-2 reading quizzes (testing essay structure and logic) throughout the semester. In addition, as a by-product of a Lumina Grant the college received, ENG 101 is also undertaking a significant course re-design during fiscal year 2011. The redesign will not be implemented until fiscal year 2012; therefore, the assessment results of that effort will not be available until 2013.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Wor-Wic Community College has, as two of its eight general education objectives, objectives to address the scientific and quantitative reasoning skills of its students: students will be able to "use the scientific method in understanding the interdependence of humankind and the environment" and "apply mathematical models to the solutions of problems."

B. Indicate level(s) at which the competency is assessed (e.g., institution, program, course)

These general education competencies are **directly** assessed at two levels: institution and course. At the institution level, pending graduates are assessed. At the course level, students enrolled in "high impact" courses (i.e. general education courses in which most students enroll) are assessed for quantitative and scientific literacy skills via the comprehensive final exam. For example, scientific literacy skills are measured in the courses in which the majority of students enroll to fulfill this general education requirement: *BIO 101 Fundamentals of Biology* and *ENV 101 Environmental Science*. For quantitative literacy, the majority of students enroll in *MTH 152 Elementary Statistics* and *MTH 154 College Algebra and Trigonometry*. For the program level, results from the institution assessment are aggregated by student major, averaged, and then disseminated to department heads.

These general education competencies are also **indirectly** assessed at the institution level with feedback on surveys from recent graduates and their employers. In addition, every other year, a random sample of current students provides indirect survey feedback on quantitative literacy as described in section D below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct-Institution

        Pending graduates at the college must complete a general education assessment as a requirement for graduation. At the institution level, **scientific** reasoning skills, beginning with fiscal year 2010, are assessed bi-annually. Pending graduates of the college complete the science module of the Collegiate Assessment of Academic Proficiency (CAAP). This module was previously administered to graduates for fiscal years 1997, 2003, 2008, 2009, and 2010. The next scheduled assessment will be for fiscal year 2012.

        At the institution level, **quantitative** reasoning skills were also assessed for pending graduates for fiscal years 1997, 2003, 2008, 2009, and 2010 using the mathematics module of CAAP. For fiscal year 2010, students enrolled in MTH 154 College Algebra and Trigonometry completed the CAAP as part of the final exam (see section III of this report for explanation of the evolution of the use of the CAAP mathematics module).

Program

        Results from the CAAP conducted at the institution level are aggregated and averaged by student major. The average score by major is then reported to the department heads so they can compare their majors' outcomes with college averages and/or national norms.

Direct-Classroom

        For **scientific** and **quantitative** literacy skills at the course level, students in all sections of BIO 101 and ENV 101 (scientific) and MTH 152 and MTH154 (quantitative) are required to complete a common comprehensive final exam. Questions on the final exam are: (1) aligned with the course objectives, (2) rated for the Bloom's cognitive level it assesses, and (3) identified by question type (i.e. multiple choice, true/false). Each course instructor enters his/her final exam results into a final exam analysis tool on the college's website. The data are then aggregated and analyzed to identify a course level pass rate by objective, pass rate by individual questions, and an overall pass rate for the exam. Individual course objectives are then mapped to general education objectives for scientific and quantitative literacy. The general education objective (GEO) relationship is also identified on the course syllabi. The benchmark to determine success for this measurement is a 70% pass rate by objective. The results are reviewed by the course coordinator and appropriate faculty to determine if an improvement action is warranted based on the results.

Indirect-Institution

        At the institution level, several indirect measures of scientific and quantitative literacy are used. These measures require the students to self-assess their scientific and quantitative abilities or employers to assess WWCC graduates whom they employ. The instruments which indirectly measure students' proficiency in scientific and quantitative literacy include: (1) the Community College Survey of Student Engagement (CCSSE) (cf. item number 12f "solving numerical problems", (2) the Graduate Students Survey (cf. items "understanding of science and technology" and "mathematics skills as a result of attending WWCC"), and (3) the Employer Satisfaction Survey (cf. item "preparation of employee's mathematics skills"). The benchmarks for these instruments are identified in the chart found in Section D below. The results of these various surveys are shared with the members of the General Education Assessment Committee for review and creation of improvement plans if warranted.

    D. Describe the results of the assessment work related to this competency.

The results of the above measures are as follows:

Instrument	Date (last FY)	Benchmark	Result
CAAP Science Module	FY 2010	WWCC Mean >= National Mean (59.2) for 2-year institutions	Benchmark Met WWCC Mean (59.7)
CAAP Mathematics Module	FY 2010	WWCC Mean >= National Mean (56.2) for 2-year institutions	Benchmark Met WWCC Mean (58.3)
BIO 101 Final Exam Results	FY 2010	70% pass rate by objective	Benchmark Partially Met 2 of 9 course objectives did not

			meet the benchmark (#'s 2 & 7)
ENV 101 Final Exam Results	FY 2010	70% pass rate by objective	Benchmark Partially Met 3 of 26 course objectives did not meet the benchmark (#'s 10, 11 & 25)
MTH 152 Final Exam Results	FY 2010	70% pass rate by objective	Benchmark Met All course objectives met the 70% pass rate
MTH 154 Final Exam Results	FY2010	70% pass rate by objective	Benchmark Met All course objectives met the 70% pass rate
CCSSE (Q 12.f) (Solving numerical problems)	FY 2009	WWCC mean >= MD community colleges/CCSSE cohort means (2.59/ 2.59)	Benchmark Met WWCC mean=2.59
Graduate Survey (Ability to use mathematics)	FY 2010	40% or more of respondents will rate WWCC's contribution to improving efficiency as "a great deal"	Benchmark Not Met 33% of respondents rated their improvement for mathematical ability as a great deal
Graduate Survey (Understanding science)	FY 2010	40% or more of respondents will rate WWCC's contribution to improving efficiency as "a great deal"	Benchmark Met 43% of respondents rated their improvement for understanding science as "a great deal"
Employer Survey (Mathematical Skills)	FY 2010	80% or more of respondents will rate WWCC employees as good or very good	Benchmark Met 100% of employers rated FY 2009 graduates as having good or very good mathematical skills

Based on the results of the above measures, only two results warranted action plans: the course level results from BIO 101 and ENV 101. For BIO 101, objectives 2 and 7 have proven to be consistently problematic for students. These two objectives focus on cell processes which students find difficult to understand. For fiscal year 2010, the course instructors agreed on an action plan to increase emphasis of these objectives in lecture and to highlight the content through laboratory exercises. Results from fiscal year 2010 demonstrated there was only a slight improvement in the pass rate. For fiscal year 2011, a new action plan was created to review and revise final exam questions related to these two objectives. Results from 2011 are not yet available to determine if this action plan was successful.

For ENV 101, for fiscal year 2009, 5 of 25 objectives did not meet the benchmark. For the action plan, the final exam was revised to reflect changes in the new edition of the course textbook with the deletion and addition of test items. This action plan resulted in a moderate improvement as only 3 of 26 objectives did not meet the benchmark for fiscal year 2010. Of these three objectives, two were within 1% of the benchmark. Given 2010 was the first year of the course with a new edition of the textbook, the fiscal year 2011 action plan is to monitor the final exam results to determine if students still have difficulty with the same three objectives, and if so, create an action plan for 2012 accordingly.

Although the result for the graduate student survey did not meet the benchmark for improving mathematical skills, no action plan is warranted at this time. First, the survey is an indirect measure, and several direct measures provided feedback on this skill which met their benchmarks. Second, the graduate survey asks students to rate their level of improvement on certain skills based on their entry-level proficiency. For mathematics, 78% of students had rated themselves as proficient or highly proficient in mathematics upon entering the college; therefore, it is not surprising to see the increase in proficiency did not quite meet the 40% benchmark as having improved a great deal since the students' initial proficiency level was already high upon entry in this area.

III. Critical Analysis and Reasoning

  A. Institution's definition of competency

Wor-Wic Community College has, as one of its eight general education objectives, an objective to address the critical analysis and reasoning skills of its students. The objective reads as follows: students will be able to "think critically and reason logically".

B. Indicate level(s) at which the competency is assessed (e.g., institution, program, course)

This general education competency is **directly** assessed at two levels: institution and course. At the institution level, pending graduates are assessed. At the course level, students enrolled in honors courses are assessed. For the program level, results from the institution assessment are aggregated by student major, averaged, and then disseminated to department heads.

This general education competency is also **indirectly** assessed at the institution level with feedback on surveys from recent graduates and their employers. In addition, every other year, a random sample of current students provides indirect survey feedback on critical thinking as described in section D below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct-Institution

Pending graduates at the college must complete a general education assessment as a requirement for graduation. At the institution level, critical thinking skills, beginning with fiscal year 2010, are assessed bi-annually. Pending graduates of the college complete the critical thinking module of the Collegiate Assessment of Academic Proficiency (CAAP). This module was previously administered to graduates for fiscal years 1997, 2003, 2008, 2009, and 2010. The next scheduled assessment will be for fiscal year 2012.

Program

Results from the CAAP conducted at the institution level are aggregated and averaged by student major. The average score by major is then reported to the department heads so they can compare their majors' outcomes with college averages and/or national norms.

Direct-Classroom

For critical thinking skills at the course level, for fiscal year 2010, students in the honors program were assessed on selected assignments in various courses using a common scoring rubric created by the faculty who teach in the honors program. The faculty held a norming session to ensure consistency in scoring. Students in three courses, SPH 101H, PSY 101H and ENG 200H, completed assignments (persuasive speech for SPH 101H, Myers-Briggs Type Indicator assignment for PSY 101H, and a research essay for ENG 200H) which were scored by the common rubric. The rubric measured three criteria on the students' abilities to: (1) analyze, (2) synthesize, and (3) evaluate information based on the assignment. The three performance levels for the rubric were: exceeds expectations, meets expectations and fails to meet expectations. The benchmark to determine success for this measurement was 75% of students will meet or exceed expectations for each rubric criterion. The results were reviewed by the honors program coordinator and appropriate faculty to determine if an improvement action was warranted based on the results.

Indirect-Institution

At the institution level, several indirect measures of critical thinking are used. These measures require the students to self-assess critical thinking abilities or employers to assess WWCC graduates who are now their employees. The instruments which indirectly measure students' proficiency in critical thinking include: (1) the Community College Survey of Student Engagement (CCSSE) (cf. item number 12e "thinking critically and analytically", (2) the Graduate Students Survey (cf. item "critical thinking" as a result of attending Wor-Wic, and (3) the Employer Satisfaction Survey (cf. item "ability to solve problems related to job"). The benchmarks for these instruments are identified in the chart found in

Section D below. The results of these various surveys are shared with the members of the General Education Assessment Committee for review and creation of improvement plans if warranted.

D. Describe the results of the assessment work related to this competency.

The results of the above measures are as follows:

Instrument	Date (FY)	Benchmark	Result
CAAP Critical Thinking Module	FY 2010	WWCC Mean>= National Mean (60.8) for 2-year institutions	Benchmark Met WWCC Mean (61.7)
Honors Rubric	FY 2010	75% or more of students will meet or exceed each rubric criterion (analysis, synthesis, and evaluation)	Benchmark Met All 3 criteria exceeded the benchmark (96%, 98%, and 96% respectively)
CCSSE (Q 12.e) (Thinking critically and analytically)	FY 2009	WWCC mean >= MD community colleges/CCSSE cohort means (2.90/ 2.59)	Benchmark Met WWCC mean=2.93
Graduate Follow-up Survey (critical thinking)	FY 2010	40% or more of respondents will rate WWCC's contribution to improving efficiency as "a great deal"	Benchmark Met 46% of respondents rated their improvement for critical thinking as a great deal
Employer Survey (ability to solve problems)	FY 2010	80% or more of respondents will rate WWCC employees as good or very good	Benchmark Met 90% of employers rated FY 2009 graduates as having good or very good ability to solve problems

Based on the results of the above measures, no action plans were warranted.

IV. Technological Competency

A. Institution's definition of competency

Wor-Wic Community College has, as one of its eight general education objectives, an objective to address the technological competency of its students. The objective reads as follows: students will be able to "demonstrate the appropriate use of technology to obtain and communicate information."

B. Indicate level(s) at which the competency is assessed (e.g., institution, program, course)

This general education competency is **directly** assessed at the course level. Students enrolled in *CMP 101 Introduction to Information Systems* and *ENG 101 Fundamentals of English I* are assessed.

This general education competency is also **indirectly** assessed at the institution level with feedback on surveys from recent graduates and their employers. In addition, every other year, a random sample of current students provides indirect survey feedback on technological their competency as described in section D below.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct-Classroom
For technological and information literacy skills at the course level, students in all sections of CMP 101 are required to complete a common comprehensive final exam. Questions on the final exam are: (1) aligned with the course objectives, (2) rated for the Bloom's cognitive level it assesses, and (3) identified by question type (i.e. multiple choice, true/false). Each course instructor enters his/her final exam results into a final exam analysis tool on the college's website. The data are then aggregated and analyzed for a course level pass rate by objective, pass rate by individual questions, and an overall pass

rate for the exam. Individual course objectives are then mapped to the general education objective for information literacy and technological competency and the general education objective (GEO) relationship is also identified on the course syllabus. The benchmark to determine success for this measurement is a 70% pass rate by objective. The results are reviewed by the course coordinator and appropriate faculty to determine if an improvement action is warranted based on the results.

In addition to the final exam for CMP 101, all students in ENG 101 are assessed via the final written essay required for the course for this competency. Two criteria of the grading rubric for the ENG 101 assignment measure information literacy skills: (1) in-text citations, and (2) research-works cited. The benchmark for this assessment is 70% or more of students will earn a score of 2 (meets expectations) or better for each criterion. A second means of assessment, discontinued for fiscal year 2011, (see section III for an explanation of the evolution of this assessment method) was the ENG 101 media center training exercise. All sections of ENG 101 participated in a training session with the director of the media center. Students learned how to conduct information searches, distinguish quality from non-quality sources, and how to appropriately cite information from sources. The benchmark for this activity was 75% of the participants would score 90% or higher on the training exercises. The results of these assessments were reviewed by the course co-coordinators and appropriate faculty to determine if an improvement action was warranted based on the results.

Indirect-Institution

At the institution level, several indirect measures of technological competency and information literacy are used. These measures require the students to self-assess technical and information literacy competencies or employers to assess WWCC graduates whom they employ. The instruments which indirectly measure students' proficiency in technology and information literacy include: (1) the Community College Survey of Student Engagement (CCSSE) (cf. item numbers 4d "worked on a paper/project that required integrating ideas from several sources" and 12g "using computing and information technology"), (2) the Graduate Students Survey (cf. items "effective use of information, understanding technology" and "computer skills" as a result of attending Wor-Wic, and (3) the Employer Satisfaction Survey (cf. items "familiarity of equipment related to job" and "knowledge of specific technical job skills"). The benchmarks for these instruments are identified in the chart found in Section D below. The results of these various surveys are shared with the members of the General Education Assessment Committee for review and creation of improvement plans if warranted.

D. Describe the results of the assessment work related to this competency.

The results of the above measures are as follows:

Instrument	Date (FY)	Benchmark	Result
ENG 101 Library Training Exercises	FY 2010	75% of the participants will score 90% or higher on the training exercises	Benchmark Met 82% of the 844 participants scored 90% or higher on the training exercises
ENG 101 Final Essay Rubric Criterion: In-text Citations and Reference Resources	FY 2010	70% of students >= a score of 2 for each criterion (in-text citations and Resources-Works Cited)	Benchmark Partially Met: 1 of 2 criteria did not meet the 70% benchmark. In-text Citations (67%) and Resources-Works Cited (72%)
CMP 101 Final Exam	FY 2010	70% pass rate by course objective	Benchmark Partially Met 3 of 7 objectives did not meet the benchmark [Objs. #1, 2, and 4)
CCSSE (Q 4.d) (worked on paper/ project that required integrating ideas from several sources)	FY 2009	WWCC mean >= MD community college/CCSSE cohort means (2.82/ 2.71).	Benchmark Met WWCC mean=3.06
CCSSE (Q 12.g)	FY 2009	WWCC mean >= MD community	Benchmark Met

(using computing and information tech)		colleges/CCSSE cohort means (2.77/ 2.71)	WWCC mean=2.90
Graduate Survey (Effective use of information)	FY 2010	40% or more of respondents will rate WWCC's contribution to improving efficiency as "a great deal"	Benchmark Met 40% of respondents rated their improvement for effective use of information as a great deal
Graduate Survey (Understanding technology)	FY 2010	40% or more of respondents will rate WWCC's contribution to improving efficiency as "a great deal"	Benchmark Not Met 36% of respondents rated their improvement for understanding technology as a great deal
Graduate Survey (Computer skills)	FY 2010	40% or more of respondents will rate WWCC's contribution to improving efficiency as "a great deal"	Benchmark Not Met 37% of respondents rated their improvement for computer skills as a great deal
Employer Survey (Computer skills)	FY 2010	80% or more of respondents will rate WWCC employees as good or very good	Benchmark Met 100% of employers rated FY 2009 graduates as having good or very good computer
Employer Survey (Familiarity of equipment related to job)	FY 2010	80% or more of respondents will rate WWCC employees as good or very good	Benchmark Met 93% of employers rated FY 2009 graduates as having good or very good familiarity of equipment related to job
Employer Survey (Knowledge of specific technical job skills)	FY 2010	80% or more of respondents will rate WWCC employees as good or very good	Benchmark Met 96% of employers rated FY 2009 graduates as having good or very good knowledge of specific technical skills

Based on the results of the above measures, two results warranted an action plan. First, for the CMP 101 final exam results, three objectives did not meet the benchmark. For objective 1 (Identify and define the purpose of computer hardware components), this was the first time in five years the objective did not meet the benchmark. For objective 2 (Identify and define components of networks), this was the third consecutive year it did not meet the benchmark. And for objective 4 (Distinguish between operating system and application software), this was the second year this objective did not meet the benchmark. For fiscal year 2009, an action plan was created to address objectives 2 & 4 by implementing additional questions and practice activities for class assignments and homework to increase student knowledge and practical application of these objectives. The results for fiscal year 2010 demonstrated there was no improvement as the objectives still did not meet the benchmark. The course coordinator believed the problem may be the time lag between when students learn this information and when they are tested on the final exam. Students have the option of completing review exercises for the final; however, data demonstrated than only 24% of students took advantage of the additional practice. For fiscal year 2011, another action plan was created to require students to take the review exams prior to the final. Results from fiscal year 2011 are not yet available to determine if this improvement action was successful.

Second, the result from the ENG 101 final essay results which did not meet the benchmark for in-text citations warranted an action plan. In order to help improve students' ability to correctly construct in-text citations, the ENG 101 instructors decided to discontinue the use of the media center training in favor of an on-line tutorial to give students more hands-on practice with citations and MLA style guidelines. Results from fiscal year 2011 are not yet available to determine if these improvement actions were successful.

Although the results for the graduate student survey did not meet the benchmark for improving their understanding of technology and computer skills, no action plan is warranted at this time. First, the survey is an indirect measure, and several direct measures provided feedback on this skill. If the direct measures did not meet the benchmark, appropriate action plans were created. Second, the graduate survey asks students to rate their level of improvement on certain skills based on their entry-level

proficiency. For computer skills, 84% of students had rated themselves as proficient or highly proficient upon entering the college and for understanding technology, 74% rated themselves as proficient or highly proficient upon entering the college; therefore, it is not surprising to see the increase in proficiency did not quite meet the 40% benchmark as having improved a great deal since their initial proficiency levels were already high upon entry in these areas.

Part Three: Evolution of Assessment Activities

Since the last SLOAR report of 2007, several modifications to the institution's assessment of the above referenced general education objectives have been completed or are currently in progress. To begin, a four-year project was initiated in fiscal year 2010 to revise the language of the general education objectives and to identify related sub-skills for each objective. Two objectives, quantitative literacy and scientific literacy were revised and approved for fiscal year 2010. Currently, in fiscal year 2011, two objectives, information literacy and cultural diversity, are being revised and a proposal for their approval will be submitted by the end of the fiscal year. The remaining four general education objectives will be reviewed, two per year, for fiscal years 2012 and 2013. The purpose of this project is to better describe the expected student outcomes for each objective so instructors can align course and program learning outcomes more closely with the expectations of each of the objectives. Once all objectives are complete, the revisions will be updated in the college catalog.

In addition to revising the general education objectives, the benchmarks for assessing the objectives were all reviewed and revised in fiscal year 2009. Prior to fiscal year 2009, the CAAP benchmark was the WWCC average per module would be within plus or minus one standard deviation of the national norm. This benchmark was increased to: the WWCC average per module will be greater than the national norm. At the course level, the previous pass rate by objective was 60%. The Assessment Committee forwarded a recommendation that academic programs adopt a 70% pass rate by objective and approximately 99% of all academic programs followed this recommendation and increased their course pass rate by objective benchmarks.

Along with the changes in the benchmarks, additional course-embedded assessment measures were created to provide multiple direct means of assessment for some of the general education objectives in addition to the use of the CAAP at the institution level. For example, beginning with fiscal year 2010, the ENG 101 final essay measure was adopted as a second means of assessment for the general education objective for written communication skills. The scoring rubric was changed from a holistic to a diagnostic/descriptive rubric to provide more detailed feedback on student strengths and weaknesses. The results from all course sections were aggregated for measuring at the institution level. The data from this new format was then disseminated by student academic major to provide information to academic departments about the strengths and weaknesses of their students' writing skills. A second example is the development of course-embedded measures for oral communication skills with the use of a common scoring rubric to evaluate students' speaking abilities is multiple courses (in addition to typical speech courses), and the use of a common student self-assessment to measure their confidence with public speaking. Again, these results were aggregated for students in all sections of these courses to provide institution level feedback on students' abilities with oral communication skills.

Another significant change was the implementation of the consistent use of the CAAP modules to assess pending graduates on their general education competencies. CAAP had been used sporadically in prior years (1997 and 2003) as a way to help validate an institution-created general education assessment instrument. The use of the "in-house" assessment was discontinued in fiscal year 2007, and CAAP was adopted as the primary measurement tool. Consistent use of CAAP allows the institution to compare Wor-Wic student outcomes historically (trend analyses) and to national standards on a yearly basis. In addition, use of a standardized instrument helped to avoid measurement reliability concerns with the in-house method since the in-house instrument was changed every year it was administered. Lastly, consistent use of the CAAP is valuable because it is a nationally recognized instrument designed to assess

general education outcomes at the collegiate level. It is one of three approved instruments currently used by the Voluntary System of Accountability (for four-year institutions). CAAP is also being considered as a possible standardized instrument for the Voluntary Framework of Accountability (currently in testing phases for two-year institutions).

Use of the CAAP mathematics module has also evolved since fiscal year 2007. Initially, the mathematics module was administered randomly to all pending graduates which may have contributed to scores that did not meet the benchmark. Upon examination of the data, the General Education Assessment Committee determined that the low scores were primarily related to students who never completed a college algebra course at Wor-Wic. Most students at the institution complete a statistics course to fulfill their general education mathematics requirement; thus, students were being tested on a skill for which they never completed a course at the college. For fiscal years 2008 and 2009, the administration of the CAAP mathematics module was limited to only those students who had completed *MTH 154 College Algebra and Trigonometry* as part of their degree requirements. While the scores improved, this created data reliability concerns because the sample size for pending graduates who had completed the mathematics module was typically very small. Plus, given the small number of test takers, results aggregated by academic major were also unreliable. Furthermore, based on feedback from the pending graduates who were assessed on the mathematics module, they expressed concerns that there was a considerable time lag between when they had completed their MTH 154 course and when they completed the CAAP assessment prior to graduation. The students felt their scores would have been better but they could not "remember that far back." Therefore, a final change with the mathematics module occurred in fiscal year 2010 when the CAAP was administered as part of the final exam for the MTH 154 course instead of being administered to pending graduates. Results from the fiscal year 2010 CAAP module (58.3 Wor-Wic average) demonstrated a significant increase from fiscal year 2009 (57.5 average). The national average for the CAAP mathematics module is 56.2. Lastly, the sample size for the mathematics module for 2010 tripled compared to the two prior years providing more statistically reliable results. Thus, decreasing the time lag between learning and testing may have accounted for the significant increase in test score averages between 2009 and 2010.

To conclude this section, a final substantial change in the assessment of the general education objectives is the further integration of assessment with planning and budgeting at the institution. First, an assessment management system, TracDat, was purchased in fiscal year 2010 to better manage the process, data analysis, and reporting requirements of assessment. As part of this process, all the program and course level student learning goals and objectives are linked or "mapped" to the general education objectives so the relationship is evident across the institution. Second, as part of the input requirements for action plans based on assessment results, faculty and staff identify if budget monies are needed to forward action plans and any new monies also require faculty or staff to complete a "new initiative budget request form." On the new initiative form, the requestor must identify which strategic plan objective and/or institution, program, or course-level learning goal(s) the request addresses. When the President's Staff finalizes budget allocations, priority is given to those requests which propose to improve student learning related to college goals.

The college devotes a significant amount of time, effort, and resources to the improvement of student learning in fulfillment of one of its main goals of providing a quality education to help prepare students for transfer and the local workforce of the service region. As exemplified in this report, the college has a systematic process in place for learning assurance, is generally successful with student learning, and constantly strives to improve learning in any area where assessment results deem action is needed for improvement. Assessment is a thriving and systemic part of the culture of Wor-Wic Community College.

Bowie State University

Bowie State University
Student Learning Outcomes Assessment Report (SLOAR) 2011

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Since the 2007 Student Learning Outcomes Assessment Report, a number of changes in assessment practices have occurred. These changes, within and outside of the University, have resulted in an increasing awareness across the entire campus community of the importance not only of evaluating the quality of the student educational experiences, but also of assessing student learning outcomes and the effectiveness of student support services. The University's transformation in this regard was driven by its mission, vision, and strategic plan.

Bowie State University's strategic plan serves as a road map to advance the University's mission of providing an excellent education for all students. Through its undergraduate and graduate programs, the University is focused primarily on enhancing the quality and value of its offerings to students, alumni, and the community. In addition, the University's Core Values of excellence, civility, integrity, diversity, and accountability provide the foundation for decision making and for building a better University.

In addition to the Strategic Plan, the University has several supporting documents that form Bowie's assessment framework. These include the Academic Plan, the Enrollment Management Plan, and the Closing the Achievement Gap Plan. These plans provide the structure for linking Middle States Characteristics of Excellence standards 7, 12 and 14. In addition, external reports including specialized accrediting agency reviews and the USM academic program review cycle are integral components of assessment.

Presently there are two structures addressing assessment of student learning: academic program assessment and general education assessment. Prior to 2009, there was an informal process of programmatic assessment residing in each department. In fall 2009, BSU established a University Student Learning and Assessment Committee (USLAC), which received approval as a standing committee of the Faculty Senate. USLAC supports academic departments in the development and revision of program learning goals, assessment plans, assessment reports, and proposed use of results to improve programs. Based on the review and evaluation of assessment plans and reports, USLAC makes recommendations to the Director of Assessment, who prepares final annual assessment reports in consultation with the deans and the Provost. Going forward, USLAC will continue to provide permanent, faculty-level support for the assessment of student learning.

An essential component of the structure is the linkage with the General Education Review and Advisory Board (GERAB). The Chair of GERAB serves on USLAC and works in close coordination with the USLAC, the Director of Assessment, and the departments to ensure that effective measures and an appropriate assessment schedule are in place.

GERAB is an ad hoc committee of the Faculty Senate. In 2007-2008, GERAB proposed significant revisions to the general education student competencies in written communication, oral communications, scientific and quantitative reasoning, critical analysis and reasoning, technological competence and information literacy. These will be discussed later in the document. In 2011, GERAB developed a comprehensive framework for general education assessment as part of its work to develop a systematic and sustained general education assessment process (BSU's Academic Plan Objective-6). The general education program is designed to meet certain competencies as required by COMAR guidelines, MSCHE guidelines under Standard 12, and BSU's Strategic and Academic Plans.

The University is currently using course embedded assessments, course evaluation surveys, and the English Proficiency Examination (EPE) as measures of learning outcomes. GERAB is working with faculty with an aim to accomplish the following within each general education course:

1) define student learning objectives in accordance with general education competencies (to be accomplished through a course) in a course syllabus;
2) use both direct and indirect measures of assessments;
3) employ multiple methods of assessment; and
4) utilize rubrics for assessment of class presentations, assignments, and participation, and test blueprints for traditional examinations to allow for content analysis of acquisition of general education competencies.

In spring 2011, Bowie State University completed its decennial Middle States review. The work of the University was recognized by the visit team who concluded that Bowie State University met **all** MSCHE standards. The University is fully committed to implementing its Academic Plan and self-study recommendation to systematize an ongoing process of general education assessment.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

Competency in written and oral communication includes the ability to communicate effectively in verbal and written language, the ability to use a variety of modern information resources and supporting technologies, the ability to differentiate content from style of presentation, and the ability to suit content and style to the purpose of communication.

   a) Analyze and discuss critical issues and recurring themes in the discipline.
   b) Make personal judgments and respond to literature by drawing conclusions and stating opinions.
   c) Make interpretations and present those ideas in writing.
   d) Employ appropriate word choices and diction in oral and written communication.
   e) Use suitable current technologies to demonstrate knowledge of concepts.
   f) Conduct research and evaluate information using the appropriate methods of the discipline
   g) Critically evaluate his or her own work and conduct peer reviews of other classmates' written work.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

The English Proficiency Exam is an institutional level assessment tool linked to completion of ENGL 102. In addition, course evaluations and course level assessment are used to evaluate written and oral communications.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Written Communication

I.   The English Proficiency Exam (EPE) is the primary measure of student writing skills. As an institutional requirement for graduation, students are instructed to take the exam upon completion of English 102, the second of the required English courses. The EPE, administered by University Testing Services, is a timed (two hour) writing exercise designed to assess a student's writing proficiency. The student selects a topic from a list provided at the examination. On the selected topic, the student must write an essay which contains an introductory paragraph with a clearly stated and relevant thesis, two to four paragraphs of adequate support, and an appropriate and relevant concluding paragraph. The essay is evaluated in terms of development, unity, coherence, clarity/logic, correct grammar and usage, and proper mechanics by a team of faculty using a holistic scoring rubric. Two readers independently evaluate each essay. If the score varies, a third reader is asked to review. Readers are required to list deficiency areas for students not passing the EPE.

II.   The College of Business (COB) tracks writing competency across courses at the 100, 200, 300 and 400 levels using rubrics appropriate for the course level. The COB found that its students were not as successful on the EPE exam compared to all students taking EPE. In addition, alumni survey data stressed the importance of written communication for workplace success. To improve student learning, the COB has adopted "written communication" as a learning outcome in all major courses. As of fall 2010, the COB assesses written communication skills using well developed rubrics.

Oral Communication:

III.   Oral communication is assessed in COMM 101 and COMM 103. Beginning in fall 2009, the Communication Department began a systematic review of its curriculum in light of the changes to the University's general education competencies. Common course syllabi were developed for COMM 101 and 103 to ensure consistency in learning objectives, content, and presentation requirements as well as textbooks. The Department also rearranged teaching assignments for these two courses so that full-time core faculty had primary responsibility for teaching these courses. The Department reviewed grade distributions as a means as examining improvements.

Indirect Measures of Written and Oral Communication

IV.   The results from the Instructor Performance and Course Rating questionnaire provide indirect evidence of the general education curriculum as a whole. The questionnaire is administered each term to all sections of all courses. The course evaluation process is managed through the Office of Planning, Analysis and Accountability under the guidance of the Faculty Evaluation Committee. Results prepared for the Bowie State University Middle States Subcommittee 7 - General Education are provided in section D below.

D.   Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Written Communication

I.   English Proficiency Exam (EPE) pass rates are shown below. Pass rates have stabilized at 90% and above since spring 2010. Improvements to the EPE process are described in Section III of this report.

EPE Pass Rates
Fall 2008 – Spring 2011

	Fail	Pass	Total	% Passing
Fall 2008	69	201	270	74%
Spring 2009	35	440	475	93%
Fall 2009	55	411	466	88%
Spring 2010	24	411	435	94%
Fall 2010	26	477	503	95%
Spring 2011	30	383	413	93%

Source: OPAA

II.   The College of Business (COB) assessed writing across its curriculum for the first time during the fall 2010 semester. A three point rubric (exemplary, acceptable, and unacceptable) was used. Baseline information is shown below. As expected, freshman written communication skills are not as strong upperclassman. The sample size at the 200 level needs to be improved. Students taking MGMT 440 did not benefit from the newly implemented focus on writing. The COB will continue to collect this information and develop improvement strategies in the near future.

College of Business Undergraduate Written Communication Learning Goal Assessment
Acceptable and Exemplary Score Percentages Fall 2010

	COB - Total	MGMT 101	MGMT 241	FINA 320 & ECON 312	MGMT 440
Paragraphs	88%	85%	95%	90%	81%
Mechanical Errors	88%	85%	100%	93%	74%
Vocabulary	89%	78%	100%	93%	84%
Sentence Structure	83%	64%	100%	93%	74%
Range of Material	85%	66%	100%	92%	84%
Perception/Original Thought	83%	78%	95%	86%	71%
Coherent Arguments	85%	71%	100%	86%	81%
Illustration	76%	72%	n/a	69%	85%
Total	**84%**	**75%**	**98%**	**88%**	**79%**
Number of students	182	73	19	59	31

Source: College of Business

Oral Communication:

III.   The Communications Department uses COMM 101 and 103 grade distribution as an indirect indicator of the structural changes it has made to the curriculum. The grade distribution information is inconclusive. Faculty in the Communications Department are working with its GERAB representatives to develop and employ appropriate rubrics to assess oral communication skills.

Student Success Rates in General Education Communication Courses

Academic Year	COMM 101			COMM 103		
	Total Number of Students	DFW %	% Success	Total Number of Students	DFW %	% Success
AY 2008	1141	17%	83%	127	15%	85%
AY 2009	862	19%	81%	226	16%	84%
AY 2010	781	16%	84%	264	12%	88%

Notes: DFW represents grades of D (Unsatisfactory), F (Fail), or W (Withdrawn)
% Success = Number of students scoring grade 'C' and above/Total number of students excluding students who audited the course.
Source: OPAA

Indirect Measures of Written and Oral Communication

IV.   The results from the Instructor Performance and Course Rating questionnaire are shown below. The BSU Middle States Subcommittee 7 – General Education requested OPAA analysis of the course evaluations for general education courses for the self-study report. This was the first time that the data were summarized in this manner. Below are the results contained in the University's Self-Study. It is anticipated that this information will be analyzed on a regular basis as part of the systematic review of the general education program.

The data provided below indicate that, in fall 2008 and spring 2009, of those students expressing a view, the majority reported that their general education courses improved their written and oral communication skills.

Student Evaluation Responses to Questions Measuring
General Education Written and Oral Communication Competencies
Writing Skills

Course Activities	Always	Often	Sometimes	Seldom	Never
Fall 2008	944	430	299	119	81
	50%	23%	16%	6%	4%
Spring 2009	3,309	1,179	684	273	162
	59%	21%	12%	5%	3%

Oral Presentation Skills

Course Activities	Always	Often	Sometimes	Seldom	Never
Fall 2008	682	317	222	129	93
	47%	22%	15%	9%	6%
Spring 2009	3,008	1,044	462	216	130
	62%	21%	10%	4%	3%

Source: OPAA

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Competency in scientific and quantitative reasoning includes the ability to locate, indentify, collect, analyze, and interpret data, and the ability to use mathematics and the scientific method of inquiry to make decisions, where appropriate.

a) Analyze and understand the physical and biological world.
b) Solve scientific problems and synthesize scientific information.
c) Apply scientific methods of inquiry during investigations.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
Course

C. Process used to evaluate competency (i.e., methods, measures, instruments)
The Department of Mathematics initiated a program of course redesign, closely resembling the "the Replacement Model" of NCAT, for one developmental course and three general education mathematics courses:

1. MATH 099: Transition to College Mathematics (Developmental; Spring 2005)
2. MATH 125: College Algebra (Fall 2005)
3. MATH 141: Pre-Calculus 1 (Fall 2007)
4. MATH 116: Introduction to Math Ideas (beginning in Spring 2010)

For example, MATH 099 (four credit hours) was created to replace the former two-course sequence comprising MATH 080 and MATH 090 (a total of seven semester hours). The redesigned course (30 sections in fall 2009) maintains its meeting schedule (MTWR for 50 minutes), with 3 of those days in the regular classroom and 1 day in the instructional lab. The online component of the course is furnished through Hawkes Learning Systems software suite and is required. All tests and quizzes are conducted online and graded automatically. The software tracks the progress of each student and provides ample opportunities for practice of basic skills and certification of mastery. A dedicated tutoring center (the Transitional Math Lab) has been established to help students in need of supplemental instruction. Equipped with 27 workstations and supporting peripherals, the tutoring center is open every weekday from 8 a.m. to 9 p.m. The Transitional Math Lab employs 15 student tutors and 2 full-time lab supervisors.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

As a result of course redesign efforts for mathematics courses, there has been improved student success in MATH 116 and MATH 141. Course grade results for these two courses are presented below.

Student Success Rates in General Education Mathematics Courses

Academic Year	MATH 116			MATH 141		
	Total Number of Students	DFW %	% Success	Total Number of Students	DFW %	% Success
AY 2008	294	51%	49%	319	68%	32%

AY 2009	323	46%	54%	349	55%	45%
AY 2010	291	45%	55%	340	54%	46%

Notes: 1.   DFW represents grades of D (Unsatisfactory), F (Fail), or W (Withdrawn)
2.   % Success = Number of students scoring grade 'C' and above/Total number of students
3.   Total number of students excluding students who audited the course.
Source: OPAA

III. Critical Analysis and Reasoning

A. Institution's definition of competency
Competency in critical analysis and reasoning includes the ability to arrive at reasoned and supportable conclusions using sound research techniques, including inference, analysis and interpretation.

a) Systematically evaluate facts, opinions, assumptions and theories from the discipline.
b) Apply skills in analysis, synthesis and problem solving.
c) Apply logical reasoning in examination and resolution of tasks.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
Course

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The GERAB is piloting a strategy to both assess both writing and critical thinking skills through a summary paper. The summary paper is written based on an article distributed by the instructor. The article relates to Bowie State University's emerging issue of global warming or greening. Students are given the article and a set of three critical thinking questions. The first question asks if the article is related to global warming or greening. The second question asks what are the problems discussed within the article. The last question asks what problems are discussed within the article. The students are then asked to write a summary paper describing the problems and solutions and how they affect their areas of study and the environment.

Two faculty members, one teaching a general education course and the other a writing instructor in the English department, collaboratively created this assessment strategy. Web enhanced tools including an online class hosting environment, an online tutoring instruction program called SmartThinking, web sites, web enhanced videos, and PowerPoint slides were incorporated into instruction.

Students in the pilot were assigned three writing assignments: two summary papers based on two different articles and a research paper that focused on computer ethics. The completion of the first summary paper was used as a baseline.   The instruction of the second summary was the same as the first summary paper. However, for the second summary students submitted their corrected versions to SmartThinking. The instruction for the research paper was augmented with specific web sites, web enhanced videos and PowerPoint slides that contain content on writing and critical analysis.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The results of the study indicate that students did improve their writing skills when given the augmented instruction. However, the rubric on critical thinking is in need of revision and additional instructional strategies need to be incorporated.

IV. Technological Competency

A. Institution's definition of competency
Technological competency includes the ability to use computer technology and appropriate software applications to produce documentation, quantitative data presentations and functional graphical presentations appropriate to various academic and professional settings.

    a) Create a document using word processing software.
    b) Produce a quantitative visual presentation of data using mathematical computation software.
    c) Construct a presentation using presentation software.
    d) Manipulate large amounts of data using a database management system.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
Course
Course Evaluations for General Education Courses

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Direct Assessment – COSC 112 and 113
The Department of Computer Science has four general education courses: COSC 110, COSC 111, COSC 112, and COSC 113. Since 2009, the Department has been working to redesign these general education courses to promote increased student academic success levels. For example, the Department redesigned both COSC 112 and COSC 113 to a direct instruction learning environment. The courses were revised using the "Replacement Model" of The National Center for Academic Transformation (NCAT). To monitor student success on course content, students were given a pre-test, final exam, 3 tests, and weekly quizzes. Weekly mandatory tutoring (standard or structured tutoring) worth at least 10% of the students' grade was given. Tutoring was delivered either face-to-face or online. Students received online tutoring via software available through Angel called Elluminate.

Indirect Measure of Technological Competency
The results from the Instructor Performance and Course Rating questionnaire are shown below.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Direct Assessment – COSC 112 and 113
The assessment of the pre-test revealed that none of the students in COSC 112 had prior knowledge of the course content. The pre-test assessment for COSC 113 showed that a few students had prior subject area knowledge. The assessment of the pre-test answers as compared to the final exam answers revealed that students did comprehend most of the content delivered in the course for both courses. Students who consistently participated in the tutoring performed better than those who did not.

As a consequence of the course redesign efforts, pass rates in COSC 112 and COSC 113 have consistently increased. Pass rates in these two courses for fall semesters over three years are presented. The course redesign efforts are continuing for all Computer Science general education courses.

Student Success Rates in General Education Computer Science Courses

Academic Year	COCS 112			COSC 113		
	Total Number of Students	DFW %	% Success	Total Number of Students	DFW %	% Success
FALL 2008	126	48%	52%	31	48%	52%
FALL 2009	121	42%	58%	31	39%	61%
FALL 2010	72	40%	60%	22	24%	86%

Notes: DFW represents grades of D (Unsatisfactory), F (Fail), or W (Withdrawn)

   % Success = Number of students scoring grade 'C' and above/Total number of students excluding students who audited the course.

Source: OPAA

Information from Elluminate and face-to-face tutoring were also incorporated into the course assessment. Structured questions were embedded into both types of tutoring sessions. Based on the structured quiz assessments, the results revealed that structured tutoring regardless of delivery did assist the students in comprehending the content material. The test results showed that a repeat of instruction after the quiz improved test results as compared to quiz results of that same structured question. The table below gives the percentage of students that correctly answer the structured question per assessment.

COSC 112 and 113 Structured Question Success Rates

Tutoring	Course	Section	Assessment	Structured Question #1	Structured Question #2	Structured Question #3
Elluminate	COSC 112	Evening	Quiz	0%	5%	0%
			Test	63%	33%	5%
			Final Exam	80%	37%	5%
Elluminate	COSC 112	Daytime	Quiz	33%	52%	7%
			Test	66%	88%	71%
			Final	50%	93%	42%
Face to Face	COSC 113	Evening	Quiz	25%	62%	0
			Test	31%	36%	31%
			Final Exam	38%	50%	43%
Elluminate	COSC 113	Daytime	Quiz	5%	5%	0
			Test	24%	33%	5%
			Final Exam	32%	37%	5%

Source: Department of Computer Science

A Direct Instruction teaching approach proved to be beneficial in addressing cognitive learning and information transfer in COSC 112 and COSC 113. Students who consistently participated in the tutoring performed better than those who did not. All weekly quizzes were announced and given after the students had received tutoring. Students who consistently came to class and took the quiz also performed better in the class than those who did not. The weekly quizzes allowed the students to comprehend information in chunks and to focus on that specific content. Administering weekly quizzes prompted the students to study throughout the week. The quiz scores show that some students did comprehend the material after a tutoring session. After the quiz, the content material was discussed and reviewed as part of the class lecture.

At the time of the test the students had already seen the structured question a number of times via tutoring, quiz, and additional class lecture on that particular content. The test was given after three quizzes where one quiz was considered a structured quiz. The test scores confirm an improvement in comprehension of the content as compared to the quiz scores.

Students are tested on the structured question a number of times prior to the final exam. Based on the results of the final exam, the percentage of students passing the structured question varied. All of the final exams scores improved over the quiz scores. Most of the final exam scores demonstrated improvement or remained the same as compared to the test scores.

The results of the Direct Instruction approach to teaching indicate that the students retained information and performed well in the course. According to PeopleSoft data, the number of sections offered in fall 2010 for COSC 113 increased by one. Also, the number of sections offered for the next subsequent programming course after COSC 113, COSC 214, increased by one section. Increasing the number of sections indicates retention of students majoring in computer science or computer technology.

Indirect Measure of Technological Competency

The results from the Instructor Performance and Course Rating questionnaire are shown below. The data provided below indicate that, in fall 2008 and spring 2009, of those students expressing a view, the majority reported that their general education courses improved their computer technology skills.

Student Evaluation Responses to Questions Measuring
General Education Competency – Computer Technology Skills

Course Activities	Always	Often	Sometimes	Seldom	Never
Fall 2008	732	315	226	132	102
	49%	21%	15%	9%	7%
Fall 2009	2,788	888	528	239	218
	60%	19%	11%	5%	5%

Source: OPAA

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

The University's 2010 Academic Plan and the 2011 Middle States Self-Study put Bowie State on a multi-year path to undertake a number of new initiatives for a rigorous assessment of general education program outcomes including the adoption of one national examination and common graded assignments. These measures will help the University ascertain student proficiency in general education courses and take appropriate actions in the form of: realignment and improvements in defining general education competencies and student learning objectives; data collection and analysis; and use of assessment results to make appropriate changes in course structure, pedagogy, and assessment instruments.

Over the past three years, the University undertook a number of initiatives to improve student learning and to build a culture of systemic assessment. Some of these are listed below.

1) In fall 2009, BSU established a faculty-senate standing committee, the University Student Learning Assessment Committee (USLAC). This committee is responsible for planning, guidance, and monitoring of student learning outcomes assessment of all academic programs of BSU.
2) In 2009, the University hired an Assistant Vice President for Institutional Effectiveness, who leads the Office of Planning, Analysis, and Accountability (OPAA).
3) An institution-wide Director of Assessment position who reports directly to the Provost was established in 2010.
4) In 2010, the University established a position of Director of Course Redesign, who also reports directly to the Provost.
5) In 2010, the University formed the Closing the Achievement Gap (CTG) Committee, which is chaired by the Interim Assistant Vice President for Undergraduate Studies.

All the above staff members and committees are contributing to the general education program improvement and assessment that leads to the organizational structure of general education program assessment as presented in Figure 1. The organizational structure of general education program is driven by the University's mission, COMAR requirements, and MSCHE guidelines.
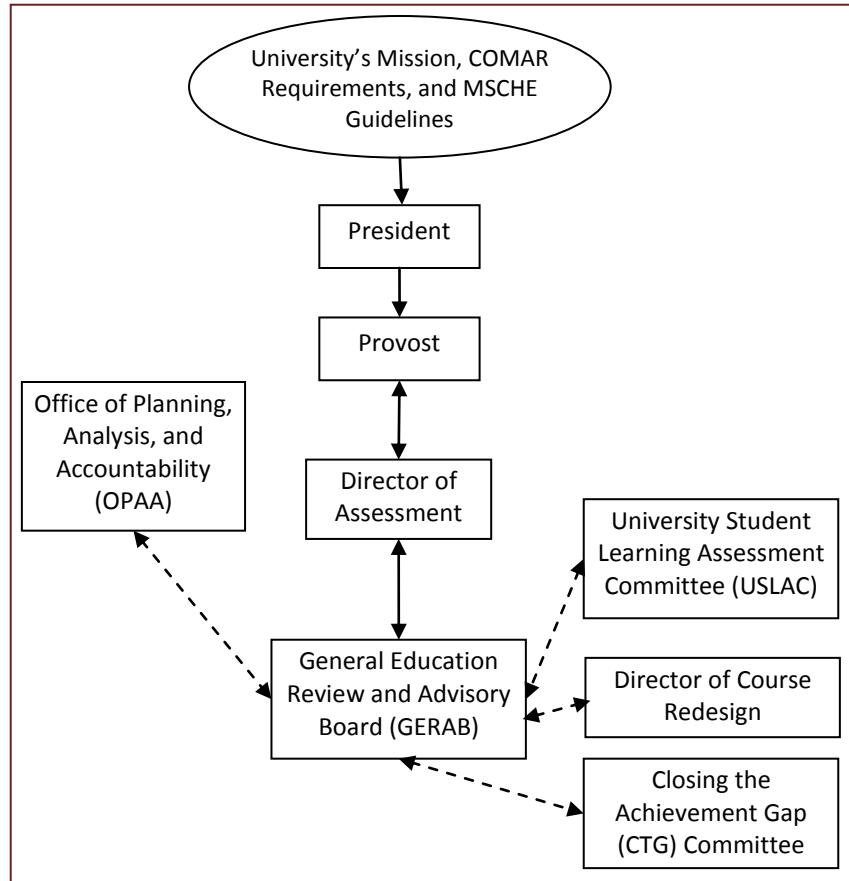
Figure 1. Organizational Structure of General Education Program Assessment System

The culture of assessment is also growing. Assessment related workshops are incorporated into fall and spring faculty institutes. Specialized training sessions for program coordinators were developed to ensure programmatic assessment plan consistency. Workshops focusing on data collection and analysis are planned in the future.

A review of tutoring programs was undertaken in spring 2011 resulting in a number of recommendations encouraging coordination across the various tutoring centers, increased professional development of student tutors, additional hours and stable funding levels. The University Testing Services (UTS), working with the Office of Planning, Analysis and Accountability developed a feedback report to the English Department and its Writing Center on the deficiency areas for students not passing the EPE. UTS is also piloting this year a detailed rubric for the EPE so that students and the Writing Center have better information on student improvement areas and focus Writing Center tutoring services.

BSU has envisioned a multilayered general education program assessment approach. In this approach, GEP assessment is envisioned to be carried out through the national, the institutional, and the course level assessments. The proposed and existing assessment strategies are outlined on the next page in Figure 2.
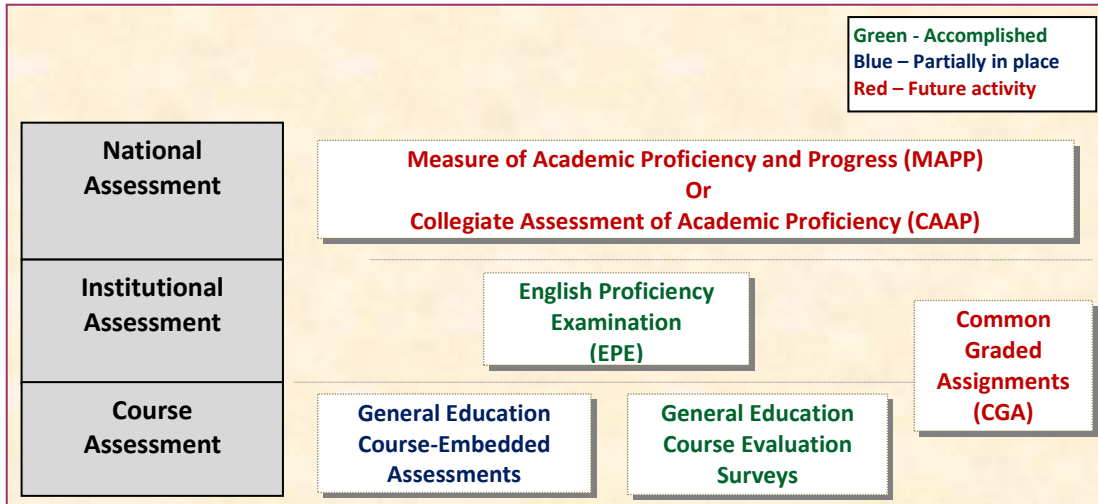
Figure 2. General Education Program Assessment Strategies

This approach will help the University to:

1. assess student proficiency in requisite academic skill areas;
2. address any identified student weaknesses by improving curriculum and instruction;
3. provide an integrated approach to developing major core competencies and GEP competencies;
4. compare the quality of its programs against programs at other institutions nationwide; and
5. measure and document program effectiveness to meet requirements for accreditation and accountability.

Although some of the recommended activities are yet to be approved and adopted, the University aims to implement these or similar activities over the next two years.

Coppin State University

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011
Coppin State University

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

For the purpose of continued institutional renewal, faculty, staff, and administrators at Coppin State University (CSU) have committed to a culture of planning, research, assessment and accountability. In general, the University continues to engage its internal and external constituencies in study, planning, assessment, and development so that it will be well positioned to carry out its very visible urban mission. An on-going effort has been made to measure overall effectiveness towards the achievement of the University's mission and goals. With respect to assessment, Coppin relies on a broad range of means for measuring, evaluating, and assessing educational outcomes. In order to promote planning and assessment, Coppin relies on the Office of Planning and Assessment and the Center for Institutional Assessment to facilitate its strategic planning, research, and assessment efforts. Consequently, Coppin State University is committed to maintaining a working relationship with every student, faculty, and staff member; thereby, assuring every voice is heard.

The goal of the University assessment process is to encourage institutional self-awareness, self-understanding, and genuine self-improvement. In general, CSU institutes an aggressive campaign to assess student learning outcomes through Center for Institutional Assessment, Faculty Assessment Committee, and Assessment Steering Committee. During the academic year 2009-10, faculty attended professional development training offered by The Middle States, and sponsored by the Office of Planning and Assessment. The Director works closely with faculty and has responsibilities for the oversight of the Center for Institutional Assessment. The Center is a centralized University resource designed to inform planning and policy decisions in a wide range of academic and administrative areas. During academic year 2009-2010, the Center continued its focus on training and development, survey development, assessment, educational research around the use of technology in teaching, and strategic planning.

In conjunction with the Office of Planning and Assessment, the Center for Institutional Assessment has responsibilities for coordinating assessment efforts at Coppin. The Office of Planning and Assessment has unique responsibilities in establishing an institutional culture of assessment with the support of University constituencies. The new President, Dr. Avery, since his arrival in 2008, hired a new Vice President for Enrollment Management to improve student retention and increase graduation rates. Additionally, our new university Provost and Vice President for Academic Affairs champions efforts to improve student

retention and graduation rates by improving general education courses. The Provost challenges faculty to improve general education courses from two perspectives. One is to reduce the number of general education courses required by students at CSU from 46 courses to 40 courses by redesigning courses so that they are less repetitive and better capture the desired student learning outcomes. The other is to improve student learning outcomes in general education courses by developing a collective effort at addressing course level performance which includes the development of direct and indirect measures. The Provost initiated and headed a General Education Committee, which included the Associate Vice President for Institutional Effectiveness and Planning, the Director of Assessment, deans, chairs and faculty. This committee uses a faculty-driven process to map general education courses into general education learning outcomes group by group in an ongoing process. This has had a major impact on the engagement of CSU faculty in analyzing assessment to improve student learning outcomes on campus.

The assessment campaign is mission driven and dynamic as the University continues to evolve into a model urban comprehensive liberal arts institution. New assessment activities have been initiated. In 2009 the University participated for the first time in the National Collegiate Learning Assessment (CLA), which measures the impact of institutional contributions to improvement of critical analysis and reasoning, and oral and written communication. The university has moved to utilize another survey, the ETS Proficiency Profile Test, which tests the same higher order skills as CLA, but also includes quantitative reasoning skills. This instrument was used in spring 2011 for senior students, and plans are underway to use it with freshmen in the fall. In fall 2010 we implemented the Cooperative Institutional Research Program (CIRP) Freshman Survey for new freshmen to give us insight into student high school academic backgrounds and attitudes. CSU has been using the National Survey of Student Engagement (NSSE) for many years so we can use this as a measure of change for longitudinal studies. We participated in the Higher Education Research Institute (HERI) Faculty Survey for the first time in the 2010-2011 school year. We plan to use the results to improve the impact of pedagogy on the student experience, to identify professional development needs for faculty, to elucidate the faculty perspective on planning and policy analysis, and to learn more about faculty characteristics.

The CSU assessment process is inclusive of the following data components: comprehensive survey research, student perception of teaching quality, skill acquisition, and learning outcomes, technical infrastructure assessment, specialized studies, program level data, and institutional learning.

CSU has invested in technical infrastructure to develop analytical systems to provide indirect measures for the purpose of assessment. Due to the technological focus at CSU, infrastructure has been developed to warehouse institutional effectiveness indicators. The institution currently uses PeopleSoft and has developed specialized Assessment modules using I-Strategy for purposes of warehousing critical information. This data are then used in reporting to assess quality improvement by unit. Using the unit representatives, data are interpreted into useful information and then used in a continuous improvement effort.

Departments designed performance assessment systems that permit the unit to review the performance of students, faculty, and programs in a systemic manner. This performance assessment system prescribes a data collection process that can be used to make informed decisions concerning the improvement of services and programs. Departments have identified categories of goals, which have been aligned with the conceptual frameworks and strategic plan.

In summary, the University has adopted an institutional assessment model that incorporates assessing student learning outcomes at the institution, program, and course levels. Both the institutional and program levels are informed by the strategic plan which provides a useful blueprint for the future direction of Coppin State University.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

Written and Oral Communication

- Writing clear expository and persuasive prose
- Use of valid research based arguments to support written or oral positions
- Expression of ideas in language appropriate to the topic and audience
- Writing and speaking proficiently for various audiences

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Written and oral communication is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The Office of Institutional Assessment compiles, analyzes and produces data to be discussed at the Assessment Committee level. These data will be transmitted to the deans, department chairs, and faculty.

The General Education Committee charges faculty to produce data in every discipline that includes competency in written and oral communication. At the departmental and program levels, the General Education Committee, which is a faculty-driven process, uses course lists to map general education learning outcomes for courses and programs. The department compiles results from each course to the program level. Once the data from the faculty has been finalized, we will collect data from student work, such as quizzes, exams, papers, and any other evidence from student work that can be used to provide evidence of this competency outcome. In the final stage we create coherence among these general education courses that prepare students up to the program level, and the program will build on these competencies in the courses. This process might help design courses which would more efficiently produce these learning outcomes. Also, it helps in reducing the number of repetitive courses.

Individual professors are responsible for assessing competencies in their own courses, by using rubrics to score student work, including tests, presentations, and projects.

The above processes are used to assess all competencies reported here.

At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. CLA results provide direct measurements of competency in written communication, while NSSE and CIRP provide indirect measurements.

The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, scores and pass rates on licensure and certification exams, such as Praxis and NCLEX, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures. At both the course and program level, aggregate student success rates serve as direct measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

According to the 2009 results from NSSE, Coppin students reported that their experience at Coppin contributed to their knowledge, skills, and personal development in writing clearly and effectively and in speaking clearly and effectively with averages above their peers for these measures at statistically significant levels. See items 11.c. and 11.d. from Table 1.

The 2009-10 CLA showed no value added gain by attending Coppin for written communication. See Table 2.

The Fall 2010 CIRP Freshman Survey shows that our freshmen are comparable with their peers in the preparation they received in high school English before attending college. See Table 3.

According to the General Education Requirements Survey in Table 4, all of the general education courses provide an introduction to written and oral communication. Of these courses, 96 percent develop this competency through a series of performance activities, and 26 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

Success rates in English composition have fluctuated in a range between 46 and 55 percent between fall 2004 and spring 2009. These success rates are below those of other categories in general education, as shown in Table 5.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

Analytical Reasoning
- Thinking critically and analytically to respond to various issues and problems/concerns
- Applying applications of classical and/or current theories and principles from specific content areas;
- Using critical judgments from a combination of evidences and assumptions to reach viable conclusions
- Collecting, analyzing, and interpreting data via computational literacy and scientific reasoning

Scientific and quantitative reasoning are included in analytical reasoning as the last bullet, according to our institutional definition of this competency.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Scientific and quantitative reasoning is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. CLA results provide direct measurements of competency in scientific and quantitative reasoning, while NSSE and CIRP provide indirect measurements.

The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, scores and pass rates on licensure and certification exams, such as Praxis and NCLEX, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures. At both the course and program level, aggregate student success rates serve as direct measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

According to the 2009 results from NSSE, Coppin seniors reported that their experience at Coppin contributed to their knowledge, skills, and personal development in analyzing quantitative problems and in solving complex real-world problems with averages above their peers for these measures at statistically significant levels. Freshmen were comparable to their peers for these measures. See items 11.f. and 11.m. from Table 1.

On the fall 2010 CIRP Freshman Survey our students are above their peers in the preparation they received in high school mathematics before attending college, but below their peers in preparation in the physical and biological sciences. See Table 3.

According to the General Education Requirements Survey in Table 4, 98 percent of the general education courses provide an introduction to analytical reasoning. Of these courses, 87 percent develop this competency through a series of performance activities, and 22 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

Success rates in mathematics have increased from 69 percent to 78 percent between fall 2004 and spring 2009. Success rates in the natural sciences have increased from 77 percent to 84 percent between fall 2004 and spring 2009. These results are shown in Table 5.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Analytical Reasoning
- Thinking critically and analytically to respond to various issues and problems/concerns
- Applying applications of classical and/or current theories and principles from specific content areas;

- Using critical judgments from a combination of evidences and assumptions to reach viable conclusions
- Collecting, analyzing, and interpreting data via computational literacy and scientific reasoning

Critical analysis and reasoning are included under analytical reasoning in our institutional definition of this competency under the first three bullets.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Critical analysis and reasoning is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. CLA results provide direct measurements of competency in critical analysis and reasoning, while NSSE provides indirect measurements.

The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, scores and pass rates on licensure and certification exams, such as Praxis and NCLEX, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures. At both the course and program level, aggregate student success rates serve as direct measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

According to the 2009 results from NSSE, Coppin students reported that their experience at Coppin contributed to their knowledge, skills, and personal development in thinking critically and analytically with averages comparable to their peers. See item 11.e. from Table 1.

The 2009-10 CLA showed no value added gain by attending Coppin for critical analysis and reasoning. See Table 2.

According to the General Education Requirements Survey in Table 4, 98 percent of the general education courses provide an introduction to analytical reasoning. Of these courses, 87 percent develop this competency through a series of performance activities, and 22 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

IV. Technological Competency

A. Institution's definition of competency

Information Literacy
- Proficiency in the use of technology and its appropriate applicability

- Use of multiple information sources such as online databases, videotapes, government documents, and journals in conducting research and/or in problem solving (e.g., electronic and print periodicals, chapters in books, government documents, archival material, and microfilm)

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Technological competency is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. NSSE and CIRP provide indirect measurements of technological competency.

The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures. At both the course and program level, aggregate student success rates serve as direct measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

According to the 2009 results from NSSE, Coppin students reported that their experience at Coppin contributed to their knowledge, skills, and personal development in using computer and information technology with averages above their peers for this measure at statistically significant levels. This result for seniors is highly statistically significant, while it is slightly significant for freshmen. This is likely due to the impact of our investment in technology infrastructure on the Coppin campus. See item 11.g. from Table 1.

The fall 2010 CIRP Freshman Survey, shows that our students are less prepared than their peers in computer science before attending college. See Table 3.

According to the General Education Requirements Survey in Table 4, 83 percent of the general education courses provide an introduction to information literacy. Of these courses, 76 percent develop this competency through a series of performance activities, and 22 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

According to the spring 2010 CSU Student Computer Access Survey, 90 percent of CSU students own a personal computer, 86 percent have internet access in their residence. Eighty-four percent reported that their own computers were adequate for their course work needs, and 77 percent reported that Coppin had an adequate number of computers to fulfill their course work needs. This demonstrates that nearly all CSU students have adequate access to the technology necessary to meet technology competency.

It can be seen from these data that although CSU students enter college on average with less preparation than their peers, their technology competency is positively impacted by course assignments and computer infrastructure available here.

Additional Competencies

Because institutional mission and goals differ, institutions may wish to report on assessment activities beyond the four major competency areas. However, this is not mandatory; institutions may report on up to three additional competencies.

V. Social and Self Awareness

A. Institution's definition of competency

   Social and Self Awareness
   - Understanding of self and responsibilities as an engaged citizen and leader of service in the community
   - Awareness/understanding of economic, political, and organizational systems, and
   - Appreciation of diverse cultural heritages and global societies.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

   Social and self awareness is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

   The NSSE survey gives information according to student majors, so it is used to assess this competency at both institutional and program levels. The General Education Committee uses data from professors about course content and student performance to assess this on the course level.

   At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. NSSE and CIRP provide indirect measurements of social and self awareness.

   The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

   According to the 2009 results from NSSE, Coppin students reported that their experience at Coppin contributed to their knowledge, skills, and personal development in understanding yourself and developing a personal code of values and ethics with averages above their peers for these measures at statistically significant levels. For developing a personal code of values and

ethics, this result was significantly higher for seniors and comparable to their peers for freshmen. See items 11.k. and 11.n. from Table 1.

According to the 2010 CIRP Freshman Survey, 27.3 percent of CSU freshmen reported having a higher pluralistic orientation than their peers as compared to 24.1 percent and 23.7 percent for the comparison groups. About the same percentage of CSU students, 43.3 percent reported having an average pluralistic orientation as the comparison groups who reported 41.9 percent and 43.3 percent. Only 29.4% of CSU students had a low pluralistic orientation as compared with 34.0 percent and 33.0 percent in the comparison groups. In order to determine this, students were asked to rate themselves on the following traits as compared with an average person of the same age: ability to work cooperatively with diverse people, tolerance of others with different beliefs, openness to having their own views challenged, ability to discuss and negotiate controversial issues, and the ability to see the world from someone else's perspective.

According to the General Education Requirements Survey in Table 4, 74 percent of the general education courses provide an introduction to social and self awareness. Of these courses, 78 percent develop this competency through a series of performance activities, and 19 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

VI. Reflective Practice

A. Institution's definition of competency

Reflective Practice
- Personal responsibility for intellectual growth through reflective practice in order to engage in continuous personal and academic development
- Use of professional organizations to develop a comprehensive understanding of the expectations of the chosen profession; and
- Development of professional competence through continuous learning experiences.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Reflective practice is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The NSSE survey gives information according to student majors, so it is used to assess this competency at both institutional and program levels.

At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. NSSE provides an indirect measurement of reflective practice.

The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

According to the 2009 results from NSSE, Coppin students reported that their experience at Coppin contributed to their knowledge, skills, and personal development in acquiring job or work-related knowledge and skills with averages comparable to their peers for these measures. See item 11.b. from Table 1.

According to the General Education Requirements Survey in Table 4, 94 percent of the general education courses provide an introduction to reflective practice. Of these courses, 63 percent develop this competency through a series of performance activities, and 15 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

VII. Responsive Citizenship

A. Institution's definition of competency

Responsive Citizenship
- Participation with broader communities
- Understanding of society and commitment to political and civic engagement;
- Understand and respect diversity of people, ideas, communities and cultures; and
- Appreciation and awareness of environmental issues and initiatives.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Responsive citizenship is assessed at all levels from institutional to departmental to program and course level.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The NSSE survey gives information according to student majors, so it is used to assess this competency at both institutional and program levels.

At the institutional level, the Assessment Committee comprised of administrators, deans, department chairs, and faculty, utilizes national survey data. NSSE and CIRP provide indirect measurements of responsive citizenship.

The rubric used to map the general education courses is a direct measure of general education learning outcomes. At the program level, "capstone" experiences, such as presentation of student scientific research, portfolios, and other written work serve as direct measures.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

According to the 2009 results from NSSE, Coppin students reported that their experience at Coppin contributed to their knowledge, skills, and personal development in items related to responsive citizenship. For voting in local, state, or national elections, the average was above their peers for this measure at highly statistically significant levels. For understanding people of other racial and ethnic backgrounds the average was above their peers at statistically significant levels. For contributing to the welfare of the community, the levels were above average for seniors, and comparable to their peers for freshmen. See items 11.i. and 11.l. and 11.o. from Table 1.

The results of this survey show that our students are highly engaged in the political process and in their communities. We highly cherish this result and plan to build on it in the future.

According to the 2010 CIRP Freshman Survey, 31.1 percent of CSU freshmen reported having a higher social agency than their peers as compared to 26.6 percent and 22.5 percent for the comparison groups. About the same percentage of CSU students, 43.0 percent reported having an average social agency as the comparison groups who reported 43.1 percent and 43.7 percent. Only 25.9 percent of CSU students had a low social agency as compared with 30.3 percent and 33.7 percent in the comparison groups. In order to determine this, students were asked to indicate the importance to them personally of each of the following: participating in a community action program, helping to promote racial understanding, becoming a community leader, influencing social values, helping others who are in difficulty, and keeping up to date with political affairs.

According to the General Education Requirements Survey in Table 4, 76 percent of the general education courses provide an introduction to responsive citizenship. Of these courses, 67 percent develop this competency through a series of performance activities, and 15 percent achieved target and proficiency in the competency for the course. These data reflect reports by faculty members teaching these courses.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

The University Planning Council (UPC), consisting of vice presidents, deans, and a selection of department chairs and faculty, is charged by the president to oversee all aspects of planning at CSU. Coppin State University has many committees to review curriculum structure, content, and outcomes. The faculty driven Curriculum Committee has to approve all changes to courses and justify these changes on the basis of enhancing teaching and learning. The General Education Committee, charged by the provost and co-chaired by two faculty members, includes the Associate Vice President for Assessment and Planning, the Director of Assessment, deans, chairs and faculty, is charged to map the general education courses into general education student learning outcomes. The Assessment Committee is charged by the president to centralize the process of assessment on campus and to provide and analyze data for deans, department chairs, and faculty.

In 2009 the University participated for the first time in the National Collegiate Learning Assessment (CLA), which measures the impact of institutional contributions to improvement of critical analysis and reasoning, and oral and written communication. This instrument was not suited for our students for various reasons. The seniors in general were not willing to devote 90 minutes to this measure, so we believe that it did not provide an accurate measurement for them. The freshmen were more willing to devote their full efforts, but analysis of the results depends on both classes giving accurate measures. We are now in the process of switching to the ETS Proficiency Profile Test, which we believe will be more

valid for our students. The methods used for data collection, analysis and reporting continue to improve, capitalizing on the institution's information technology infrastructure. These activities have enabled the University to improve academic programs through timely and complete student learning outcomes assessment at the institutional, program and course-levels.

CSU participated in the National Survey of Student Engagement NSSE in 2008 and 2009, as shown in Table 1. CSU students showed improvement for Analyzing quantitative problems compared to 2006. In 2006 freshmen had an average of 2.92, which increased to 3.06 in 2009. Seniors improved slightly, from 3.26 to 3.27 for this measure. In 2009, CSU students outperformed their peers in each category related to written and oral communication, scientific and quantitative reasoning, and critical analysis and reasoning. The higher averages for CSU freshmen and seniors compared to the averages for their NSSE peers were statistically significant for both Writing and Speaking Clearly and Effectively, and for seniors in Analyzing Quantitative Problems and Using Computing and Information Technology.

Currently, we are working on merging our survey data, such as NSSE and CIRP into our enrollment file data to gain more information about our students. We also disseminated these institutional data for NSSE at the program level and report it as part of accreditation for certain majors, such as education, nursing, and social work. CIRP Freshman Survey was conducted for the first time last year. We gained useful information about our students' high school preparation and their financial and social characteristics. We are in the planning phase for implementing the CIRP First Year Student Survey, which will provide us information about characteristics of students who have spent one year at the university.

CSU is moving forward with efforts to support faculty in improving student performance at both the program and course level. We disaggregated the NSSE survey data on the institutional level to the departmental level in order to provide data to departments, such as education, nursing, and social work for accreditation purposes. On the course level, we also help faculty with course assessment by providing individual faculty with the pre and post-tests for their courses in social work to measure the value-added, or learning gain in that course. We plan to expand this effort to include courses from other departments.

CSU utilized the HERI faculty survey for the first time during the 2010-2011 school year. Participating in the HERI survey will give us a perspective on the input of the faculty into the teaching and learning process, as other surveys currently in use focus on student aspects.

Success rates for CSU students in Arts and Humanities, Social and Behavioral, Mathematics and Natural Science, as shown in Table 5, were all above 70 percent in spring 2009. In comparison to spring 2006, the rates are similar or higher in all categories for spring 2009, except Interdisciplinary & Emerging Issues, which has declined. Although English Composition has improved slightly from 46 percent in spring 2006 to 49 percent in spring 2009, this area is still a concern. The mathematics faculty redesigned their courses by creating developmental math (DVMT) with more lab and assessment measures. This coincides with in an increase in the success rate for mathematics from 75 percent in spring 2006 to 78 percent in spring of 2009.

The university initiated a deanship for first year retention in spring 2011. These efforts should be helpful to the success and retention of our first year students.

CSU has used many part-time faculty. In an effort to improve our success and retention, we have moved to the hiring of full-time faculty, especially in the natural sciences. The addition of full-time faculty will have a big impact on course offerings and enrollment in the natural sciences. This could help our objective of improving our STEM program.

We value our advancement in technology. Access to wireless internet has been available on campus, and many classrooms have been converted into smart classrooms, equipped with technology to allow faculty access online resources in the classroom to enhance teaching. This enhancement in technology has positively impacted our students in improving their technology competency. As the data shows, CSU

students are at a disadvantage compared to their peers in preparation in information technology, but have surpassed their peers in gaining knowledge in these technologies by time they reach their senior year.

In specialized areas, the University has many successes. The School of Education was reaccredited by the National Council for the Accreditation of Teacher Education programs and the Maryland State Department of Education in spring 2006 while the Department of Social Work was accredited in 2008, and the Health Information Management Program (HIM) in the School of Nursing was accredited in 2009. Importantly, the institution had its accreditation reaffirmed by the Middle States Commission on Higher Education in 2008. The University-wide Academic Program Review Committee (APRC) was re-activated in 2001 to facilitate internal academic program reviews. Its charge was to review all academic programs at the institution during a seven-year cycle. The Committee comprised of faculty, chairpersons, and administrative representatives of the University at large, created a review process that includes the administration of a programmatic self-study. The instruments used to evaluate the self-study insure compliance with Middle States Commission on Higher Education, National Council for the Accreditation of Teacher Education, National League for Nursing, Council on Social Work Education, and Council on Rehabilitation Education. In additionally the APRC serves to provide ongoing assessment of all programs. This process is used for those programs where specialized accrediting agencies are applicable, as well as those where no such specialized accreditation is in effect to date, i.e. History, Geography, and Global Studies, Social Sciences, Criminal Justice. The APRC has set a seven-year schedule to review all academic programs internally as part of its process to achieve continuous quality improvement.

The General Education Committee has been working aggressively to improve general education courses. We have established six general education learning outcomes, written and oral communication, analytical reasoning, information literacy, social and self awareness, reflective practitioner, and responsive citizenship. We have identified which general education courses address each of these measures. The next step will be to create a rubric for each competency including scores for student work. This will give us a better understanding of the levels of implementing this competency. This will guide us in redesigning course content and pedagogy to better reflect development of skills in the six learning goals in students.

Systematic program review at Coppin State University has had an impact on creating new programs, such as interdisciplinary majors, urban studies, and a bachelor's degree in geography. These programs impact student success, retention, and graduation rates.

Coppin State University has a strategic plan for 2009-2014 that has currently been revised and updated to align with the System of Maryland's new strategic plan. The University System of Maryland (USM) has adopted a new strategic plan recently. CSU is now in the process of modifying our strategic plan to align with the USM plan. The task force is looking into CSU goals and has disseminated them to each entity of the university, such as schools and administrative units. The next step is to allocate financial resources for implementation of these goals. This is the first time that CSU has linked financial resources into the strategic plan. This will provide for more efficient use of our resources. Progress will be monitored each year, so that the plan can be adjusted as necessary to further improvements at CSU.

For additional information on the assessment of student learning at Coppin State University, please contact Mr. Aladdin Fouad, Director, Center for Institutional Assessment at afouad@coppin.edu or 410-951-3493.

Frostburg State University

> **Part One: Summary of Assessment Activities**
> Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Frostburg State University
Student Learning Outcomes Assessment Report (SLOAR) 2011

Institutional Assessment

Frostburg State University's 2006 draft Institutional Assessment Plan (IAP) was designed to support and facilitate the University's strategic plan at the time. With the development of a new strategic plan and planning process in 2011, the University has set aside major aspects of the draft IAP. Presently, assessment work at the University is supported by the Office of Planning, Assessment, and Institutional Research and takes two important directions. The first focuses on the University's new mission statement, strategic goals and priorities and assessment at the institutional level. The second direction is at the divisional level and involves the assessment of academic and student programming, as well as the assessment of student learning outcomes. At both levels, significant and careful efforts have been made to integrate assessment efforts with the strategic planning work of the institution.

Assessment of Student Learning

One of the major priorities of the University and its colleges has been to strengthen assessment of student learning. Each of the colleges has moved to establish, strengthen, and expand its efforts in this area. An overview of the student learning assessment in each of the University's colleges is presented below, followed by a discussion of the assessment of student learning in the General Education Program.

The College of Education

In the College of Education's (COE) 2007 National Council for Accreditation of Teacher Education (NCATE) reaccreditation visit, the visiting team indicated that there were "no areas for improvement" in relation to the college's assessment system.[1] The COE system includes methods for identification and use of assessment results as a means of informing and improving educational practices. This is accomplished by having a group that annually reviews and summarizes the assessment data. This information is then used by the College of Education to identify areas for improvement.

The College of Business

The College of Business (COB) is accredited by the Association to Advance Collegiate Schools of Business International (AACSB International) and has developed and maintains a comprehensive assessment program that focuses on the teaching and learning activities that reflect its mission and the Assurance of Learning Standard.[2] The fundamental components of the assessment program are the learning goals for the bachelor's and MBA degree programs. The goals, which reflect institutional learning goals, were developed with faculty, student, administrator, advisory boards (executives, students), and other stakeholder input. Assessment activities have been ongoing for several years commencing in 2001 at which time curriculum review across all COB programs and courses took place. Learning goals and objectives were established and matrices were prepared that demonstrated how instructional activities of various courses supported the learning goals. An Assurance of Learning Committee (AOLC) was established in 2003. In 2006, an Assurance of Learning (AOL) plan was prepared by the AOLC and accepted by the faculty. An assessment coordinator position was also created at that time to support the work of the

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[1] NCATE Board of Examiners Report, April 21, 2007
[2] Fifth Year Maintenance of Accreditation Report for AACSB International, Academic Years 2006-2010, July 20, 2010

AOLC.

Since its establishment in 2003, the AOLC, using both direct and indirect assessment methods, evaluates student achievement each semester relative to established COB learning goals. Direct assessment tools include tests and a variety of course-embedded tasks and activities, with much of the embedded assessment work accomplished within capstone courses in the bachelor's degree program and in the MBA program. The end goal of all of these efforts is to promote continuous improvement and student learning. To ensure that this occurs, multiple efforts have been made to use data mined from AOL processes to improve upon current learning.

The College of Liberal Arts and Sciences

Academic programs within the College of Liberal Arts and Sciences (CLAS) have made significant progress on student learning assessment. By March 1, 2011, all of the 34 continuing academic programs achieved a "green" assessment rating, having established effective student learning assessment plans (see below).

The CLAS Assessment Council was formed in fall 2007 to improve student learning assessment within the college, as recommended in the 2006 Middle States Evaluation Report. The council's role is to provide CLAS programs with guidance and feedback on establishing and implementing effective plans that link program objectives and learning goals with the University's institutional learning goals. The council collected assessment plans, reviewed them using a standardized checklist, and met with program representatives to provide feedback. Programs were ranked according to the following categories:

- Green rating – The program has developed a student learning assessment plan that addresses all assessment categories.
- Yellow rating – The program has made progress in establishing an assessment plan and has addressed most assessment categories.
- Red rating – The program's assessment plan needs improvement, or no plan is submitted.

Through partnership and collaboration with CLAS program representatives, the percentage of green-rated programs has increased from 29 percent in AY 2008-2009 to 56 percent in AY 2009-2010 to 100 percent in AY 2010-2011. The council has also begun collecting data and updates from programs that have already met this goal to ensure that assessment data is being collected, reviewed, and used to enhance student learning outcomes.

Assessment of the General Education Program

In August 2009, the assistant dean of CLAS was charged with devising and implementing assessment strategies for the General Education Program/Core Skills courses. (Rhodes, 2010)

Direct assessments of student learning include written work, performances, presentations, portfolios, exams, etc. Scores on locally designed multiple choice and/or essay tests, such as final examinations in key courses, comprehensive exams, or pass rates on appropriate licensure/certification exams, may be appropriate. While it is important to respect the fluidity of assessment mechanisms and methodologies as they are applied to courses across a wide spectrum of disciplines, assessing the University's GEP/Core Skills courses must demonstrate their linkage to institutional expectations.

Part Two: Four Major Competency Areas
For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

    A. Institution's definition of competency:

a. **Written Communication:** Communication through strong, organized thesis formulation and support; clear, concise, coherent language; and awareness of rhetorical situation (audience and purpose).
   i. To be considered proficient in basic writing at FSU, students must demonstrate control over the following aspects of writing.
      1. *Thesis:* Students should be able to formulate a thesis statement based in part on analysis and evaluation of appropriate source material.
      2. *Support:* Students should be able to support a thesis by synthesizing their own ideas (reasons, evidence, and/or arguments) with the ideas of others.
      3. *Organization:* Students should be able to organize the support logically according to the demands of content.
      4. *Language:* Students should be able to express their ideas in writing that is readable (clear, concise, and coherent) and correct (relatively free of distracting errors of grammar, punctuation, spelling, capitalization, and usage).
      5. *Rhetorical Knowledge <u>(Audience and Purpose)</u>:* Student should demonstrate an awareness of the rhetorical situation—understanding how audience and purpose shape all of the above.

b. **Oral Communication:** The process of people using verbal and nonverbal messages to generate meanings within and across various contexts, cultures, channels, and media. It promotes the effective and ethical practice of human communication.

B. Level(s) at which the competency is assessed (e.g., department, program, course)
   a. **Written Communication:** ENGL 101 and writing intensive courses.
   b. **Oral Communication:** Speaking intensive courses.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
   a. **Written Communication:**
      i. Assessment will initially be administered through Freshman Composition (English 101).
      ii. Use of a common rubric for embedded (graded) assessments of basic skills.
         See Rubric in Appendix.

   b. **Oral Communication:** Speaking intensive courses.
      i. Assessment will initially be administered in selected courses using oral presentations as a substantive portion of grading criteria.
      ii. Administered through Speaking-Intensive courses using a rubric.
         See Rubric in Appendix.

D. Describe the results of the assessment work related to this competency. *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

Written Communication:

ENGL 330.001: Business Writing

This section of Business Writing had an enrollment of 21. This section's curriculum and methodology are typical of all sections of Business Writing, then 125 students received this instruction during spring 2010. ENGL 330 is one of several options available to students for completion of their Basic Requirement in Advanced Composition in the GEP. Options include ENGL 300, 308, 309, 310, 312, 330, 338, and 339; a total of 494 students enrolled in sections of these courses.

The sponsoring department's reviewer scored the course as "Above Standards" in each of the five dimensions above.

Evaluation

ENGL 330 builds upon skill sets in writing and information literacy introduced in ENGL 101. The evidence demonstrates that the instructor models professional methodologies in the provision of a template and samples of exemplary student work that are posted in Blackboard. Student products from spring 2010 evidence that the course provides instruction allowing students to reach a level of proficiency in critical thinking, preparing an effective oral presentation, and the conceptualization and writing of a professional document with formulating a thesis with proper research, organization, rhetoric, formatting, and application of technology. Completed rubrics with feedback to students were attached to three student feasibility studies. Outlines for additional assignments were included along with a rubric for the assessment of the oral presentation. Reviewer scored the course as "Above Standards".

MGMT 356.002: Leadership and Human Behavior

There were three sections of this course offered during spring 2010. Each was taught by a different instructor. The three sections each had 30 students. This course demonstrates an upper-level disciplinary approach where emphasis is placed on applications of leadership qualities and the human skills (e.g. communication) required for managerial success and organizational effectiveness. Students need to demonstrate effective written communication skills, oral presentation skills, and the utilization of current communication technology for presentations. The sponsoring department's reviewer scored the course as "Above Standards" in the first, second, and fourth dimensions above and as "Meets Standards" in the third and fifth dimensions.

Evaluation

The syllabus clearly outlines the goals and objectives for each skill set or content area addressed within the curriculum. These include: oral communication, written communication, critical thinking, teamwork and leadership, library usage, technology usage, ethics content, global/international business content, political/social/legal content, applied business practice, and diversity content. Rubrics were provided for peer assessment. Examples of papers demonstrated a discipline appropriate understanding of thesis, support, organization, language, and rhetorical knowledge/purpose. Students needed to demonstrate the analysis and evaluation of appropriate source material and synthesize this source material with their own ideas in order to support their thesis. Additionally, instructor feedback, peer evaluations, and leader self-evaluations were extensive in quality and quantity. Reviewer scored the course as "Meets Standards".

Oral Communication:

CMST 102.001: Introduction to Human Communication

There were six sections of CMST 102 during spring 2010. Total enrollment was 139. The assessed section had an enrollment of 25. The sponsoring department's reviewer scored the course as "Above Standards" for dimensions 1, 2, and 4 and "Meets Standards" for dimensions 3 and 5.

Evaluation

The common syllabus contains a "List of Course Topics and Objectives" that focuses on students' development of Core Skills in relation to communication, perception, language, nonverbal communication, listening, supportive/defensive communication, developing oral messages, organizing oral messages, and small group development and decision making. This document and an addendum outlining the graded oral exercises explicitly link course objectives and activities to the expectations for an oral communication course. Additional documents include rubrics for Informative and Persuasive Speech assignments (focusing on substance, structure, and presentation), course lecture notes that evidence instruction on the basic skills, completed rubrics with instructor feedback, graded Listening Exercises 1 and 2, and exams. Documents are consistent in supporting the development of students' oral communication skills. Reviewer scored the course as "Above Standards".

SOWK 379.001: Foundations for Social Work Practice

There was one section of this course taught during spring 2010; enrollment was 14. This course is included as an example of upper level discipline specific instruction in Core Skills. The sponsoring department's reviewer scored the course as "Above Standards" for all dimensions except for the third which received a score of "Meets Standards

Evaluation

While the reviewer emphasizes SOLER as the disciplinary model for the development of students' oral communication skills, it is clear that instruction and course activities allow students to acquire a level of proficiency in carefully designing a strategy of inquiry and vocabulary appropriate for the audience/client, communicating objectives in a clear and effective manner, using disciplinary vocabulary and content, organizing interviews in an organizational pattern appropriate to the professional purpose, and functioning extemporaneously. Homework, in-class assignments, a videotaped assignment with written evaluation, and a self-analysis are well designed to further students' proficiency in the skills outlined, most notably listening, observing, exploratory questioning skills and reflective responding. In the video, the interviewer displayed attending skills, eye contact, open body posture, and a relaxed state as well as open ended questioning, probing, and a strengths perspective. A professional "duty to warn statement" was made at the beginning. As stated, the written discussion was a constructive self-assessment of the interview with focus on self-awareness and ethical issues that may have surfaced in the video. Case role playing exercises, an exercise on "how to respond to clients", and a handout on "the professional functions self-efficacy scale" further outlined disciplinary expectations for oral communication. Instructor feedback was appropriate. Reviewer scored the course as "Above Standards".

II. Scientific and Quantitative Reasoning

   A. Institution's definition of competency
      a. **Scientific Reasoning:** The ability logically solve problems through the application of the scientific method which includes: problem identification/observation; inductive and deductive reasoning; hypothesis generation; experimentation; interpretation of results; making logical conclusions and critical evaluations.
      b. **Quantitative Reasoning:** The ability to apply basic concepts and understand issues relating to number or quantity.

   B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
      a. **Scientific Reasoning:** IDIS 160, other natural science courses in the future

      b.   **Quantitative Reasoning:** MATH 209, MATH 102, MATH 104

  C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
      a. **Scientific Reasoning:**
           i. The site for initial assessments will be "Science, Technology, and Society" (IDIS 160). A common grading rubric will be applied. See Rubric in Appendix.

      b.   **Quantitative Reasoning:** Common rubric for MATH 209, MATH 102, MATH 104. See Rubric in Appendix.

  D. Describe the results of the assessment work related to this competency. *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

Scientific Reasoning:

Three courses from Modes of Inquiry: C were assessed.

GEOG 103.012/.013: Physical Geography

There were seven sections of this course with a total enrollment of 226; this section had 28 students. The sponsoring department's reviewer scored the course as "Above Standards" in regard to the six dimensions listed above.

Evaluation

The course portfolio contained many documents that linked course objectives with practical applications in the classroom and lab. Labs begin with a warm-up to introduce the scientific method, and then the lab exercise forces students to form a hypothesis, apply skills, collect raw data, analyze data, accept or reject the hypothesis, report on conclusions, and their application to contemporary issues. Instructor feedback on reports further guide students through the scientific method. Reviewer scored the course as "Above Standards".

BIOL 149.009: General Biology I

There were three sections of BIOL 149 with a total enrollment of 192 students. This section had an enrollment of 71. The sponsoring department's reviewer scored the course as "Above Standards" in the six dimensions.

Evaluation

Course documents include the syllabus, laboratory schedule (listing practical exams and lab reports) evidencing the diversity of the pedagogy, an online assignment suggesting the introduction of varying technological modalities, and completed exams. A "Lab Report Guidelines" reiterates students' need to demonstrate their understanding of the scientific method in the form of a paper with an emphasis on skills related to information literacy. In regard to results, students are told to summarize findings and use quantitative data within the text to explain results, thereby employing integration and synthesis. Proficiency in written communication is emphasized. Reviewer scored the course as "Meets Standards".

IDIS 160.001: Science of Food

This was the only section of IDIS 160 offered during spring 2010; enrollment was 25. The sponsoring department's reviewer scored the course as "Above Standards" in regard to the design of the curriculum; the reviewer scored dimensions 2 to 6 as "Meets Standards".

Evaluation

Extensive documentation was provided. Included were handouts on the Scientific Method, quizzes to assess student learning of methodologies and course content, experiential learning outcomes, hands-on activities, paper guidelines with graded student work, and linkages to GEP Learning Goals. While the reviewer seemed frustrated with the limited space and resources available, the course as written and as implemented matches and/or exceeds expectations in each dimension. Reviewer scored the course as "Above Standards".

Quantitative Reasoning:

Two courses were assessed in this category.

MATH 102.001/.002/.004: College Algebra
There were five sections of Math 102 with a total enrollment of 165 students; the three specified sections were taught by the same instructor and had an enrollment of 107. The sponsoring department's reviewer scored the course as "Meets Standards" for four of the five dimensions above with a score of "Below Standards" in the third dimension.

Evaluation

Course documents include tests and homework assignments. These include in-class and online submissions. These documents evidence that students interpret mathematical models such as formulas, graphs, and tables, communicate mathematical information, visually and numerically, use algebraic methods to solve problems, and estimate and check answers to mathematical problems in order to determine reasonableness. Reviewer scored the course as "Meets Standards".

MATH 209.001/.002: Elements of Applied Probability & Statistics

There were twelve sections of this course with a total enrollment of 384. These two sections were taught by the same instructor with a total enrollment of 60. The sponsoring department's reviewer scored the course as "Meets Standards" for each of the five dimensions above.

Evaluation

Evidence of student learning in each of the dimensions of quantitative literacy consisted of online and in-class quizzes and assignments. Appropriate to the curricular focus, students demonstrated literacy in item analysis, finding the range, mean, variance, and standard deviation of a simple data set, articulating the distinction between qualitative and quantitative data, and calculating and assessing frequency distribution and probability. Reviewer scored the course as "Meets Standards".

III. Critical Analysis and Reasoning

   A. Institution's definition of competency

       a. **Critical Thinking:** as reflective, self-directed thinking that requires skills in reasoning and the dispositions to use those skills so that a person can think effectively about questions, problems, and decisions both inside and outside of the classroom.

   B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
       a. Lower Level IDIS 150
       b. Upper Level IDIS 350

   C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
       a. Pre-test-post-test Needs for Cognition Scales Test administered in Fall 2006 for IDIS 150
       b. Homegrown testing methods
       c. Collegiate Learning Assessment: (Bensley, 2011)

d. National Survey of Student Engagement
    http://www.frostburg.edu/academic/slassessment/nsse.htm
    See Rubric in Appendix.

D. Describe the results of the assessment work related to this competency. *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

IDIS 150 Lower Division

In the early stages of students' college careers, modeling the ambiguities and the search for resolutions in interdisciplinary thought is particularly valuable as a precursor to the types of connections they will be expected to make in their major academic studies. It is suggested that students complete the course prior to earning 45 credit hours. IDIS 150 examines a selected theme or subject from multiple perspectives within two or more of the five academic areas as identified by the Code of Maryland: (1) Arts and Humanities, (2) Social and Behavioral Sciences, (3) Biological and Physical Sciences, (4) Mathematics, and (5) English Composition. FSU has further defined a multi-disciplinary approach in a First-Year FSU Colloquium to mean that all sections of IDIS 150 will explore a course topic from the perspective of at least two of the Modes of Inquiry content areas of the GEP.

19 sections of IDIS 150 were offered during spring 2010; combined sections enrolled 525 students. Six sections of IDIS 150, sponsored by six different departments, were assessed.

IDIS 150.001: Techno-Philosophy

There was one section dedicated to this topic; enrollment was 32. The sponsoring department's reviewer scored the course as "Above Standards" for each of the five dimensions above.

Evaluation

The course curriculum and structure are appropriate for an IDIS course. In respect to the Modes of Inquiry, the course draws on the disciplines of paleoanthropology, neuroscience, and media philosophy, thereby crossing the humanities, social sciences, natural sciences, and communication studies. As the rationale for this curricular theme is its "extreme relevance to our students' lives," the course is designed to help students better adapt to, think through and intervene in the process of technological change. Paper topics force students to apply the theories discussed in the course, focus on the "structure of experience," and think through how their own experiences have been or are being shaped by technology. Examples of feedback to students are provided; comments address grammatical and substantive issues. Reviewer scored the course as "Above Standards".

IDIS 150.008: Equal Protection and Justice under the Law

This section of IDIS 150 had an enrollment of 32 students. The sponsoring department's reviewer scored the course as "Above Standards" for each of the five dimensions above.

Evaluation

In regard to the above comments submitted by the department reviewer, bullets number three and four reference Core Skills. More needs to be clarified in respect to GEP Learning Goals. Materials presented in support of the course's assessment were very summary. The syllabus presented the course objectives from the perspective of a content-based curriculum, however no reference was made to students' acquisition of or practice in particular skill sets as is appropriate in a section of IDIS 150. While the term paper instruction sheet and oral presentation rubric outline the instructor's criteria for scoring/grading, a more thorough discussion of expectations may be appropriate. Instructor feedback on the sample student paper evidenced a focus on developing the student's writing skills. The examination was appropriate for the course.

When a comparison of this syllabus is conducted against the original syllabus approved by UUCR in 2007, it is clear that the course has drifted from the original intention. In addition to the currently required research paper and oral presentation, students were to participate in simulations of oral arguments involving "student justices" and "student attorneys" arguing opposing sides of a landmark case in respect to race and equal protection. The original proposal also mentioned that students will be required to write critical essays and debate various issues in class; this is not present in the current course structure. Mirroring GEP Learning Goals, the proposed course would allow students to 1) articulate alternative views on leading issues in the area of equality and identify reasons and arguments that may be advanced in support of these competing views, 2) advance and defend a position on various issues in the area of equality, 3) employ relevant analytical and empirical techniques in an effort to gain knowledge about past and current struggles for equality, and 4) write and speak about issues in the area of equality in a clear, logically sound, and coherent manner. While currently, class meetings consist of a lecture and discussion format, which provides students the opportunity to debate the key issues, the context for such interaction is not clearly outlined.

Overall, the curriculum and course materials need to be revisited to ensure that the goals and objectives of IDIS 150 are preserved and documented. Within the syllabus, no mention was made of the modeling of interdisciplinary thought, the importance of interdisciplinarity in the critical assessment of complex issues, or other distinctive features of IDIS courses. Reviewer scored the course as "Below Standards".

IDIS 150.012: Musical Lyrics and Life

Sections of this theme are sponsored by either the Department of Music or the Department of Psychology. This section was sponsored by the latter. Enrollment was 26. The sponsoring department's reviewer scored the course as "Above Standards" for each of the five dimensions above.

Evaluation

The explanation provided in the course review form and syllabus match expectations for an IDIS course. Documentation concerning student productions (oral presentations) was not available as these presentations are not videotaped and the instructor immediately handed the feedback to students at the completion of each student's presentation. Quizzes reinforce the disciplinary perspective while the final exam also assesses students' understanding of the importance of core skills as part of effective communication. Reviewer scored the course as "Meets Standards".

IDIS 150.013: Personal Security and Privacy in the Age of Information

There were two sections of this topic. The section being assessed had an enrollment of 24 students. The sponsoring department's reviewer scored the course as "Above Standards" for each of the five dimensions above with the except of the third which received a score of "Meets Standards".

Evaluation

The curriculum appropriately frames the issue by exploring the technological, economic, historical, and ethnographic perspectives. Readings are updated and topics shift keeping pace with contemporary issues. Paper guidelines set out expectations in respect to interdisciplinary thought. Student papers were assessed based on the students' ability to synthesize research, approaching the topic from multiple disciplinary perspectives, and effective writing skills. The presentation rubric assessed the students' ability to synthesize research, effective use of PowerPoint, and clarity of thesis. Reviewer scored the course as "Above Standards".

IDIS 150.015: Experiencing Appalachia

There was one section of IDIS 150 dedicated to this theme. Enrollment was 22. The sponsoring department's reviewer scored the course as "Above Standards" for each of the five dimensions above.

Evaluation

As written in the syllabus, this section of IDIS 150 meets expectations for interdisciplinary pedagogy and student learning with students gaining exposure to and realizing the value of such an approach. They recognized the cultural, economic, and environmental implication of the official designation of a region, understand the influence of environmental change on Appalachian culture, and evaluate the dynamic changes of economy and politics on local people. Students were advised that their role is to engage in reflective reading and thoughtful analysis of the course material via in-class and Blackboard discussion, class exercises, presentations, and exams. In class exercises consist of problem-based case studies that require students to engage in practical application using knowledge gained in class. Reading question responses are submitted electronically and also serve as study guides for exams. Student samples and instructor feedback demonstrate the requirement that students critically and reflectively assess readings. As noted above, oral presentations were graded and critiqued by students' peers. A sample of their collated comments and scoring based on the student's knowledge of topic, preparation, presentation style, and ability to answer questions addressed technology fluency, information literacy, and oral communication skills. A sample research paper was graded for clarity of thesis/topic statement, use and incorporation of research sources, flow, and sources. Guidelines for the essay portion of the final exam reinforced the above plus contained a rubric for scoring. Reviewer scored the course as "Above Standards".

IDIS 150.016/017/018: Health in America

There were three sections of the topic offered in spring 2010; 88 students were enrolled.
The sponsoring department's reviewer scored the course as "Above Standards" for the first four dimensions and "Meets Standards" in the fifth.

Evaluation

Extensive documentation included pre/post test results, course change papers, midterm exams, final exams, information summary sheets, and rubrics for papers and group presentations. Also included were samples of student work and instructor feedback. Course activities included videos, website visitation, advertisements, video news clips, guest speakers, demonstrations and in class and out of class assignments addressing the assessment of a favorite meal to the RDA for fat, sugar, sodium and calories, finding a tobacco advertisement, and a description completion of an illicit drugs and STD. Most important was the multi-dimensional design of the group research project and presentation. The former includes the statement of the problem, definition of economic, political, cultural, social, and ethical concerns with synthesis and critical analysis of research. The latter includes the

incorporation of PowerPoint, internet videos and media, an interactive activity to engage the audience, and creativity. Reviewer scored the course as "Above Standards".

IDIS 350 Upper Division

The Advanced FSU Colloquium is an upper-level General Education course that provides students the opportunity to engage in intensive interdisciplinary investigation. In IDIS 350, a pedagogical model predicated on inquiry-based learning will be employed. In comparison to IDIS 150, which focuses on the faculty's modeling of multiple disciplinary perspectives in response to a topic, an inquiry-centered colloquium emphasizes that "disciplinary connections and perspectives are not sought as ends in themselves, but rather as tools for making sense of a problem." Inquiry-centered teaching not only uses inquiry as a basis for organizing teaching and learning, but it also teaches inquiry. That is perhaps its primary justification. By organizing study around inquiry, a teacher engages his/her students in critical thinking about a problem or question. In addition to learning whatever they must learn to confront the specific question, the students will learn how to use the resources around and within them to solve any problem. These resources include first, their own minds, second, the minds of their fellow inquirers in the class, and third, whatever external resources they end up drawing upon (assigned books, library, internet, field trips, labs, the teacher, etc.). This approach creates a flow of knowledge from the classroom to a real-life situation or problem.

Five sections of IDIS 350/351 were offered during spring 2010. Total enrollment was 122. One course was assessed.

IDIS 350.005: Leisure and Culture through the Movies

This section was sponsored by RPM and enrolled 18. The sponsoring department's reviewer scored the course as "Above Standards" for each of the dimensions above.

Evaluation

This was the first time the course was taught since its approval by UUCR in fall 2009. Documents provided include the syllabus, outline for the discussion of topics for the reflective essays, including grading expectations (integration vs. synthesis of material), students' essays, completed rubrics, an in-class work and participation rubric, and instructor feedback on the essays. In addition to modalities outlined above, the instructor created a lavish Blackboard site containing documents, PowerPoints, pdfs, and links to supplemental information, as well as instruments for self-assessment in respect to attitudes and values highlighted in the course, and various scenario surveys (Survey Monkey). Therefore, active participation in the course involves proficiency in technology skills. Reviewer scored the course as "Above Standards".

IV. Technological Competency

   A. Institution's definition of competency: students must acquire and/or demonstrate mastery of the following ten *Basic Student Information Technology Skills:*
- *Using appropriate terminology to discuss basic concepts:* The student can demonstrate an understanding of basic computing terms and acronyms. The student can explain an advertisement for a computer and common peripheral equipment
- *Using basic operating system features:* The student can demonstrate a basic understanding and use of the features and utilities of an operating system. The student can install new software, delete unwanted software, invoke applications, and understand the reasons for different file formats. The student can demonstrate the ability to save files to a personal folder or disk, copy files from one location to another, and print files. The student can demonstrate an awareness of the variety of operating systems and hardware platforms.
- *Using e-mail:* The student can use e-mail effectively and appropriately to receive and send messages and documents (e.g., managing a personal mailbox, creating an address book, adding attachments, observing e-mail etiquette).
- *Using the Internet to find information and resources:* The student can efficiently use browsers, search engines, and online scholarly databases to locate information from a variety of Web-based

resources. The student can evaluate this information and document its sources, and can participate in "chat rooms" and other "real-time" electronic communication.

- *Using word processing to create a text document:* The student can manipulate text to create a variety of document formats, create tables and charts to show a comparison of data, use a spelling and grammar checker, and insert images and other items into a text document.
- *Using information appropriately:* The student can understand and discuss the social, ethical, legal, and political consequences of information technology.
- *Using instructional materials:* The student can use online help files and understand printed instructional materials. The student can use a tutorial to understand essential models and ideas underlying new hardware and software.
- *Using a spreadsheet to model simple processes or financial tables:* The student can acquire the necessary skills to modify cells in a spreadsheet file, use formulas appropriately, create various graphs from a spreadsheet program to represent data, and design appropriate print formats for a spreadsheet.
- *Using a database system to set up and access useful information:* The student can construct and manipulate a flat datafile, search the datafile for specific information using keyword search patterns, upload and download files from the datafile, and format the data for printing.
- *Using presentation software:* The student can use general-purpose presentation software and can incorporate multimedia into presentations (e.g., audio and video clips).

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
   a. COSC 100, approved tech. fluency courses

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)
   a. Complete COSC 100 with a C or better, or BITS (Basic Information Technology Skills) Testing
   b. A list of approved Technology-fluency courses
      See Rubric in Appendix.

D. Describe the results of the assessment work related to this competency. *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

Four courses from different sponsoring departments were assessed.

COSC 100.004/.005: Introduction to Computer Science

There were seven sections of COSC 100 taught during spring 2010 with a total enrollment of 210. These two sections were taught by the same instructor, yet the use of a common syllabus for all sections of the course guarantees uniformity in pedagogy. These sections had 30 students apiece. The sponsoring department's reviewer scored the course as "Meets Standards" for each of the three dimensions above .

Evaluation

Tutorials, electronic homework assignments, and lab exercises are appropriately designed to help students achieve fluency in the use of technology. Evidence was provided in instruction in all of the ten skills listed above including designing tables, navigating through options and tools, macros in Word and Excel, fonts, colors, custom animation, and sound effects. Student work consisted of a PowerPoint slide presentation evidencing fluency in presentation software and samples of reports generated through Access and Python. Samples of the first written paper were included; instructions list the required components such as bullets, headers and footers, a graph/chart, table, insertion of a picture with label and caption, etc. The second paper used a Memo template with appropriate formatting conventions, demonstrating professional applications of learned skills. Reviewer scored the course as "Above Standards".

GEOG 275.001/.002 (lab): Fundamentals of Geographic Data Handling

There was one section of this course with an enrollment of 14. As taught during spring 2010, the course fulfilled its proposed goals as a Technology Fluency course with discipline specific instruction. The sponsoring department's reviewer scored the course as "Above Standards" for each of the three dimensions above.

Evaluation

The course covers a number of strategies and techniques for the collection, analysis, visualization, and presentation of geographic data and information. Students gain exposure to both analog and digital methods of handling geographic data and information. The instructor's faculty web page contains a link which connects to a variety of relevant Web-based materials. The syllabus also includes a statement on Skills to be Acquired and Learning Outcomes derived from NCGIA Core Curriculum for Technical Programs (www.ncgia.ucsb.edu/cctp). These learning outcomes are divided into three components including awareness, competency, and mastery. Awareness deals with the idea of the student becoming introduced to the basic concept of specific topics relevant to spatial analysis; competency focuses on an understanding of how to carry out specific tasks; mastery of an outcome expects a student to independently carry out specific tasks within the context of topics relevant to spatial analysis. Much of what is further cited parallels the above discussion. Handouts on file types and their organization, surveying electronic resources, introduction to ArcView, spatial data query and map projections, collecting and organizing data were used for labs and classroom discussion. Lab outlines set out the goals, procedures, reporting mechanisms, and exercises for student self-assessment. Student lab reports also demonstrate levels of fluency in all of the outlined skill sets. Reviewer scored the course as "Above Standards".

MUSC 103.001: Music Theory 2

There was one section of this course with an enrollment of 18. The sponsoring department's reviewer scored the course as "Above Standards" for each of the three dimensions above. As taught during spring 2010, the course fulfilled its proposed goals as a Technology Fluency course with discipline specific instruction.

Evaluation

The submitted documents evidence that students reached a level of technological fluency as defined above. These include: an exam of technological terms, a capture of Blackboard's performance dashboard, course materials accessed through Blackboard, student use of the Digital Dropbox and online music theory resources, a sample database set up by a student, use of discipline specific music notation software, PowerPoint presentations produced by students, and evidence of use of Microsoft Office Software. As the usage of a spreadsheet was not necessary for the disciplinary context of the course, a tutorial was completed during class and applied as cited above. Issues of information literacy also were incorporated into the curriculum throughout the semester. Reviewer scored the course as "Meets Standards".

ART 207.001/.002/.003: Graphic Design

The sponsoring department's reviewer scored the course as "Meets Standards" for the first two dimensions and as "Below Standards" for the third. This instructor taught three sections of the course during spring 2010 with a total enrollment of 59 students. The reviewer commented that the course syllabus and its course components met BOR expectations; they are based on a common syllabus used by multiple instructors over the years since the course was approved as a technology fluency course. However, the reviewer noted a deficiency in the course portfolio in linking the students' acquisition of fluency in these skill sets as addressed in the instructor's narrative with specific course work and projects. A document was submitted that listed "responses" to the use of the 10 Basic Technology Skills.

Evaluation

The lack of a clear relation between the 10 Basic Technology Skills, the design of the course, and student outcomes is evident. The syllabus does not outline the specific requirements of the course, i.e. number of projects, quizzes, exams, etc., and their relative value in the computation of the grade. Course outcomes as listed in the syllabus do not correspond to the expectations of a technology fluency course. Other submitted documents include pages from copyrighted electronic journals, vocabulary matching worksheets, Microsoft Office Online instructions covering the

skills (copyrighted, from Microsoft's website), the table of contents from a textbook, quizzes from chapters of the text, summary project guidelines, a project rubric, and electronic samples of student work. Rubrics do not assess the enumerated skills, and so without being designed to assess such skills, it is unclear how "fluency" is defined, how students are to meet those benchmarks, and how "fluency" is to be assessed. Project guidelines are loosely worded and as a result, connections with certain skills are not drawn. The submitted quizzes and projects do not allow students to demonstrate fluency in skills 5,6,7,8 and 10. The electronic file contains documents, yet no relation is drawn between the evidence and the syllabus or course outcomes. No instructor feedback was submitted. Reviewer scored the course as "Below Standards".

ACCT 305.001/002: Accounting Information Systems

Though not submitted to be designated as a course for students to complete their Technology Fluency graduation requirement, this course is included in the present discussion as evidence of Technology Fluency instruction that is discipline-specific and carried vertically through the curriculum. A prerequisite for the course is COSC 100: Introduction to Computer Science. Two sections of ACCT 305 are offered every fall semester with a total enrollment of 32.

The sponsoring department's reviewer scored the course as "Above Standards" for each of the three dimensions.

Evaluation

Textbooks and learning resources include online practice sets, Excel and Access for Accounting, Computer Accounting with QuickBooks Pro with Student Data Files & QuickBooks software, and Microsoft Office 2007. Daily PowerPoint slides are posted and stored on Blackboard for the course; these describe upcoming assignments, course materials, etc. However, most indicative of the course curriculum's success is samples of videos prepared by students. The videos are hosted on FSU servers, and they demonstrate the type of integrative projects and the portfolio approach used to document their performance.

Additional Competencies
Because institutional mission and goals differ, institutions may wish to report on assessment activities beyond the four major competency areas. However, this is not mandatory; institutions may report on up to three additional competencies.

V. *Information Literacy*

    A.   Institution's definition of competency
         a.   As defined by the faculty planning group, Information Literacy is a set of abilities requiring individuals to recognize when information is needed and to have the ability to locate, evaluate, and use effectively the needed information. It initiates, sustains, and extends lifelong learning through abilities which may use but are not ultimately independent of them (Association of College and Research Libraries). Information Literacy is more than technological competence or library/online research. Rather, it promotes critical thinking, leading to efficient and effective use of information in all disciplines throughout the academic program.

    B.   Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)
         a.   English 101

    C.   Process(es) used to evaluate competency (i.e., methods, measures, instruments)
         See Rubric in Appendix.

    D.   Describe the results of the assessment work related to this competency. *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

The above was translated into the GEP/Core Skills assessment instrument as follows:

Two courses were assessed.

ENGL 101.002: Freshman Composition

Even though during spring 2010, 525 students were registered in 27 sections of this course, the syllabus, outcomes, and modes of evaluation are universal. This section was taught by a tenure-track Assistant Professor. Enrollment was 22. The sponsoring department's reviewer scored the course as "Above Standards" in each of the three dimensions above.

Evaluation

From a review of the narrative plus the syllabus, course materials, assignments, rubrics and evidences of student outcomes (papers, tests, and daily writings), it can be concluded that ENGL 101 is designed appropriately as an Information Literacy course. While the course also addresses competencies in writing, discussions and practical applications of instruction on academic arguments, attributive tags, in-text citations, works' cited entries, plagiarism, and effective library usage amply exist throughout the course. As the course is taken by freshmen, the information literacy skills taught in this course can be used throughout students' academic careers. Reviewer scored the course as "Above Expectations".

MCOM 447.001: Telecommunications Law

This course is included in this assessment as evidence of upper level discipline specific instruction in Core Skills. There was one section of MCOM 447 taught during spring 2010 with an enrollment of 33 students. The sponsoring department's reviewer scored the course as "Above Standards" in each of the three dimensions above .

Evaluation

For the research paper, students must analyze a Supreme Court decision, a major action taken by the FCC, or an act passed by the U.S. Congress dealing with mass communication. The instructor explains how to locate a topic, research it, and write the final paper. Students must have at least five sources which are specific to the topic. A paper outline and the syllabus stress the issues of resources and plagiarism. Two case studies presented and discussed in class, focus on reliability of sources, the ethics in broadcasting information, and laws concerning appropriateness of language. By the nature of the discipline, information literacy and legitimacy are central to all discussion. The

integrity of research, the evaluation of information and its sources, synthesis, and communication of findings are essential for ethical and professional standards. Copies of student papers evidence students' abilities to locate, evaluate, and use effectively the needed information. Tests reinforce discussion of the First Amendment, copyright, broadcasting standards, and unprotected speech. Reviewer scored the course as "Meets Standards".

Part Three: Evolution of Assessment Activities
Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

 Piloting a GEP Assessment Process

With the implementation of a pilot GEP assessment process beginning in spring 2010, the guidelines, definitions, and format for GEP/Core Skills course assessment were presented to the Student Learning Assessment Advisory Group (SLAAG), the provost, deans, and department chairs of COE, COB, and CLAS. Each department was expected to offer at least one course to be included in the pilot, and a workshop was presented in January 2010 for participating faculty and department chairs.

Portfolios for courses included in the pilot were to include a syllabus, linkages of course goals/objective to those of the GEP and institution, examples of student products, and instructor feedback to students (samples of assessment). When applicable, sponsors outlined the course's connection to at least three goals of the GEP and specific course activities that support those goals. For courses submitted as emphasizing GEP core skills (technological fluency, oral communication, written communication, and information literary courses), expectations were specifically listed. A total of 37 GEP/core skills courses were assessed in the pilot.[3]

A course reviewer, designated by the sponsoring academic department, received the course portfolio and completed a cover sheet titled the Course Review Form. The reviewer was also asked to score the course as "below, meets, or above standards" per each dimension outlined on the form. Guidelines for scoring the course as "below, meets, and above standards" were provided to departments. The assembled portfolio and completed Course Review were to be forwarded to the assistant dean by the summer of 2010.

Findings of the Pilot

Of the 37 GEP courses evaluated, two were rated as "below standards," 14 courses rated as "meet standards," and 21 courses were rated as "above standards." Courses most recently approved by the University Undergraduate Curriculum Requirements (UUCR) Subcommittee fared the best, especially those that were taught for the first time. Courses taught by new faculty received higher scores, as perhaps, new faculty rethought course assumptions. Courses with lower scores were approved years ago and may currently be taught by faculty other than those who proposed them to the UUCR Subcommittee.

To close the loop within the assessment of GEP courses, it is necessary to interpret the evidence and make decisions to improve curricular offerings, perhaps including altering the curriculum content, the teaching method, the assignments, and/or the schedule. Since FSU has recently instituted this assessment process, it is too early to determine whether recommendations resulting from the review were informative for course or program improvement.

Next Steps

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[3] Goals for the General Education Program reflect the new Mission Statement of the University and its Undergraduate Institutional Learning Goals through a focus on four specific areas of learning: (1) Core Skills; (2) Liberal Knowledge and Skills of Inquiry, Critical Thinking, and Synthesis; (3) Values and Social Responsibility; and (4) Appreciation of Cultural Identities.

A Phase II pilot will be conducted during the 2010-2011 academic year, with between 30 and 40 courses under review:

- Courses that were evaluated as "below standards" during Phase I will be reassessed.
- Courses will be selected by the assistant dean to vary the distribution across categories of the GEP and core skills.
- There will be a more equitable inclusion of courses taught by part-time, non-tenure-track (PTNTT) and full-time, non-tenure-track (FTNTT) faculty members.
- Departments that have exhausted their GEP offerings in Phase I, or that do not offer GEP courses, will assess courses within the major programs that focus on discipline-specific skill enhancement.

A need still exists for further communication and, potentially, a workshop on institutional expectations and the goals of the GEP and core skills. While the topic is of interest for tenured and tenure-track faculty, focus should be placed on informing adjuncts and new and first-year returning faculty as these instructors are often charged with the delivery of the GEP.

Evidence

Core Skill/ Course Category	# of courses	# of students registered in assessed course sections	Below Standard	Meet Standard	Above Standard
Information Literacy	2	55		1	1
Written Communication	2	51		1	1
Quantitative Reasoning	2	167		2	
GEP: A, B, D	8*	232		4	4
GEP C: Scientific Reasoning	3	124		1	2
GEP E: Critical Thinking (100-level)	6	224	1	1	4
GEP E: Critical Thinking (300-level)	1	18			1
GEP F: Identity & Difference	5+	141		2	3
Technology Fluency	6	335	1	2	3
Oral Communication	2	39			2
Totals	37	1357	2	14	21

*One course was blended.
+Two courses were online.

Bibliography

Bensley, D. A. (2011). *Preliminary Report on Collegiate Learning Assessment (CLA) Results for 2009-2010 for Frostburg State University.*

Rhodes, R. (2010). *Report on GEP and Core Skills Assessment.*

Frostburg State University
Student Learning Outcomes Assessment Report (SLOAR) 2011
Appendix

WRITTEN COMMUNICATION
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	The course's curriculum focuses on students' attainment of the core skills necessary to become proficient in writing and to communicate information and ideas effectively. (provide syllabus)	
	Comments:	
2.	Instruction and course activities allow students to acquire a level of proficiency in basic writing, e.g. Thesis (ability to formulate a thesis statement based in part on analysis and evaluation of appropriate source material), Support (ability to support a thesis by synthesizing their own ideas with the ideas of others), Organization (ability to organize the support logically according to the demands of content.), Language (ability to express their ideas in writing that is readable and correct), and Rhetorical Knowledge (demonstration of an awareness of the rhetorical situation). (provide documentation)	
	Comments:	
3.	The course clearly identifies its connection to at least 3 Goals of the General Education Program. (please identify the goals and explain the connection)	
	Comments:	
4.	The course activities support the above identified GEP learning goals. (please describe)	
	Comments:	
5.	The assessment mechanisms as employed in the course are appropriate. The faculty member is engaged in identifying, administering, and evaluating assessment instruments and results. (provide copies of student products and instructor feedback, e.g. papers, tests, projects, etc.)	
	Comments:	

ORAL COMMUNICATION
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	The course's curriculum provides students with specific, clearly-defined opportunities to engage in developing and exhibiting speaking and presentation skills. (provide syllabus)	
	Comments:	
2.	Instruction and course activities allow students to acquire a level of proficiency in basic skills of presentation, e.g. (1) choose and narrow a topic appropriately for the audience and occasion, (2) communicate the thesis in an appropriate manner, (3) cite/provide appropriate supporting material, (4) use an introduction, conclusion and organizational pattern appropriate to topic, audience, occasion, and purpose, (5) research, select and cite appropriate supporting material, and (6) present speech extemporaneously. (provide documentation)	
	Comments:	
3.	The course clearly identifies its connection to at least 3 Goals of the General Education Program. (please identify the goals and explain the connection)	
	Comments:	
4.	The course activities support the above identified GEP learning goals. (please describe)	
	Comments:	
5.	The assessment mechanisms as employed in the course are appropriate. The faculty member is engaged in identifying, administering, and evaluating assessment instruments and results. (Provide copies of student products and instructor feedback, e.g. papers, tests, projects, etc.)	
	Comments:	

Oral Presentation Rubric

Instructor: Course:

	Below Expectations	Meets Expectations	Above Expectations
Audience and Topic: Topic relevant, appropriate to audience, sufficiently narrowed for assignment			
Thesis and Purpose: Thesis clearly stated, desired audience response achievable and appropriate for assignment			
Supporting Material: Relevant, specific, accurate, logical, effective, from legitimate sources, accurately cited (including images)			
Organization: Clear introduction, pattern of main points leading to logical conclusion, effective transitions			
Language: Word choice vivid, precise, accurate, avoiding slang, unexplained jargon, grammatical errors, and gratuitous profanity			
Delivery: Natural, spontaneous, free of vocal placeholders, appropriate volume, rhythm, pronunciation			
Professional Demeanor: Appropriate dress, confident attitude, appropriate body language			
Makes Eye Contact: Engages with entire audience			
Visuals: Relevant and appropriate images in sharp focus, clearly readable error-free text			
Meets Time Specifications:			

MODES OF INQUIRY: C
SCIENTIFIC REASONING
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	The course's curriculum is based on information derived from the application of the scientific method. The course content is directly related to the natural sciences. Also, the curriculum must be based on well-established theories concerning energy and matter. (provide syllabus)	
2.	The course includes an embedded component of experiential learning that allows students to participate in the application of basic scientific principles as appropriate to the course subject area. (provide documentation of the experiential component and student outcomes)	
	Comments:	
3.	The course includes demonstrations and hands-on activities focusing on the application of basic scientific principles in the course subject area. (provide documentation)	
	Comments:	
4.	The assessment mechanisms as employed in the course are appropriate. The faculty member is engaged in identifying, administering, and evaluating assessment instruments and results. (provide copies of student products and instructor feedback, e.g. papers, tests, projects, etc.)	
	Comments:	
5.	The course clearly identifies its connection to at least 3 Goals of the General Education Program. (please identify the goals and explain the connection)	
	Comments:	
6.	The course activities support the above identified GEP learning goals (please describe)	
	Comments:	

QUANTITATIVE REASONING
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	The course's curriculum focuses on students' attainment of the core skills to understand and apply mathematical reasoning to solve quantitative problems and to evaluate quantitative information and arguments. (provide syllabus)	
	Comments:	
2.	Instruction and course activities allow students to acquire a level of proficiency in basic skills of quantitative literacy, e.g. (1) interpret mathematical models such as formulas, graphs, and tables, and be able to draw inferences from them, (2) communicate mathematical information symbolically, visually, numerically or verbally, (3) use arithmetical, algebraic, geometric, or statistical methods to solve problems, and (4) estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results. (provide documentation)	
	Comments:	
3.	The course clearly identifies its connection to at least 3 Goals of the General Education Program. (please identify the goals and explain the connection)	
	Comments:	
4.	The course activities support the above identified GEP learning goals. (please describe)	
	Comments:	
5.	The assessment mechanisms as employed in the course are appropriate. The faculty member is engaged in identifying, administering, and evaluating assessment instruments and results. (provide copies of student products and instructor feedback, e.g. papers, tests, projects, etc.)	

FIRST-YEAR FSU COLLOQUIUM
CRITICAL THINKING
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	The course's curriculum crosses at least two of the Modes of Inquiry content areas within FSU's general education program. (provide syllabus)	
	Comments:	
2.	The faculty member models interdisciplinary thought in the introduction and discussion of the theme/issue from multiple disciplinary perspectives. (provide documentation)	
	Comments:	
3.	The course clearly identifies its connection to at least 3 Goals of the General Education Program. (please identify the goals and explain the connection)	
	Comments:	
4.	The course activities support the above identified GEP learning goals. (please describe)	
	Comments:	
5.	The assessment mechanisms as employed in the course are appropriate. The faculty member is engaged in identifying, administering, and evaluating assessment instruments and results. (provide copies of student products and instructor feedback, e.g. papers, tests, projects, etc.)	
	Comments:	

TECHNOLOGY FLUENCY
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	Course curriculum meets expectations. (provide syllabus)	
	Comments:	
2.	The course curriculum and specific course components provide instruction in the ten basic technology skills identified. (Provide evidence of course activities in each of the ten skills: (1) using appropriate terminology to discuss basic concepts, (2) using basic operating system features, (3) using e-mail, (4) using the internet to find information and resources, (5) using word processing to create a text document, (6) using a spreadsheet to model simple processes or financial tables, (7) using a database system to set up and access useful information, (8) using presentation software, (9) using instructional materials, and (10) using information appropriately.)	
	Comments:	
3.	Student outcomes in each of the ten basic technology skills identified demonstrate students' fluency in each of these skills. (Provide student products evidencing completion and a level of fluency in each of the ten skills: (1) using appropriate terminology to discuss basic concepts, (2) using basic operating system features, (3) using e-mail, (4) using the internet to find information and resources, (5) using word processing to create a text document, (6) using a spreadsheet to model simple processes or financial tables, (7) using a database system to set up and access useful information, (8) using presentation software, (9) using instructional materials, and (10) using information appropriately.)	
	Comments:	

INFORMATION LITERACY
COURSE REVIEW FORM

COURSE _____

KEY: 3 = Above Standards; 2 = Meets Standards; 1 = Below Standards

1.	Course curriculum meets expectations. Information literacy is a set of abilities requiring individuals to recognize when information is needed and have the ability to locate, evaluate, and use effectively the needed information. The course promotes critical thinking, leading to efficient and effective use of information in all disciplines throughout the academic program. (provide syllabus)	
	Comments:	
2.	The course curriculum and specific course components provide instruction in the eight basic information literacy skills identified. (Provide evidence of course activities in each of the eight skills: (1) recognizing the need to find information to support ideas and opinions, (2) understanding that there are differences among information resources, (3) searching several kinds of sources to retrieve information, (4) evaluating the reliability of information sources, (5) evaluating the probability of the accuracy and reliability of information content, (6) using information to complete assignments, (7) understanding issues of plagiarism, and (8) citing sources using appropriate documentation style.)	
	Comments:	
3.	Student outcomes in each of the eight basic technology skills identified demonstrate students' fluency in each of these skills. (Provide student products evidencing completion and a level of fluency in each of the eight skills: : (1) recognizing the need to find information to support ideas and opinions, (2) understanding that there are differences among information resources, (3) searching several kinds of sources to retrieve information, (4) evaluating the reliability of information sources, (5) evaluating the probability of the accuracy and reliability of information content, (6) using information to complete assignments, (7) understanding issues of plagiarism, and (8) citing sources using appropriate documentation style.)	
	Comments:	

Salisbury University

SALISBURY UNIVERSITY

Student Learning Outcomes Assessment Report
2011 Report

PART I
SUMMARY OF ASSESSMENT ACTIVITIES

Salisbury University (SU) continues to engage faculty, staff, administration, and students in discussions and activities that create a culture of assessment. In fact, assessment has now been formally added to the University's Strategic Plan. As a result, the campus has been using data about student learning outcomes to effect curricular and programmatic changes, from the creation of an elected faculty assessment committee, to a revision of the Academic Program Review (APR) process, to a comprehensive review of the Student Learning Goals (SLGs) that were mapped to the existing General Education (Gen Ed) curriculum.

The University Academic Assessment Committee (UAAC), an ad hoc committee at the time of our previous SLOAR, became an official elected Faculty Senate committee during academic year 2007-2008. One of the UAAC's primary responsibilities is to articulate a coherent plan for ongoing assessment of the Gen Ed curriculum. This is done in collaboration with the Office of University Analysis, Reporting, and Assessment (UARA) and the Provost's Office.

The two major ongoing institutional assessment activities are APR and a course-embedded Gen Ed assessment. APR provides a periodic opportunity for rigorous academic evaluation that advances programmatic excellence. Every program must complete an APR at least every seven years. Part I of the APR includes an assessment plan and summary where programs describe their current student learning outcomes, assessment methods, data collected, and data use by the academic program. Part II includes a critical internal and external evaluation of program curriculum, resources, and other information. (See http://www.salisbury.edu/iara/APR/APR%20home.html for an overview.)

In addition to this program-level assessment, the entire campus has engaged in several Gen Ed assessment activities since the last SLOAR cycle. The UAAC and UARA Director spoke to key University governance groups and hosted a Gen Ed Retreat in June 2009 to communicate the rationales behind curriculum mapping and outcome-based assessment of student learning and to seek the input of faculty members.

During the retreat, faculty members were divided into sub-groups based on how the Gen Ed courses they taught fit into the University's common Gen Ed Groups. These sub-groups articulated specific outcomes for the SLGs aligned with Gen Ed courses. As a result of the retreat, a comprehensive Gen Ed curriculum and outcome map was produced. (See https://secureweb.salisbury.edu/iara/Assessment/DRAFT%20GE%20Assessment%20Plan.xlsx.) In spring 2010, the Gen Ed curriculum and outcome map was presented to the Faculty Senate, which endorsed the documents. The UAAC created a subcommittee to oversee the assessment of Gen Ed, the Gen Ed Assessment Council (GEAC). The GEAC has recommended a five-year pilot of a course-embedded Gen Ed assessment which begins in fall 2011, which the Faculty Senate has also endorsed. During this pilot, each of the Student Learning Goals (SLGs) will be assessed. (See Appendix A for a more detailed timeline.)

PART II
ASSESSMENT OF MAJOR COMPETENCY AREAS

Written and Oral Communication

I. Definitions

Written or oral communication competencies are subsumed under the command of language SLG. Command of language is defined as the ability to communicate effectively—including reading, writing, listening, and speaking. Written and oral communication has been further defined using the following student learning outcomes:

Written Communication:
1. Synthesize and apply information and ideas in discipline-specific forms of writing.
2. Use appropriate evidence, organizational patterns, and styles for specific writing tasks.
3. Construct thesis-driven arguments that marshal appropriate evidence and counter-arguments.
4. Select, evaluate, and cite reputable and appropriate sources.

Oral Communication:
1. Compose oral, thesis-driven arguments that include appropriate evidence.
2. Engage with audiences effectively and appropriately.
3. Participate actively and respectfully in meaningful discussions.

II. Level of Assessment

Institutional

In 2006 and continuing for four years, the University began a pilot assessment of the command of language SLG at the institutional level. Writing and critical thinking competencies are assessed using students enrolled in introductory English and history courses. Each year, a random sample of more than 250 final exams was selected from aggregate English and history course data, and the essays on those exams were assessed using rubrics designed by the English and history faculty.

Additionally, several surveys are conducted on a regular basis to collect indirect evidence of student achievement. The National Survey of Student Engagement (NSSE) in conducted regularly to assesses and compare SU student engagement to national data. A triennial alumni survey also collects graduates' perceptions of skill development while attending SU.

Program

As a component of all APRs, programs are required to describe their ongoing student learning assessment activities. As such, beginning in fall 2009, all programs completing an APR were required to link their program-level student learning outcomes with the University's SLGs. As a result, the University can determine the extent to which the SLGs are addressed at the program-level. Currently, 25 undergraduate programs (60%) have identified that they provide written or oral communication learning opportunities for students. Nearly 57% of undergraduate students at SU major in one of these 25 programs. However, this is likely an underestimate as all programs have not updated their linkages.

Program-level assessments of written and oral communication are embedded in the program and measured through performance, portfolio, written examinations, presentations, activities, and other assessments as determined appropriate by departmental faculty. Data are aggregated at a

level appropriate for each program. One specific example of program-level oral communication assessment can be found in the French and Spanish programs where an oral exit interview is conducted on all graduating seniors.

III.   Process of Evaluation
Direct Assessment
The University assessed the writing and critical thinking competencies of students enrolled in introductory English and history courses. Student essays completed during the final examination period from fall 2006 to spring 2009 were rated on a scale of 1-5 (poor, fair, good, very good, excellent) for six different subscales and a Total score (0-30). This section will focus on the writing component of this assessment; critical thinking results will be described in a later section.

The six subscales employed for fall 2006 and 2007 included rating a student's academic writing skills in introductory English on: organization, thesis, supporting evidence, providing arguments in opposition, refutation of opposing arguments, and grammar. In fall 2008, the English subscales were modified slightly. The opposing arguments subscale was removed and replaced with a style subscale. Every essay was randomly assigned to two readers/raters. If subscale ratings provided by a pair of raters differed by more than one point, a third rater provided an adjudicated score that was used in lieu of the other subscale ratings.

Students introductory history essays were also rated on a scale of 1-5 (poor-excellent) for six different subscales and a Total score (6-30). The six subscales examined: organization, supporting evidence, analysis of ideas, discussion of diverse aspects, intercultural comparisons, and historical connections. The last two subscales measure critical thinking skills only, and will be discussed in the corresponding section of this report.

Oral communication skills are routinely assessed by the Modern Foreign Languages department for French and Spanish majors. An oral interview is conducted during the senior year with the two French or Spanish faculty members. The interview format was created using the same format as the American Council on the Teaching of Foreign Languages (ACTFL) Oral Proficiency Interview. Questions begin at an introductory language proficiency level and progressively get more difficult. They include a wide range of tasks for students to complete orally. A standard bank of questions and evaluation rubric are used.

Indirect Assessment
Every three years, the University assesses its most recent alumni one year after graduation. For the 2009 survey, approximately 371 students graduating in 2007-08 responded to the survey. The survey requests respondents to self-report whether their "overall education and/or experience at SU enhanced your ability to:"
- Read effectively
- Write effectively
- Listen effectively
- Speak effectively

In 2008, SU surveyed a random sample of freshmen and sophomores using the NSSE. Approximately 180 freshmen and 168 seniors responded to the survey. The survey requests respondents to self-report whether they:
- Asked questions in class or contributed to class discussions (oral)
- Made a class presentation (oral)
- Prepared two or more drafts of a paper or assignment before turning it in (written)
- Worked on a paper or project that required integrating ideas or information from various sources (written)

And, to what extent their experiences at SU contributed to knowledge, skills, and personal development in the areas of:
- Writing clearly and effectively
- Speaking clearly and effectively

IV.   Description of Assessment Results
Direct Assessment Results
Results for the Gen Ed English writing assessment can be found in Table 1. Students routinely scored lowest on the providing evidence to refute arguments subscale. Average scores on the refutation subscale have ranged from 1.85 (poor/fair) to 2.61(fair/good). The data confirmed a weakness that had been previously noted by anecdotal evidence collected by the English faculty. Based on this data, the department had the evidence it needed to prompt teaching adjustments to hopefully improve students' abilities to refute arguments in writing. The GEAC, working in collaboration with the Writing Program Administrator, will continue to track the progress of student learning related to the refutation of arguments and the University's Gen Ed writing SLG.

Table 1
English General Education Writing Assessment Results

	Organization	Thesis	Evidence	Arguments in opposition	Refutes	Grammar/ Spelling	Style	Total
Fall 2006	3.75	3.97	3.60	2.89	2.61	3.63	-	20.44
Fall 2007	3.29	3.50	3.16	2.06	1.92	3.27	-	17.16
Fall 2008	2.94	2.96	2.93		2.22	2.99	3.03	17.08
Spring 2009	2.66	2.59	2.67		1.85	2.74	2.90	15.41

According to the Gen Ed history writing assessment, students were rated as "fair" with respect to their writing skills. The scores from 2007-08 were significantly lower than the scores compared from 2006-07 when students averagely scored 19.87 (good). The History department reviewed the Gen Ed writing assessment results and determined that additional expansion of the rubric was necessary to ensure the meaningfulness of the results. As such, they formed an assessment committee to further review and revise the process and rubric.

Table 2
History General Education Writing Assessment Results

	Organization	Evidence	Analysis	Discussion	Inter- Cultural Comparisons	Historic Connection	Total
AY 2006-07	3.32	3.44	3.33	3.43	3.15	3.20	19.87
AY 2007-08	2.57	2.49	2.39	2.29	2.10	1.62	13.46

Finally, the results of the French and Spanish senior interview indicated that the majority of students majoring in these programs score at the intermediate-high level, slightly below the advanced- low goal with respect to language communication skills. The department feels that this may be influenced by the fact that students tend to study abroad during their sophomore or junior year but are not evaluated until their senior year. Further examination of student performance has revealed that students have difficulty talking in paragraph length utterances. As a result, faculty have added a variety of activities in all 300 and 400 level classes to permit students to talk more, using higher order thinking skills such as evaluating, analyzing, synthesizing and hypothesizing in the hope that students will be better able to sustain longer conversations.

Indirect Assessment Results
As previously noted, SU triennially survey graduates on their experiences while attending SU. The results of the most recent survey can be found on Table 3. Graduates overwhelmingly reported that their SU experience enhanced their ability to read, write, listen, and speak effectively.

Table 3
2009 Alumni Survey Results

	Enhanced by Undergraduate Experience
Read effectively	88%
Write effectively	89%
Listen effectively	92%
Speak effectively	89%

The most recent results from the NSSE indicated mixed results. Given that they have had a longer college experience, there is an expectation that seniors would respond more positively to questions about writing and oral communication skills. However, fewer seniors reported writing two or more drafts of a paper or assignment than freshmen. When these responses were compared to our performance peer institutions, the same decline was found. However, responses to the other communication skills questions indicated that the majority of seniors participated in activities at SU that would improve their writing and oral communication skills. SU freshmen and seniors were comparable to performance peers groups in each of the four areas displayed in Table 4.

Table 4
2008 NSSE Results

	Freshmen	Seniors
Asked questions in class or contributed to class discussions	64%	80%
Made a class presentation	27%	69%
Prepared two or more drafts of a paper or assignment before turning it in	54%	36%
Worked on a paper or project that required integrating ideas or information from various sources	86%	90%

Note. Percentages represent the percent of respondents indicating that they "Very Often" or "Often" engaged in the activity described.

Similar to the results of the alumni survey, the majority of freshmen and seniors indicated that SU contributed to the development of their writing and speaking skills "very much" or "quite a bit." In fact, these affirmative responses from SU seniors were five percentage points higher than those reported by seniors at our performance peer institutions.

Table 5
2008 NSSE Results

	Freshmen	Seniors
Writing clearly and effectively	73%	83%
Speaking clearly and effectively	63%	80%

Note. Percentages represent the percent of respondents indicating that SU *"Very Much" or "Quite a Bit"* contributed to the development of these skills.

Scientific and Quantitative Reasoning

I. Definition

At SU, scientific and quantitative reasoning is subsumed under two different SLGs. Scientific reasoning includes knowledge and understanding within the areas of biological and physical sciences. Quantitative literacy at SU refers to a student's ability to reason mathematically. Both of these competencies have been further defined using the following student learning outcomes:

Scientific reasoning:
1. Use common lab equipment and procedures to collect data.
2. Use terminology and describe basic principles of two different STEM disciplines.
3. Recognize the key elements of scientific investigation such as reliance on evidence, use of inductive reasoning and control of variables.
4. Evaluate and interpret how STEM contexts relate to popular media.
5. Reflect on and evaluate one's own health.

Quantitative literacy:
1. Collect measurement data in a scientific manner.
2. Accurately analyze and interpret data.
3. Use quantitative methods to solve problems.
4. Evaluate and draw inferences from mathematical models.

II. Level of Assessment

Institutional

To address a high failure rate in introductory math and science courses, SU implemented a pilot mathematics placement program (ALEKS) in 2008-09. Prior to registering for their classes, all

accepted first-time, first-year applicants that have paid a deposit are asked to complete the assessment. ALEKS was selected because it could be taken online and was aligned with the skills needed to be successful in many of the math and science courses offered at SU. Additionally, online learning modules were offered to students to fill gaps in their math or science background. The availability of online learning modules was particularly attractive to SU because SU offers no developmental mathematics courses. Data aggregated at the course-level were used to determine students' quantitative skill level and potential for success.

Program
As mentioned previously, all programs are required to describe their ongoing student learning assessment activities as a part of the APR process and link their program-level student learning outcomes with the University's SLGs. Currently, 13 undergraduate programs (31%) have identified that they provide learning opportunities for students to develop their quantitative reasoning skills and six (14%) are linked to scientific reasoning. While 26% and 11% of undergraduate students major in the programs aligned with quantitative and scientific reasoning, respectively, this is likely an underestimate of coverage. Several programs have not updated their alignment at the time of this report. Program-level assessments of these competencies are embedded in the program and courses and are measured using standard exam questions, lab assignments, quizzes, and other assessments as determined appropriate by departmental faculty. Data are aggregated at a level appropriate for each program.

III.   Process of Evaluation
Direct Assessment
During the pilot, sections of ALEKS (i.e., numbers, equations, functions, polynomials, rational expressions, radical expressions, exponents & logarithms, and geometry & trigonometry) were aligned with student performance in selected mathematics and science classes. The assessment is given online, and incoming students may take it from home at their own pace. Course-specific scores are then calculated based on the ALEKS sections aligned with each course. Since its full implementation in fall 2009, approximately 80% of deposited first-time, first-year students completed the assessment prior to registering for classes. Students and advising coordinators are provided with a letter during freshmen advising sessions that provide course recommendations based on ALEKS performance.

By correlating historical success rates in the math courses offered at SU with placement test scores, each student is classified as "ready," "not ready," or "maybe ready" for certain math/science courses. This classification is done by creating cut scores which determine how likely a student will pass a certain course. If a student has 90% chance of passing then they are classified as "ready," if their chance of passing is between 60 and 90% then they are classified as "maybe ready," and if their chance of passing is below 60% they are classified as "not ready."

Indirect Assessment
The 2009 alumni survey also assessed math and science skills. Respondents self-reported whether their overall education and/or experience at SU enhanced their ability to make effective use of:
- Mathematics
- Biological and physical sciences

Additionally, the 2008 administration of the NSSE collected responses from freshmen and seniors about the extent to which their experiences at SU contributed to knowledge, skills, and personal development in the areas of:

- – Analyzing quantitative problems

IV. Description of Assessment Results

Direct Assessment Results

In spring 2011, SU enlisted the assistance of the Mathematics and Computer Science department and its students to analyze the ALEKS placement data, the results are provided in this section. Preliminary data on the ALEKS assessment suggests that implementing a placement examination has had a positive effect on success rates (A, B, or C) in several math/science courses. (See Chart 1). The 2003-07 academic years were used to calculate baseline success rates in these courses. All courses examined showed a marked increase since the implementation of ALEKS.

Chart 1
Course Pass Rates
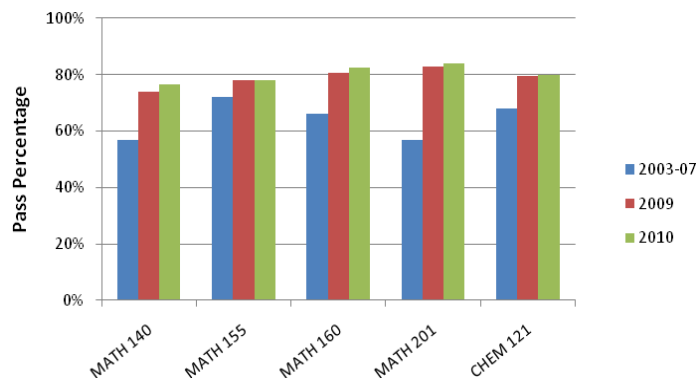
Additionally, historical data indicated that minority students fail math and science courses at SU at higher rates than other students. Since the implementation of ALEKS, these achievement gaps have decreased, and pass rates for minority students have increased substantially. (See Chart 2).

Chart 2
Minority Pass Rates
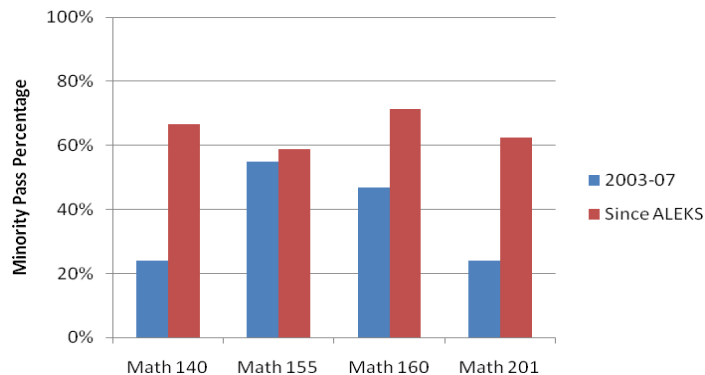
Following the review of these positive results, it was determined that ALEKS is having a positive impact of student success in math and science. However, use and usefulness of the online learning modules was questionable. Given the absence of developmental math courses at SU and the inefficiency of the online modules, it was determined that an alternative approach needed to be taken with students deemed "maybe ready" or "not ready." As a result, SU has modified course recommendations to include Math 105 (Math and Culture), for which all students are "ready." Additionally, students considering enrolling in a course for which they were deemed "maybe ready" are encouraged to use campus academic support services, such as faculty office hours, math tutoring, supplemental instruction courses, and the Center for Student Achievement, to improve their chances of success.

Indirect Assessment Results

During SU's triennial survey of graduates, 70% of respondents indicated that their experiences while attending SU enhanced their mathematics ability. Additionally, 74% believed that their biological and physical sciences proficiency was enhanced by their experience at SU. The results of the most recent survey can be found on Table 6.

Table 6
2009 Alumni Survey Results

	Enhanced by Undergraduate Experience
Mathematics	70%
Biological & physical sciences	74%

Results from the NSSE were even more positive. The data showed that 83% of seniors believed that SU contributed to their development of quantitative skills. SU also exceeded performance peers on this indicator, where only 74% of seniors responded positively.

Table 7
2008 NSSE Results

	Freshmen	Seniors
Analyzing quantitative problems	73%	83%

Note. Percentages represent the percent of respondents indicating that SU *"Very Much" or "Quite a Bit"* contributed to the development of these skills.

Critical Analysis and Reasoning

I. Definition

Critical analysis and reasoning refers to a student's ability to engage in independent and creative thinking and solve problems effectively. It has been further defined using the following student learning outcomes:

1. Analyze, synthesize, and/or evaluate ideas, concepts, and/or evidence.
2. Describe diverse aspects of a discipline using discipline-specific concepts.
3. Apply appropriate problem-solving strategies to discipline-specific issues.
4. Compare and contrast theories within a discipline.

II. Level of Assessment

Institutional

As mentioned previously, in 2006, the University began a pilot assessment of writing skills that also included an assessment of critical thinking. Additionally, a university administered alumni survey and responses to the NSSE also provide indirect measures of critical analysis and reasoning skills aggregated at the University level.

Program

All programs are required to describe their ongoing student learning assessment activities as a part of the APR process and link their program-level student learning outcomes with the University's SLGs. Currently, 25 undergraduate programs (60%) have identified that they provide learning opportunities for students to develop their critical analysis and reasoning skills. These 25 majors include nearly 52% of undergraduate students at SU. This is likely an underestimate of coverage as several programs have not updated their linkages at the time of this report. Program-level assessments of critical thinking are embedded in programs and courses. Skills may be measured through performance, portfolio, written examinations, presentations, activities, and other assessments as determined appropriate by departmental faculty. Data are aggregated at a level appropriate for each program.

III.   Process of Evaluation

Direct Assessment

The same evaluation methodology used for assessing writing skills described earlier was employed for measuring critical thinking. The final exam essays collected from introductory Gen Ed history and English courses were evaluated for critical thinking skills on a scale of 1-5 (poor, fair, good, very good, excellent). Three of the subscales from the English course rubric (supporting evidence, arguments in opposition, and refutation) and five of the history rubric subscales (supporting evidence, analysis of ideas, discussion of diverse aspects, intercultural comparisons, and historical connections) assess critical thinking skills.

Indirect Assessment

For the 2009 alumni survey, respondents self-reported whether their "overall education and/or experience at SU enhanced your ability to:"
- Engage in independent and creative thinking.
- Solve problems effectively.
- Solve problems using a variety of approaches.
- Obtain, accurately assess and present information and ideas.

The 2008 administration of the NSSE included freshmen and senior self-reported responses about whether their coursework emphasized:
- Analyzing the basic elements of an idea, experience, or theory.
- Synthesizing and organizing ideas, information, or experiences.
- Making judgments about the value of information, arguments, or methods.
- Applying theories or concepts to practical problems or in new situations.

And, to what extent their experiences at SU contributed to knowledge, skills, and personal development in the areas of:
- Thinking critically and analytically.
- Solving complex real-world problems.

IV. Description of Assessment Results

Direct Assessment Results

Results of the Gen Ed English and history critical thinking assessment were mixed. On both assessments, students were deemed "good" at providing evidence to support their arguments and analyzing ideas and concepts. However, students only performed "fair" at acknowledging and refuting arguments that opposed their own thesis. When results from introductory history courses were examined, students performed worse when evaluating intercultural similarities and differences and making connections with broader historical currents. Use of these results was described previously within the writing competency section of this report and on Tables 1 and 2.

Indirect Assessment Results

During SU's triennial survey of graduates, respondents are asked several questions about their experience at SU as it relates to the development of critical thinking skills. The results were overwhelmingly positive. In fact, 94% of respondents indicated that their experiences at SU enhanced their ability to engage in independent and creative thinking, as well as improved their ability to obtain, accurately assesses, and present information and ideas. Additionally, 95% believed SU enhanced their ability to effectively solve problems using a variety of approaches. The results of the most recent survey can be found on Table 8.

Table 8
2009 Alumni Survey Results

	Enhanced by Undergraduate Experience
Engage in independent and creative thinking	94%
Solve problems effectively	95%
Solve problems using a variety of approaches	95%
Obtain, accurately assess and present information and ideas	94%

Some of the most positive NSSE results were revealed when questions about critical reasoning were explored. An overwhelming majority of seniors reported that SU coursework emphasized critical thinking skills such as analysis, synthesis, making judgments, and application. With the exception of, synthesis, SU seniors reported a greater emphasis of these skills than seniors at our performance peer institutions. Based on the NSSE results, SU also helped students to think critically and analytical and solve complex real world problems.

Table 9
2008 NSSE Results

	Freshmen	Seniors
Analyzing the basic elements of an idea, experience, or theory	80%	97%
Synthesizing and organizing ideas, information, or experiences	67%	80%
Making judgments about the value of information, arguments, or methods	79%	79%
Applying theories or concepts to practical problems or in new situations	79%	88%

Note. Percentages represent the percent of respondents indicating that their coursework emphasized these mental activities *"Very Much" or "Quite a Bit"*

Table 10
2008 NSSE Results

	Freshmen	Seniors
Thinking critically and analytically	84%	92%
Solving complex real-world problems	57%	77%

Note. Percentages represent the percent of respondents indicating that SU *"Very Much" or "Quite a Bit"* contributed to the development of these skills.

Technology Competency

I. Definition

At SU, technology competency is subsumed under the information literacy SLG. Information literacy includes the ability to use libraries, computer applications, and emerging technologies. Student learning outcomes relevant to technology competency include:

1. Use appropriate technology to collect, analyze, summarize, and/or communicate information.
2. Communicate electronically using email and course management software.

Additionally, SU is required by the University System of Maryland (USM) to have a Technology Fluency Policy that addresses the use of technology. It notes that all students must demonstrate information technology fluency including skills in four broad areas: basic operations and concepts, accessing information through technology, communicating effectively using technology, and organizing and analyzing information with technology.

II. Level of Assessment

Institutional

SU annually surveys all students to identify significant technology use, trends, and innovations affecting teaching, learning, academic research, personal, and professional communications. Additionally, a university administered alumni survey and responses to the NSSE also provide indirect measures of technology skills aggregated at the University level.

Program

All programs are required to describe their ongoing student learning assessment activities as a part of the APR process and link their program-level student learning outcomes with the University's SLGs. Currently, 24 undergraduate programs (57%) have identified that they provide learning opportunities related to technology. The programs aligned with technology competency outcomes include nearly 51% of undergraduate students. This is likely an underestimate of coverage as several programs have not updated their linkages at the time of this report. Program-level assessments are embedded in the program and courses and measure technology skills through performance, portfolio, presentations, activities, and other assessments as determined appropriate by departmental faculty. Data are aggregated at a level appropriate for each program.

III. Process of Evaluation

Indirect Assessment

For spring 2011, 655 students responded to the online Technology Survey. Students were asked questions about:

- Adoption of new technology

- Types of technology used (including cell phones, televisions, computers, tablets, etc.)
- Usage of and satisfaction with campus technology (including computer labs, software, MyClasses, etc.)

For the 2009 alumni survey, respondents self-reported whether their "overall education and/or experience at SU enhanced your ability to:"
- Use information resources effectively.
- Effectively use computer applications and emerging technologies.

In 2008, freshmen and sophomores self-reported on the NSSE to what extent their experiences at SU contributed to knowledge, skills, and personal development in the areas of:
- Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment.
- Use email to communicate with an instructor.
- Using computing and information technology.

IV. Description of Assessment Results

Indirect Assessment Results

Some of the major technology developments in recent years are the result of student feedback collected using the Technology Survey. For instance, in a recent survey, 79% of students indicated that their University-issued email was their preferred method of contact, and, in a previous Technology Survey, 54% said that they would like to have the SU email account for life. As a result of this increased technology usage, when the University migrated to a new email system, they selected one that would more efficiently allow for this feature.

Table 11
2011 Technology Survey Results

	Freshmen
How would you describe your adoption of new technology	86% are mainstream, early or innovative adopters
I use MyClasses in the following number of courses	94% used it in at least one
Technology and information tool usage	91% use presentation software (ex. PowerPoint) 55% use spreadsheets 38% use graphics software
How does SU's technology compare to that offered at other campuses	86% said average or better than average

Additionally, SU graduates reported that their undergraduate experience enhanced their ability to use information resources (90%) and computer applications and emerging technologies (89%) effectively. Given that these results were collected from undergraduate students that graduated in 2007-08, it is likely that these percentages will grow even more as technology usage increases. The same may be true for the 2008 results of the NSSE. Only 62% of seniors reported using an electronic medium to complete an assignment. Currently, the 2011 Technology Survey indicated that 94% of respondents utilized MyClasses, a course management system for web-enhanced, hybrid, and online courses, for at least one of their classes. Other NSSE technology questions revealed more positive results. For instance, 83% of seniors used computing and information technology, and 95% used email to communicate with faculty. SU percentages were higher than peer data for all three of the technology related NSSE questions.

Table 12
2009 Alumni Survey Results

	Enhanced by Undergraduate Experience
Use information resources effectively	90%
Effectively use computer applications and emerging technologies	89%

Table 13
2008 NSSE Results

	Freshmen	Seniors
Used an electronic medium (listserv, chat group, Internet, instant messaging, etc.) to discuss or complete an assignment	46%	62%
Use email to communicate with an instructor	76%	95%
Using computing and information technology	73%	83%

Note. Percentages represent the percent of respondents indicating that SU *"Very Much" or "Quite a Bit"* contributed to the development of these skills.

PART III
EVOLUTION OF ASSESSMENT ACTIVITIES

Since the last SLOAR in 2007, SU's assessment practices have continued to evolve. In 2005, SU used ETS's Academic Profile, since renamed the Proficiency Profile, to assess the Gen Ed competencies. However, it was difficult to recruit a representative sample of juniors and seniors who were willing to perform at their highest level during a voluntary two-hour standardized exam. Though the assessment results were positive, the small sample and lack of adequate mapping of the standardized test to SU's Gen Ed goals and outcomes greatly limited the interpretations that could be made from the results. As a result, a more meaningful assessment method needed to be considered.

To facilitate University assessment efforts since the last SLOAR, the once ad hoc UAAC, became an official Faculty Senate committee. Additionally, faculty development in the area of assessment has been promoted through a Gen Ed retreat (2009) and a professional development day (2010) with presentations from internal and external assessment experts. This training has paid off in the form of additional faculty participation and interest in assessment. Most notably, the GEAC was formed in 2010 and has done substantial work to develop a course-embedded Gen Ed assessment pilot, to begin fall 2011. Given the extensive work that went into the development of the Gen Ed student learning outcomes, described in Part I, this new assessment method has garnered support from the Faculty Senate. The course-embedded Gen Ed assessment plan requires greater involvement of faculty across campus and reinforces the notion that Gen Ed is the responsibility of all faculty and programs.

Another significant development since the last SLOAR, was described in Part I, the revision of the APR guidelines. Since this revision, programs must now align program-level student learning goals with the Gen Ed curriculum and University Gen Ed SLGs. Programs must also identify how their curriculum provides opportunities for students to achieve program-level learning outcomes. This information is collected via a newly developed university website known as the Assessment Web Interface (AWI). Programs login into the AWI and enter in their program-level

outcomes, link these outcomes to the SLGs, and then indicate which of their courses are aligned with each identified outcome. Moreover, as a part of the APR process, programs are now required to complete an assessment action plan that includes a timeline for implementing, collecting, analyzing, and using assessment data. Programs now upload their completed APR to a University-maintained website that facilitates the sharing of these documents with program faculty, deans, and the Provost's office.

As further evidence of the growing campus culture of assessment, in the *2009-13 Strategic Plan*, assessment was added a focus area.

> Goal 1: Provide exceptional contemporary liberal arts education and academic professional programs that are aligned with an increasingly competitive, global, and knowledge-based economy.
>
> Recommendation 1.10: Under the direction of the Provost, UARA should work with the appropriate governance bodies and committees to implement the goals of the UARA five-year plan and improve assessment efforts of General Education and academic majors programs across campus.

Additionally, resources have been redirected and redistributed to allow for the hiring of an Assessment Analyst in the office of UARA to help accomplish this goal. The integration of assessment within the strategic plan, formation of the UAAC and GEAC, and devotion of resources to fund a new assessment position is evidence of an increased institutional commitment to measuring and understanding student learning.

Description of Course-Embedded Assessment:

In a course-embedded assessment, courses serve as the data collection venue. A sample of the Gen Ed courses aligned with a particular Student Learning Goal would be asked to consider their **current** in-class assignments and assessments to determine their appropriateness for use in a University-wide assessment of that goal. Faculty from the subset of courses would collaborate to determine commonalities in their **current** assignments to determine if similar assignments exist across these Gen Ed courses.

These similar assignments would be administered and graded by faculty according to their own course purposes. At the end of the semester, the faculty would share these assignments with a Gen Ed evaluation team for a **separate** Gen Ed assessment. The Gen Ed assessment would **NOT** include an evaluation of data at the course or instructor level. Instead, the assignments collected across multiple courses and instructors would be aggregated to provide a general sample of evidence on how well SU students are accomplishing the Student Learning Goal being evaluated.

Pilot:

A pilot of the course-embedded Gen Ed assessment plan is being recommended for a five-year period, to start in fall 2011. The pilot will be evaluated at the end of each year by the UAAC, with modifications to be made where appropriate (e.g., ensuring appropriate courses are being sampled). During this five-year pilot phase, each of the Student Learning Goals within the "Skills" area will be assessed. This would include the following Student Learning Goals: Critical Thinking, Command of Language (Reading, Writing, Speaking, & Listening), Quantitative Literacy, Information Literacy, and Interpersonal Communication. It is anticipated that at least two of the "Skill" areas would be evaluated each year during the pilot.

Reason for Recommendation:

This data collection methodology was recommended for several reasons:

1. Student motivation would be high because the assessment activity is part of a course activity
2. It does not require additional student time as it is part of the curriculum
3. It is faculty-driven and thus, more likely, to be used for [COURSE] improvement
4. Because it's linked to the curriculum, it's more likely to identify specific curricular needs/deficiencies

The alternative approach, a University–wide Assessment Day, was deemed too massive in scope and disruptive of University affairs for conducting an inaugural pilot. As a 'community of assessment' develops at SU, this approach may become more feasible in years to come.

STUDENT LEARNING GOALS- General Education student learning goals.	TIMELINE				
SKILLS	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
1. Critical Thinking - Acquire abilities to engage in independent and creative thinking and solve problems effectively.			X		

2. Command of Language - Acquire abilities to communicate effectively—including reading, writing, listening and speaking. *(36 Outcomes to 10 Outcomes)*					
2a. Reading *(12 Outcomes to 2 Outcomes)*	**X**				
2b. Writing *(22 Outcomes to 4 Outcomes)*	**X** One outcome shared with Info Lit-Use of Libraries & Use of Computer Apps.				
2c. Speaking *(4 Outcomes to 3 Outcomes)*		**X** One outcome shared with Interpersonal Communication. & Listening			
2d. Listening *(3 Outcomes to 1 Outcome)*		**X** One outcome shared with Interpersonal Communication & Speaking.			
3. Quantitative Literacy - Acquire abilities to reason mathematically. *(3 Outcomes to 4 Outcomes)*	**X**				
4. Information Literacy - Acquire abilities to use libraries, computer applications and emerging technologies. *(21 Outcomes to 6 Outcomes)*					
4a. Use of Libraries *(10 Outcomes to 2 Outcomes)*	One outcome the same as Command of Language Writing outcome		**X**		
4b. Use of computer applications and emerging technologies *(11 Outcomes to 4 Outcomes)*	One outcome the same as Command of Language Writing outcome		**X**		

	2011-12	2012-13	2013-14	2014-15	2015-16
5. Interpersonal Communication - Acquire abilities to relate to and work effectively with diverse groups of people. *(4 Outcomes to 1 Outcome)*		**X** Same outcome is used as an outcome for Command of Language Speaking and Listening			
KNOWLEDGE	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
1. Breadth of Knowledge *(37 Outcomes to Outcomes 25)*					
1a. Visual and Performing Arts *(2 Outcomes to 2 Outcomes)*				**X**	
1b. Literature *(4 Outcomes to 3 Outcomes)*				**X**	
1c. Civilization *(6 Outcomes to 5 Outcomes)*				**X** 3 outcomes shared with Contemporary Global Issues.	
1d. Contemporary Global Issues *(11 Outcomes to 5 Outcomes)*				**X** 3 outcomes shared with Civilization.	
1e. Second Language or Culture *(0 Outcomes to Outcomes)*			**X**		
1f. Mathematics *(3 Outcomes to 2 Outcomes)*	**X**				
1g. Social and Behavioral Sciences *(5 Outcomes to 3 Outcomes)*				**X**	
1h. Biological and Physical Sciences		**X**			

(6 Outcomes to 5 Outcomes)					
2. Interdependence among Disciplines *(9 Outcomes to 1 Outcome)*					X
DISPOSITIONS	**2011-12**	**2012-13**	**2013-14**	**2014-15**	**2015-16**
1. Social Responsibility *(4 Outcomes to 2 Outcomes)*					X
2. Humane Values *(2 Outcomes to 1 Outcome)*					X
3. Intellectual Curiosity *(5 Outcomes to 2 Outcomes)*					X
4. Aesthetic Values *(1 Outcome to 1 Outcome)*					X
5. Wellness *(3 Outcomes to 1 Outcome)*					X

Towson University

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Part One: Summary of Assessment Activities

Student learning is at the core of Towson University (TU). The university is committed to providing students with educational experiences that are intellectually rigorous and pedagogically effective so that they "acquire the intellectual and social preparation to achieve their potential as contributing leaders and citizens of the workforce and a complex global society." The competencies associated with these expectations are first articulated in Towson's general education program. General education learning outcomes are grouped in two basic categories: I. *Skills for Liberal Learning,* and II. *Contexts for Liberal Learning*. Courses in Category I emphasize useful tools for gathering, evaluating, valuing and shaping information and ideas. Category II identifies social, historical, cultural and scientific contexts wherein knowledge finds active meaning, and emphasizes the need for understanding interdisciplinary relationships among the different ways of knowing. Courses are approved to specific requirements of the two categories. These include the following:

Gen Ed I. Skills for Liberal Learning	Gen Ed II. Contexts for Liberal Learning
Writing for a Liberal Education	Scientific Inquiry
Using Information Effectively	American Experience: Arts and Humanities
College Mathematics	American Experience: Contemporary Issues
Advance Composition	Western Heritage: Arts and Humanities
Creativity and Creative Development	Western Heritage: Social and Behavioral Sciences
	Western Heritage: Cultural Plurality and Diversity
	Global Awareness: Non-Western Cultures, Traditions, Issues

The competencies associated with TU's expectations for student learning are also well articulated in undergraduate courses and programs. Students are expected to develop the ability to think critically, communicate effectively, organize and analyze data, acquire knowledge across disciplines, work as members of a team, make informed decisions, solve problems, adapt to a rapidly changing society, understand and appreciate diverse cultures and perspectives, acquire technological skills, and become lifelong learners. Assessment of student learning outcomes includes both direct and indirect measures. Direct measures are collected at the course and program level, while indirect measures occur at the course, program, department, college and university levels.

The Office of Assessment has responsibility for and oversight over all university-wide assessment practices that pertain to student learning. The assistant vice president for Assessment (AVPA) works closely with the University Assessment Council (UAC) to guide and support all student learning assessment initiatives. The UAC members include faculty from each of the colleges, key administrators and students. The council is composed of three subcommittees that focus on as on the assessment of general education courses as well as undergraduate and graduate programs.

The Subcommittee on General Education Assessment (SGEA) monitors student learning outcomes in general education courses. General education requirements are designed to help students gain essential intellectual skills and knowledge that will be important throughout their lives. These skills include successful speaking and writing, the gathering and evaluation of information, the appreciation of diverse points of view, and the ability to understand and formulate ideas and values. The overall goal is to provide students with: 1) the flexibility and resourcefulness required to adapt successfully to rapid social, economic and technological change, 2) the understanding and tolerance necessary for informed citizenship and social action, and 3) the interest and curiosity essential to the pursuit of learning throughout the whole of life. General education courses are reviewed every five years to determine their effectiveness in meeting approved outcomes. If all outcomes are addressed adequately, the courses are recertified for five years. The subcommittee reviews, analyzes and rates each course in four key areas*: learning goals, teaching/learning strategies, assessment methods*, and *use of results*. SGEA rates each area according to three

rubrics: *best practice, meets standard*, and *needs attention*. These ratings, along with qualitative feedback, are designed to encourage programs to identify optimal ways in demonstrating continuous improvement in student learning.

The Subcommittee on Undergraduate Program Assessment (SUPA) and the Subcommittee on Graduate Program Assessment (SGPA) are charged with supporting the design, evaluation, and promotion of undergraduate and graduate program assessments. All undergraduate and graduate academic departments and programs are expected to have student learning assessment plans in place. Measurement tools vary and include analysis of student work products which may include portfolios, research projects, labs, faculty ratings of student performance, essays, papers, tests, etc. In addition to direct measures of student learning, indirect methods may include exit surveys of seniors regarding their development of particular skills or the quality of graduates as assessed by their employers. Data are collected annually and are analyzed at the program level. Every three years, programs are required to document student learning outcomes and provide assessment data and results for the majors they offer in self-study reports. During the intervening years, each unit is expected to report any modifications or improvements to their assessment protocols and/or how they used their assessment data to improve student learning. These reports are submitted to SUPA and SGPA for review. These subcommittees rate the program protocols in four key areas: *learning goals, teaching/learning strategies, assessment method*s, and *use of results*. Each area is rated according to three rubrics: *best practice*, *meets standard*, and *needs attention*. These ratings, along with qualitative feedback, are designed to encourage programs to identify optimal ways in demonstrating continuous improvement in student learning.

External program review for all academic degree programs takes place every seven years. The program review process is extensive and consists of an internal self-study report of the degree program as well as an assessment by an external reviewer. Each program under review identifies an action plan to improve practices based on the recommendations of the external reviewer, including ways progress will be assessed. In addition, academic departments and colleges have assessment protocols and practices pertinent to their disciplines. Degree programs accredited by external agencies such as NCATE for the College of Education, and AACSB for the College of Business and Economics, develop assessment practices that align with accrediting agency standards.

An additional way that TU assesses student learning is assessment of co-curricular activities. The Student Affairs Assessment Subcommittee (SAAS) examines assessment efforts related to co-curricular learning. This occurs through a variety of methods and the results are used to inform program offerings and make changes to co-curricular activities as necessary

Assessment at Towson not only involves internally developed processes in measuring data, but also includes externally developed data sources for use in benchmarking and comparative purposes. Towson participates in a number of nationally-normed, standardized surveys. These instruments include the National Survey of Student Engagement, the College Student Survey, the CIRP first year student survey, and the EDUCAUSE Center of Applied Research (ECAR) Study of Undergraduate Students and Information Technology. These surveys facilitate Towson's understanding of the student experience and allow us to compare our results to those of peer institutions across the nation as well as augment and support the assessment data we collect through campus-based initiatives. Results from these national surveys provide indirect evidence of student learning at both the programmatic and general education levels as well as student perceptions of their university experience. Towson has also administered the Collegiate Learning Assessment—a measure of value-added learning—to a sample of first year and senior students as part of its ongoing efforts to understand and improve student learning on campus.

I. Written and Oral Communication

Written and oral communication are developed and mastered through general education coursework and the major. TU's expectations in these areas are first articulated through required courses in three categories: *Writing for a Liberal Education, Using Information Effectively, and Advanced Composition.* Attachment A includes a description of the competencies associated with each category as well as relevant student learning goals. The general education course recertification process was recently re-established and is described in Part Three.

Communication competency, both written and oral, is also imbedded in undergraduate program-level learning outcomes. Since the last SLOAR report, assessment reports and/or external reviews have been submitted by 46 programs with outcomes specific to communications. Thirty-eight programs (83%) report success in students achieving defined competencies. Six programs are changing assessment strategies related to these outcomes and data results have yet to be reported. Two programs indicate they are meeting expectations, but data to validate are not included. (See Attachment B for a list of reports since the last SLOAR). Examples of assessment of written and oral communication competency and changes made as a result of that assessment are presented below.

Art + Design
One of the five key learning goals of the Art + Design program is that students **articulate, through writing, verbally and through the production of a body of work, their personal aesthetic and professional direction**. This learning goal is evaluated using direct methods of assessment at the course level. For example, images of student artwork are collected from ART 497 - Senior Project, a capstone course required of all graduating seniors. Students must write an artist's statement or design statement on their work (some students will also be required to make an oral presentation). The course's instructor and a committee of faculty assess the work in relation to this learning goal using a rubric with scores ranging from *worst* (1) to *best* (5). A score of 3 is *minimally adequate*.

- In the 2008 program assessment report, students scored an average of 4.3 on the question *Does the body of work show a clear, personal aesthetic or professional direction?*
- Students scored an average of 4.08 on questions related to oral expression such as *How well was the student able to articulate the conceptual basis and/or formal concerns in their work?*
- Students scored an average of 3.73 on questions related to written expression such as *Does the body of work as a whole show a clear, personal aesthetic or professional direction and focus? How well is the student able to articulate the conceptual basis and/or formal concerns in their work?* The program reports that this is significantly better than prior year's score (3.2), perhaps due to a handout on writing artist statements that was created in response to the poorer score.

As a result of this assessment, Art + Design program faculty determined that current required courses to encourage communication competency remained inadequate as students' ability to write about their own work has been a continued weakness. In response, the program has created a "Foundations" core course protocol for freshmen effective fall 2009 that includes a new Visual Concepts course as an opportunity for students to begin learning to write about their work (required course topic/activity). The hope is that this earlier start in writing in the discipline will result in stronger communication skills of students by the end of the program.

Deaf Studies
A consistent program learning goal assessed in the Deaf Studies program is whether students **demonstrate professional-level writing skills**. Written communication skills are evaluated in two ways. First, a final paper is submitted for Career Exploration in which the grading rubric used provides assessment and feedback on students' *grammar, punctuation, spelling, and organization of thoughts*. Second, internship supervisors evaluate interns' *ability to provide accurate, complete, and persuasive written communication*. In a fall 2007 assessment report containing evaluation of final papers from the Career Exploration class, there was an increase in the number of students receiving *exceptional* ratings in grammar and punctuation from 38% in fall 2005 to 89% in spring 2006, with corresponding declining rates on the other four categories of *very good, satisfactory, fair* and *poo*r. In regards to spelling skills, there was an increase in the number of students receiving *exceptional* rates from 76% in fall 2005 to 100% in spring 2006. In internship evaluations, written communication skills were rated as 67% *exceptional* and 33% *very good* among students assessed in fall 2006. In spring 2007, 80% of the students were rated as *exceptional* while the remaining 20% were *very good*. Overall, students appear to be improving their writing skills or at least taking the cultivation of these skills more seriously. In assessing the results, the Deaf Studies program advises students with weak writing skills to seek help at the Writing Lab sponsored by the College of Health Professionals. The following adjustments in the program have also been made:
- explicit criteria and rubrics are provided in syllabi for Career Exploration and Internship classes regarding expectations for level of writing skill and grading rubrics,

- attempts are made to provide more specific feedback on writing skills on all assignments, and
- syllabi are revised every semester to ensure that instructions and expectations are clear.

Family Studies

Each one of the courses in the Family Studies program focuses on developing students' liberal arts competencies to a different degree. One of its key learning goals is for students to **demonstrate competency in written communication, oral communication, and critical thinking**. These are evaluated in three ways: final papers in the senior capstone course, final supervisor evaluations of student interns, and exit surveys of graduating seniors.

- Instructors rating comprehensive written papers in FMST 490: Senior Seminar in Family Studies used the Brenau University Writing Skills Assessment Form that employs a five-point scale ranging from *poor* (1) to *excellent* (5) across categories of *content, organization and language*. In the 2010 assessment report, data were collected between fall 2007 and fall 2009. Students demonstrated relative strengths in expressing their content knowledge in writing and organizing their writing. In both these areas, 67% of students met the departmentally determined standard for their skills. However, the results indicated an area of relative weaknesses in writing skills related to language use including knowledge of grammar, punctuation, and the conventions of APA style (54% met the department standard).
- Internship supervisors during spring 2009, summer 2009, and fall 2009 semesters submitted evaluations for students using a five-point scale ranging from *unacceptable* (1) to *excellent* (5) across categories of *professionalism, communication skills, and problem solving*. Results show that on average 87% of supervisors reported students met the department standard in communication skills. Relative strengths include their ability to communicate with team members and supervisors (90.5% met standard) and use of active listening skills (89.9% met standard). Relative weaknesses are noted in students' written communication skills (83.4% met standard), articulation of information to clients (85.1% met standard), and their overall communication skills (85.1% met standard).
- Graduating seniors during spring 2009 and fall 2009 semesters were asked to rate four questions examining the degree to which they felt the program's coursework prepared students' competencies in *writing, oral communication* and *critical thinking*. Using a five-point scale ranging from *strongly disagree* (1) to *strongly agree* (5), 90 to 95% of students agreed that it was important that such skills be further developed within the family studies curriculum. On average, students also felt that there needs to be more writing in the curriculum with over 45% each semester reporting that they *agree* or *strongly agree* that they would like more writing experience.

Beginning 2010, the Family Studies program set a goal to have 25% or fewer students receive scores in the *needs attention* category in reviewing students' written work as well as internship assessments related to communication competency. The aim is to decrease the number of students with ratings in the *needs attention* category by 5% each year to obtain an ideal 15% or fewer students with deficient skills in communication. Potential strategies to achieve this goal include the following: recommending that students who receive a grade of "C "in the program's advanced writing course take a second writing course as an elective; developing a stronger partnership between the College of Liberal Arts Writing Center and writing-centered courses in the family studies curriculum; infusing more courses with short, frequent writing assignments which require the use of scholarly sources in an effort to assist students with their writing skills earlier in their career; and balancing the types of writing assignments used with students to create a better mix between writing in the discipline and writing for reflection.

Information Systems

In its spring 2009 assessment report, the Information Systems program provided three sets of data collected in assessing the key learning goal that students **work effectively in teams and communicate effectively**. These include results from senior exit interviews, internship evaluations completed by supervisors, and final group projects including presentations in required course CIS 379 - Systems Analysis & Design. The report details the following data:

- First, the end-of-program exit survey given to graduating seniors in spring 2008 indicated that 100% of the students *agree*d that this learning goal had been met for them, with 66% indicating that they *strongly agreed* that it had been met. The portion of the survey that addressed this learning goal used a scale with five nominal values ranging from *strongly disagree* to *strongly agree*.
- Second, students who took internship courses from spring 2008 through fall 2008 were evaluated on the items most relevant to this learning objective such as *written communication, team work, and articulating another's viewpoint through verbal and non-verbal cues*. The ratings are as follows:
  - 45% of the interns received *exceptional* ratings for the items relevant to this goal.
  - 47% of the remaining interns received *exceptional* or *very good* ratings for relevant items.
  - The remaining 8% all had *satisfactory* or better ratings for the items relevant to this goal.
- Third, evaluations of final projects in CIS 379 indicate over 60% of the class achieved a grade in the "B" range or better; approximately 90% achieved a grade of "C" or better. This result is highly impressive considering the project covers an extensive range of business and information systems concepts, more than ten qualitative and quantitative analysis and modeling methods, and intensive team collaboration.

Results from the above assessment strategies indicate satisfactory achievement of this learning outcome. As such, the CIS Program Committee continues to monitor these results as well as look for other ways to evaluate learning.

In addition to general education course assessment data and information provided through program assessment analysis, Towson employs the use of national survey instruments to help gage students' academic progress. The National Survey of Student Engagement (NSSE) asks students to report on to what extent their college experience contributed to their development of various skills using four categories: *very little, some, quite a bit,* and *very much*. In 2009, students were asked to what extent their experience at Towson contributed to their knowledge and personal development of ***writing clearly and effectively***. Of 742 seniors participating, 78% reported that Towson contributed *quite a bit* or *very much* in the development of their written communication skills. Of 791 freshmen surveyed, 75% reported the same. Students were also asked to what extent their experience at Towson contributed to their personal development of ***speaking clearly and effectively***. Of 741 seniors participating, 75% reported that Towson contributed *quite a bit* or *very much* in the development of their oral communication skills. Of 790 freshmen surveyed, 67% reported the same.

II. Scientific and Quantitative Reasoning

Scientific and quantitative reasoning are developed and mastered through general education coursework and the major. TU's expectations in these areas are first articulated in two general education categories: *College Mathematics* and *Scientific Inquiry*. Attachment A includes a description of the competencies associated with each category as well as relevant student learning goals. Examples of assessment of these competencies in general education courses and the changes implemented as a result of that process are presented below.

Mathematics
There are currently 14 general education *College Mathematics* courses taught by the Department of Mathematics with tens of sections of each course offered and taught by various faculty members. The department has an assessment committee that selects random samples of sections from the multi-section courses for evaluation and, to insure consistency, controls certain parameters. To achieve this, a number of mathematical problems addressing each one of the four student learning goals in this category are proposed for each course and the instructors of the randomly selected sections use them during the semester. The problems devised to assess the goals vary in complexity and also by context. Since the assessment of a given goal is based on a combination of success rates, i.e. the average of percentages of students demonstrating reasonable understanding of a particular problem, the department considers the combined score of *50% to be an adequate measure that students met a particular learning goal*. In addition, for each course another set of two open-ended questions of general/conceptual nature addressing the learning goals are proposed by the assessment committee. Instructors of the selected sections use these in quizzes, tests, etc., and provide the committee relevant pages of students' work for review. For the two open-ended/conceptual items, *a mean of 1 is considered an adequate measure that students met a particular learning goal.* Papers are scored on a scale ranging *from 0=work shows complete misunderstanding* to *2=work clearly demonstrates a correct interpretation of the problem and a correct approach to the solution*. The following are overall results of the data collected from randomly selected sections among the 14 mathematics courses and examples of ways the department has identified improving student learning for each general education goal:

- ***Construct and evaluate logical arguments:*** 74% of students adequately met this goal in problem solving. The mean for students correctly answering the two open-ended/conceptual questions was 1.01. After review, instructors were encouraged to use more open-ended, non-routine problems when teaching the logic portion of the course. For example, instructors might provide students flawed arguments and ask them to identify flaws using truth tables.
- ***Apply and adapt a variety of appropriate strategies to solve mathematical problems.*** 74% met this goal in problem solving. The mean was 1.01 for open-ended/conceptual questions. Course committees convened a meeting of all instructors each semester to discuss various approaches to fundamental problems of the course. Instructors were encouraged to be accepting of multiple approaches to a particular problem, while highlighting various student solutions, particularly those that display "out of box" thinking.
- ***Recognize and apply mathematics in contexts outside of mathematics.*** 72% met this goal in problem solving. The mean was 1.03 for open-ended/conceptual questions. Instructors were encouraged to incorporate mathematical scenarios found in mass media and expect students to make connections to relevant course content as appropriate. Projects and extended assignments are also encouraged.
- ***Organize and consolidate mathematical thinking through written and oral communication.*** 77% met this goal in problem solving. The mean was 1.01 for open-ended/conceptual questions. Instructors were encouraged to include oral presentations as a measure of evaluating their students. They were also encouraged to require students to explain their approaches and/or thinking in writing and have students peer-review each other's written explanations to check for clarity and logical flow.

Biology
There are currently 12 general education *Scientific Inquiry* courses taught by the Department of Biology. For this category, one course will be highlighted regarding its work toward meeting one of the five student learning

outcomes of such courses: *utilize scientific vocabulary and examples to describe major ideas appropriate to a specific scientific discipline.* In BIOL 190, development of basic scientific vocabulary is essential to mastering the content of the course in order to understand the material and to demonstrate knowledge through oral and written communication. There are four opportunities for students in the course to master appropriate terminology: a genetic terms exercise, a follow-up lecture quiz on chromosomes, an essay question about chromosomes, and a final exam question used as a follow-up on the discussion about chromosomes. In the 2010 assessment report, data sets for the latter two of these assessment methods were provided. On the essay exam, average grades earned for that particular question included 54% in the A and B range, 17.5% in the C and D range, and 28.5% in the F range. For the final exam question, 33% were in the A and B range, 10% in the C and D range, and 57% in the F range. In terms of how the Biology program will incorporate these findings to improve the success of students in meeting this learning goal, the department reports it will re-evaluate questions with low scores by:

- rewriting the questions to clarify phrasing;
- developing alternative approaches to presenting materials in class; and
- developing exercises that focus on problem areas.

Mathematical and scientific competency is also imbedded in undergraduate program-level learning outcomes. Since the last SLOAR report, assessment reports and/or external reviews have been submitted by 18 programs with outcomes specific to mathematics and scientific reasoning. Fourteen programs (78%) report success in students achieving defined competencies. Three programs are changing assessment strategies related to these outcomes and data results have yet to be reported. One program indicates students are achieving the desired outcome, but data to validate are not included. (See Attachment B for a list of reports since the last SLOAR). Examples of assessment of mathematical and scientific competencies in the disciplines are presented below.

Computer Science

For the learning outcome that students can *explain the theoretical and applied principles that underlie computer science*, the department uses multiple measures in its assessment. These include an introductory course pre-test, a final project in a required introductory course (COSC 236), mapped final exam questions in two required introductory courses (COSC 236 and 237), and a graduating student exit survey. The following are results of these assessments according to the program's 2009 report and examples of actions identified to improve student learning:

- The pre-test identified students with scores below average that would either drop the course to take a recommended preparatory course or remain in the course most likely struggling to finish. Those with average or high scores usually did well in the course. Students with low scores were more closely monitored and encouraged to visit instructors during office hours. Students with higher scores on the pre-test were challenged with more stimulating course projects to enable them to continue their learning.
- For the COSC 236 final programming project, 72% of the students achieved a "C" or better and final exam mapping indicate 77% achieved a "C" or better in meeting the learning goal. These results are consistent with the national trends for students in an introductory computer science course.
- The COSC 237 final exam mapping indicated that 60% of the class who achieved a grade of "C" met the targeted learning goal. These data imply that students could be better prepared for this course coming out of the preceding course. As a result, the department is piloting a special session in its general computing class to help students that enter the major with the least programming experience. The department is also seeking a grant to fund the development of software to help initial programming courses more appealing and relevant to students.
- The exit survey given to graduating seniors in spring 2008 indicated that 90% either *agreed or strongly agreed* that this learning goal had been met for them. The portion of the survey that addressed this learning goal used a scale with five nominal values ranging from *strongly disagree* to *strongly agree*.

Nursing

Nursing research knowledge and application to clinical practice are evaluated throughout the curriculum as students integrate scientific, professional, and data based research findings into their clinical practice. Care plans, journals, written papers, conferences, and discussions provide ways for students to learn how to apply scientific evidence to one's professional practice. One of the key learning goals for this program is *utilizing research-based knowledge from nursing and the sciences as a basis for the practice of professional nursing*. This is assessed in two ways: the Terminal Evaluation of the Program for Graduating Seniors measuring students' perceptions of how well the program has prepared them to accomplish this objective, and employer surveys reflecting the relative importance placed on research utilization by employers of nursing graduates. According to the program's fall 2007 report, graduating seniors used a five-point scale in their surveys ranging from *strongly disagree* (1) and *strongly agree* (5) to evaluate this objective. The average score was a 4.42 for the December 2006 graduating class and a 4.3 for the May 2007 graduating class. Nursing students are now rated on clinical performance evaluations in two research categories: *identifies nursing situations that require further scientific investigation* and *identifies/applies research to nursing practice*. The nursing research course in the proposed new curriculum has been increased from 2 to 3

credits, reflecting the importance of this curriculum component in baccalaureate level nursing education. The need for increased attention in applying research to practice was recently affirmed by the results of an alumni survey conducted in spring 2009. Although the majority of respondents indicated that the nursing program prepared students *very well* to *excellent* in six out of the seven categories, the only category that was rated *average* or *poor* was in preparation for research activities.

In addition to general education course assessment data and information provided through program assessment analyses, Towson employs the use of national survey instruments to help gage students' academic progress. The National Survey of Student Engagement (NSSE) asks students to report on what extent their experience at Towson contributed to their development of various skills using four categories: *very little, some, quite a bit,* and *very much*. In 2009, students were asked to what extent their experience at Towson contributed to their knowledge and personal development of **analyzing quantitative problems**. Of 742 seniors participating, 71% reported that Towson contributed *quite a bit* or *very much* in the development of their quantitative reasoning skills. Of 786 freshmen surveyed, 72% reported the same.

III. Critical Analysis and Reasoning

Critical analysis and reasoning skills are developed and mastered through general education coursework and the major. Expectations in these areas are first articulated throughout the Towson's general education requirements as courses are offered in all twelve categories. (See Attachment A for a list of student learning goals for each of the categories.)

Critical analysis and reasoning competencies are also imbedded in undergraduate program-level learning outcomes. Since the last SLOAR report, assessment reports and/or external reviews have been submitted by 45 programs with outcomes specific to critical analysis and reasoning. Thirty-eight programs (84%) report success in students achieving defined competencies. Five programs are changing assessment strategies related to these outcomes and data results have yet to be reported. Two programs indicate they are meeting expectations, but data to validate are not included. (See Attachment B for a list of reports since the last SLOAR). Examples of assessment of critical analysis and reasoning competency in the disciplines are presented below.

Art Education
One of six key learning goals in this program includes whether students **demonstrate knowledge of art criticism and aesthetics as applicable in K-12 Art Education.** According to 2008 and 2009 assessment reports, information collected about these skills has been based upon two measures. First, students in the Professional Seminar (ARED 485) complete a program assessment form containing questions related to this learning goal; and second, students take the Praxis II Exam which measures learning in art education including art criticism and aesthetics. Using a rubric with a four-point scale ranging from *poor* (1) to *excellent* (4), students were asked to rate their success with the following experiences/assignments designed to help them achieve these skills. The average scores were:
- *Oral/written discussion in art history courses -*   2008:   3.4   2009:   3.6
- *Critique sessions in studio courses -*   2008:   3.5   2009:   3.7
- *Worksheets dealing with art criticism and aesthetics -*   2008:   3.1   2009:   2.8
- *Art criticism/aesthetics paper (ARED 479) -*   2008:   3.5   2009:   3.5
- *Praxis II Exam -*   2008:   2.9   2009:   3.1

Overall, students in the senior seminar rated their success in meeting this learning goal with an average score of 3.5 in 2008 and a 3.6 in 2009 (between *good* and *excellent*). In response to comments on the 2008 surveys by students questioning the importance of studying art criticism and aesthetics, the importance of these topics have been clarified and emphasized more in subsequent years. Regarding the second form of measurement, all students in 2008 passed the Praxis II Exam achieving at least *minimally adequate* ratings. In addition, they scored two percentage points above the national average in sections addressing criticism and five percentage points above the national average in portions regarding aesthetics (scoring *better than adequate*). However, although all students passed the Praxis II Exam with *minimally adequate* ratings in 2009, they scored one percentage point less in both the criticism and aesthetics categories. In order for these skills to be emphasized more in the future, the program began collecting ARED 479 (Methods of Teaching Art) art criticism and aesthetics papers and assessing them separately. Using a rubric with a four-point scale ranging from *poor* (1) to *excellent* (4), the average score of papers in 2009 was 3.91. There were no scores below 2. A more developed rubric is being designed for subsequent years.

Political Science
One of its four key learning goals, the Political Science program strives for students **to develop critical thinking skills by being able to identify historical, cultural, and socio-economic assumptions that underlie politics and explain how they affect perceptions and actions**. Assessment of this goal is done in two ways: student surveys and

portfolio reviews. The Student Satisfaction Survey given during the senior seminar is the equivalent of an exit interview. Through a series of 21 questions, the survey specifically addresses each of the program learning goals and asks seniors to compare their acquisition of learning benchmarks relative to their attainment on entering Towson. Using ratings ranging from *low* (1) to *high* (5), students were asked to assess knowledge gained on the following information. The following are results in scoring critical thinking competency when students entered Towson, exited Towson and the differences in the average scores:

- *Analyzing theoretical works in political science -*   2007: 2.5, 4.2, +1.7   2009: 2.1, 4.0, +1.9
- *Analyzing statistical data -*   2007: 1.7, 3.9, +2.2   2009: 1.9, 3.6, +1.7
- *Evaluating political and policy arguments -*   2007: 2.9, 4.5, +1.6   2009: 2.3, 4.4, +1.1
- *Making historical & modern political connections -*   2007: 3.2, 4.7, +1.5   2009: 2.6, 4.4, +1.8

On average, students self-report high attainment on almost all of the benchmarks. Throughout their senior seminar, students are also asked to maintain portfolios consisting of major papers written throughout the course. Portfolio reviewers assigned ratings ranging from *unsatisfactory, satisfactory* and *above average*:

- In the category of *identify assumptions*, although there was decrease in *satisfactory* scores from 62% in 2005 to 48% in 2009, there was a corresponding increase in *above average* scores from 27% to 43%.
- For *explain results,* there was also a decrease in *satisfactory* scores from 73% in 2005 to 52% in 2009 with an increase in *above average* scores from 23% to 41%.

In reviewing the assessment data, the faculty teaching the senior seminars concluded that the program needed to address issues in research and writing skills. In 2009, a significant change was introduced into the curriculum to address how students were ill-prepared for the rigor of the seminar. Previously, students were required to take a total of 21 hours in upper division electives, bound only by the requirement that they take at least one course in three of four concentrations. Students must now take at least one specified upper division course in four of six core areas. The senior seminars have been redefined so there is now one generic seminar for each of the six core areas. Since the core area courses require specific lower division prerequisites, the new curriculum guarantees that a student in a seminar must have taken, at minimum, one related lower division course, one related upper division course, and the research methods course prior to registering for the senior seminar.

Undergraduate Education Programs

The university's 21 undergraduate programs associated with NCATE teacher education unit abide by the 10 standards set by the Interstate New Teacher Assessment and Support Consortium (INTASC).   These standards reflect the professional consensus of what beginning teachers should know and be able to do. One of the standards involves the prospective teacher's use of critical analysis and reasoning in terms of assessing student learning: Standard 8 - ***The teacher understands and uses formal and informal assessment strategies to evaluate and ensure the continuous intellectual, social, and physical development of the learner.*** Teaching candidates' skills are assessed in a multitude of ways using both direct and indirect measures. For example, the following data was detailed in a fall 2007 College of Education assessment report:

- Through a portfolio review in a capstone course, external reviewers assessed the use of template lesson plans by teacher candidates to document their impact on student learning. Using a five-point scale ranging from *unsatisfactory* (1) to *distinguished* (5), candidates demonstrated at least a *proficient* ability to make data-driven decisions regarding instruction for their students with increasing average scores of 4.41 in fall 2005, 4.56 in spring 2006, and 4.59 in fall 2006.
- Results of graduating students' surveys of undergraduate programs' effectiveness show increasing agreement that students felt adequately prepared to use assessment methods to measure student learning. Using a five-point scale ranging from *strongly disagree* (1) to *strongly agree* (5), average scores taken after graduation ranged from 4.29 in fall 2005, 4.26 in spring 2006, to 4.49 in fall 2006.
- In a survey measuring graduates' first year performance, employers reported that they agreed graduates were able to effectively use assessment strategies to prove and improve student learning. Using a five-point scale with values ranging from *strongly disagree* (1) to *strongly agree* (5), average scores ranged from 4.26 for 2003 graduates, 4.60 for 2004 graduates, to 4.44 for 2005 graduates.

There are numerous examples of data-driven changes made in the education programs in recent years. Some examples include the addition of course in the Special Education program to respond to feedback from interns expressing concern about their preparation to meet the needs of children with exceptionalities, and changes to course content, such as the addition of a field experience to the Art Education program, that contribute to teaching candidates' better use of assessment strategies to create positive impact on student learning.

In addition to assessment of student learning in general education courses and undergraduate programs, Towson uses the Collegiate Learning Assessment (CLA) test to collect direct information on freshmen and seniors' competencies in writing, critical analysis and reasoning. The CLA presents realistic problems that students analyze and use to support an argument or perspective. Multiple sources are used that vary in relevance to the task, creditability, and other characteristics. Students' written responses are graded to assess their abilities to think critically, reason analytically, solve problems, and communicate clearly and cogently. Reports (released by the

Council for Aid to Education that analyzes CLA data for participating colleges) compare students' performance in these tasks with those in other participating colleges. Results from Towson's first administration of the tests conducted in AY 2010 showed that freshmen and seniors scored above the mean score nationally in both tasks. Among 153 colleges administering the CLA, Towson freshmen placed in the 78th percentile. Among 159 colleges participating, Towson seniors ranked in the 64th percentile.

The CLA also uses a value-added analysis to measure an institution's contribution, or value added, to the development of students' competencies during their undergraduate careers. The CLA uses the Hierarchical Linear modeling (HLM) to calculate the institutional value-added score indicating the degree to which the observed senior mean CLA score meets, exceeds, or falls below expectations. The expected performance is established using the seniors' Entering Academic Ability (EAA) scores and the mean CLA performance of freshman as a control for selection effects not covered by EAA. Ratings are placed on a standardized (z-score) scale and assigned performance levels: *well below expected* (scores below -2.00), *below expected* (between -1.00 and -2.00), *near expected* (between -1.00 and +1.00), and *above expected* (between +1.00 and +2.00). Results from AY 2010 showed that seniors performed at *near expected* levels. The value-added score of .14 ranked students in the 56th percentile. Towson plans to continue using the value-added analysis as a benchmark for student competency in critical analysis and reasoning.

Towson also employs the use of the National Survey of Student Engagement (NSSE) which asks students to report on what extent their experience at Towson contributed to their development of various skills using four categories: *very little, some, quite a bit,* and *very much*. In 2009, students were asked about their knowledge and personal development in **thinking critically and analytically**. Of 741 seniors participating, 86% reported that Towson contributed *quite a bit* or *very much* in the development of their critical thinking skills. Of 789 freshmen surveyed, 83% reported the same. In addition, the NNSE instrument helps to assess areas in which coursework emphasized particular mental activities for students to master. Using the same ratings system, participating students indicated that coursework emphasized *at least quite a bit* or *very much* among the following activities:
- *Memorizing facts, ideas, or methods from courses and readings* – 67% seniors, 79% freshmen
- *Analyzing the basic elements of an idea, experience, or theory* – 85% seniors, 82% freshmen
- *Synthesizing and organizing ideas, information, or experiences* – 75% seniors, 71% freshmen
- *Making judgments about the value of information, arguments, or methods* – 72% seniors, 72% freshmen
- *Applying theories or concepts to practical problems or in new situations* – 83% seniors, 78% freshmen

IV. Technological Competency

Expectations with respect to technological competency center on information literacy and managing the array of technological resources available to use information effectively. Within the general education program, these expectations are developed in the *Using Information Effectively* category. (See Attachment A for a list of student learning goals in this category.) The majority of courses that include course objectives and learning outcomes related to information literacy and technology competencies do include key research/presentation assignments which feature and practice these skills, including digital or print portfolios. These assignments focus on mastering the use of general and discipline-specific tools, and resources, including the use of data sets and/or specialized software, and citation styles. To ensure that students meet information literacy goals, teaching faculty and librarians collaborate regularly, especially in the instruction *of Using Information Effectively* courses, as well as upper level research methods and technical writing courses. Library faculty are guided by the Association of College and Research Libraries' (ACRL) *Information Literacy Competency Standards for Higher Education,* which defines and contextualizes information literacy as "the basis for lifelong learning… common to all disciplines, to all learning environments, and to all levels of education." In FY 2008, more than 300 information literacy sessions were taught by librarians in academic courses across the university curriculum. While most students enter Towson with technology skills, additional technological support and instruction is available to facilitate student learning. Almost twenty thousand requests for assistance were fielded by Student Computing Services staff. The Office of Technology Services offered over five hundred self-help documents, over three hundred training sessions, and fifty movie tutorials available for download.

Information literacy and technological competency are imbedded in undergraduate program-level learning outcomes. Since the last SLOAR report, assessment reports and/or external reviews have been submitted by 31 programs with outcomes specific to information literacy and technological competencies. Twenty-nine programs (94%) report success in students achieving these. Two programs are changing assessment strategies related to these outcomes and data results have yet reported. (See Attachment B for a list of reports since the last SLOAR). Examples of assessment of these competencies in the disciplines are presented below.

Business Administration and E-Business
One of the student learning goals for majors in these programs is **the use of software for writing, spreadsheets, databases, presentations, and decision support**. There are three ways the program assesses whether this goal is being met. In required course MNGT 365, the first assessment measures skills to *develop graphic, spreadsheet and financial analysis support for a position taken* based on students' spreadsheets submitted for either homework assignments or projects. According to the 2008 assessment report, 90% of students showed an acceptable level of competency in this area. The second measurement used is the results of employer evaluations of the student internship, BUSX 460. Evaluations of the practicum taken from spring 2004 through spring 2007 used a rubric with scores ranging from *poor* (1) to *excellent* (5). A score of 3 is *satisfactory*. Students' average rating on this particular ability was 4.84 in AY 2004-05, 4.69 in AY 2005-06, and 4.68 in AY 2006-07. Employers' evaluation of business administration and e-business interns shows students' competency in these skills as near *excellent*. The third assessment method used is the Educational Benchmark, Inc. (EBI) Student Satisfaction Survey, which uses a 7-point scale: *very poor* (1) to *exceptional* (7). In the learning outcome of *effective use and management of technology*, the average score increased from 4.92 (*good*) in AY 2005-06 to 5.01 (*very good*) in AY 2006-07. Overall, the Business Administration and E-Business programs state that since the findings are satisfactory in assessing this set of skills, current practices will continue. Nonetheless, assessment systems continue to help the program evolve. For example, faculty created an online department depository of assignments and teaching materials to help faculty take advantage of best practices. The program has also acquired two DVD recorders to make it easier for students to review and self-assess their presentation skills.

Geography
One of the student learning outcomes for the Geography & Environmental Planning and Geography & Land Surveying programs is the **development of spatial reasoning and problem solving skills**. The goal for students to demonstrate technological competency is imbedded in this learning outcome so that graduates will be successful in their discipline. Among the assessment methods used is a portfolio review that students maintain as they progress in the major. There are 13 assessment criteria that are measured in these reviews. In a 2009 assessment report, the department detailed the results of reviews completed in 2000, 2006 and 2008 and how this data has been used to improve and maintain high quality student learning. For example, one of the assessment criteria seeks to measure students' *computer literacy by using computers for document preparation, data analysis, and/or graphical and cartographical representation of data*. Using three nominal values of *unsatisfactory, satisfactory/average* and *above average to exceptional*, the department found the number of *unsatisfactory* ratings decreased from 6.7% in 2000 to 0% in 2008 and the number of *above average to exceptional* ratings increased from 6.7% in 2000 to 60% in 2008. Since the earlier assessments revealed that geography majors were not meeting the learning objectives for mastery of cartographic, graphical, quantitative, and special analysis skills as evinced by the portfolio submissions, the department took the following steps:
- Made two strategic hires of full-time tenure track faculty to redress curriculum deficiencies in cartography and spatial analysis.
- Required students to use and interpret statistical geographical data beginning with lower-division courses.
- Revised the Quantitative Methods in Geography course to provide students with more feedback and instructions to master statistical concepts and operations.
- Required maps, graphs, tables, and statistics (descriptive and inferential) to be used as elements for projects, reports, and research assignments in upper division geography courses.

Undergraduate Education Programs
The university's 21 undergraduate programs associated with NCATE teacher education unit abide by the 10 standards set by the Interstate New Teacher Assessment and Support Consortium (INTASC). These standards reflect the professional consensus of what beginning teachers should know and be able to do. One of the standards involves the prospective teacher's use of communication and technology: Standard 6 **- the teacher uses knowledge of effective verbal, non-verbal, and media communication techniques, with focus on the instructional integration of technology, to foster active inquiry, collaboration, and supportive interaction in the classroom**. Teaching candidates' skills are assessed in a multitude of ways using both direct and indirect measures. For example, the following data was detailed in a fall 2007 College of Education assessment report:
- Through a portfolio review in a capstone course, external reviewers assessed whether teacher candidates knew and demonstrated professional and pedagogical knowledge and skills. Using a five-point scale with values ranging from *unsatisfactory* (1) to *distinguished* (5), candidates were rated as having demonstrated at least a *proficient* ability through examples presented in their portfolios of their use of technology to support teaching and learning. Scores were consistent with ratings of 4.56 in fall 2005, 4.43 in spring 2006, and 4.49 in fall 2006 – averaging in the 4.5 range.
- Assessments of capstone internships by mentor teachers also showed that students demonstrated being *proficient* in their integration of technology in the classroom. Using the same five-point scale, scores stayed within the same 4.5 range: 4.51 in fall 2005, 4.51 in spring 2006, and 4.44 in fall 2006.

- Similarly, assessments of capstone internships by university supervisors confirmed that students were *proficient* in their instructional integration of technology. Using the same five-point scale as above, ratings mirrored a similar 4.5 range: 4.51 in fall 2005, 4.48 in spring 2006, and 4.51 in fall 2006.

There are numerous examples of data-driven changes made in the education programs in recent years. One included content restructuring and emphasis to increase effective use of technology in instructing K-12 students among physical education teacher candidates. Another addressed the lack of diversity in internship placements for special education candidates allowing them to observe and utilize technology best practices, especially among those with no access to a technology lab dedicated solely to special education.

In addition to general education course assessment data and information provided through program assessment analysis, Towson employs the use of national survey instruments to help gage students' academic progress. The National Survey of Student Engagement (NSSE) asks students to report about their development of various skills using four categories: *very little, some, quite a bit,* and *very much*. In 2009, students were asked to what extent their experience at Towson contributed to their knowledge and personal development of **using computing and information technology**. Of 743 seniors participating, 81% reported that Towson contributed *quite a bit* or *very much* in the development of their information literacy and technological competencies. Of 790 freshmen surveyed, 78% reported the same. Towson also participates in the Educause Center for Applied Research (ECAR) Study of Undergraduate Students and Information Technology survey. Using a five-value scale ranging from *strongly disagree* to *strongly agree*, students report on how they use technologies and the impact that technology has on their academic experience. For example, 45% of seniors and 49% of freshmen participating in the 2010 study agreed with the following statement: *By the time I graduate, the IT I have used in my courses will have adequately prepared me for the workplace.* Other areas of the survey allow students to indicate skill levels using particular technology or information literacy. Using a five-nominal values ranging from *not at all skilled* to *expert*, students rated being at least *fairly skill* or above among the following:
- *Using spreadsheets (Excel, etc.)* – 82% seniors, 68% freshmen
- *Using presentation software (PowerPoint, etc.)* – 96% seniors, 94% freshmen
- *Using the college/university library website* - 97% seniors, 85% freshmen
- *Using the internet to effectively and efficiently search for information* - 96% seniors, 95% freshmen
- *Evaluating the reliability and creditability of online sources of information* - 97% seniors, 89% freshmen

Part Three: Evolution of Assessment Activities

With the approval of its updated mission statement in December 2010, TU formally established university-level learning outcomes. The updated mission statement now includes the following language:

> Towson University, as the state's comprehensive Metropolitan University, offers a broad range of undergraduate and graduate programs in the liberal arts, sciences, arts and applied professional fields that are nationally recognized for quality and value. Towson emphasizes excellence in teaching, scholarship, research and community engagement responsive to the needs of the region and the state. *In addition to educating students in the **specialized knowledge of defined fields**, Towson's academic programs develop students' capacities for **effective communication**, **critical analysis**, and **flexible thought**, and they cultivate an **awareness of both difference and commonality necessary for multifaceted work environments** and for **local and global citizenship and leadership***.

The items in italics reflect the competencies and expectations of all Towson graduates. A university-level assessment process is being developed by the Office of Assessment. Because assessment practices at Towson are decentralized, the assessment process will rely largely on its seven-year program assessment processes already in place. Each program will address the university-level learning outcomes as a part of their program assessment reports, as well as their discipline specific outcomes. The current schedule of assessment reports and the external review processes for undergraduate programs is presented in Attachment C.

Course Level Assessment

In 2008, the Provost's Office appointed a General Education Review Committee chaired by the dean of the College of Liberal Arts. The *General Education Review Committee Report Fall 2008* proposed a new University Core to replace the existing general education requirements. To be implemented in fall 2011, the requirements align with the university's mission and reflect current assumptions about the 21st century learning goals for undergraduate education. A greater emphasis is placed on global perspectives and courses and/or activities reflecting Towson's commitment to community engagement and its identity as a metropolitan university. The University Core is distinctive, yet aligned with the courses required by MHEC. Most importantly, the requirements of the University Core are no longer bundled into the first two years before students engage in the major field of study. Rather, the University Core recognizes the value of offering students the opportunity to build a strong liberal learning foundation throughout their undergraduate education.

The University Core establishes specific learning outcomes. These include the following:

1. Students will display competency in essential skills required of a college graduate by:
>   a. Writing clearly and persuasively for a variety of purposes and for different audiences, revising and improving such texts.
>   b. Making articulate, persuasive, and influential presentations.
>   c. Reading, interpreting, analyzing and evaluating written discourse.
>   d. Understanding mathematical principles and applications at or above the level of college algebra
>   e. Demonstrating knowledge of methods used to collect, interpret, and apply scientific data.
>   f. Integrating ideas and concepts in order to make judgments based on evidence.
>   g. Researching a topic, develop an argument and organize supporting details.
>   h. Using software as appropriate for writing, for spreadsheets, for statistical analysis, for calculations, or for presentations.

2. Students will explore and integrate knowledge in order to understand how various disciplines interrelate by:
>   a. Articulating relevant basic assumptions, concepts, theoretical constructs and factual information of a discipline.
>   b. Understanding and applying relevant discipline-specific methodologies and strategies of inquiry.
>   c. Applying appropriate critical-thinking/problem-solving skills and communication skills in discipline specific contexts.
>   d. Identifying some of the fundamental similarities and differences among various fields of study.
>   e. Recognizing the complexity and multiplicity of methods and standards of inquiry as well as the diversity of opinion among informed inquirers within and among different fields of study.

3. Students will use inquiry and critical judgment to make decisions by:
>   a. Reflecting and evaluating claims and evidence (rather than merely reporting information).
>   b. Thinking in complex terms that move beyond an either/or binary approach.
>   c. Demonstrating knowledge of issues that affect people across multiple countries and continents.
>   d. Understanding mathematical principles and applications at or above the level of college algebra.

4. Students will identify, interpret, evaluate, and integrate human values by:
>   a. Demonstrating an understanding and application of human values (e.g., moral, ethical, aesthetic).
>   b. Demonstrating an understanding of competing human values as evidenced by cultural, socio-economic or other differences.

c. Demonstrating an understanding of the complexity and multiplicity of methods of inquiry and diversity of opinion among different disciplines.

5. Students will reflect upon and demonstrate appreciation for the lives of people from cultures and situations other than their own, and they will exhibit global awareness, by:

a. Engaging intellectually and seeking to understand the experiences and views of people with different cultural backgrounds and beliefs, whether in their own country or abroad.
b. Explaining their own cultural perspective as well as make a meaningful comparison with the perspectives of others.
c. Demonstrating knowledge of issues that affect people across multiple countries and continents.
d. Creating or participating in projects and assignments in which they can demonstrate their ability to interpret, evaluate, compare, and critique the views and experiences of their own and other cultures.

Students are required to complete fourteen courses to accommodate the University Core. The courses and related course goals are included in the following:

Fundamentals - ordinarily taken during the first year, these courses emphasize writing, mathematics, and creativity, and include the new Towson Seminar designed to introduce students to college-level liberal learning.
Towson Seminar (3 credits) course goals (must address first four, last two are optional):
- Prepare and present a compelling substantive interpretation, argument, and/or analysis of a problem or issue in a research paper.
- Gather and use academic resources effectively and according to the standards and rules of academic integrity in formulating and presenting a substantive interpretation, argument, and/or analysis of a problem or issue.
- Understand and evaluate the nature and possible causes and implications of events, behavior, problems, and issues from an informed and intellectually balanced perspective.
- Connect concepts and empirical evidence in logically coherent, valid, and compelling ways.
- Understand and appreciate social and cultural differences among individuals, groups, and societies and to engage and learn from others with different backgrounds and perspectives in constructive ways, when appropriate to the topic.
- Participate responsibly and effectively in group efforts to address and solve problems, where appropriate within the course format.

English Composition (3 credits) course goals (must address all):
- Write academic essays that effectively and appropriately respond to specific rhetorical situations.
- Improve literacy skills, including the ability to read and analyze a variety of texts.
- Organize an essay around a sound central idea supported by relevant material.
- Organize supporting material with a discernable and logical plan.
- Present ideas in complex and effective sentences relatively free from mechanical errors.
- Support and share ideas and opinions with confidence.

Mathematics (3 credits) course goals (must address all)**:**
- Construct and evaluate logical arguments.
- Apply and adapt a variety of appropriate strategies to solve mathematical problems.
- Recognize and apply mathematics in contexts outside of mathematics.
- Organize and consolidate mathematical thinking through written and oral communication.

Creativity & Creative Development (3 credits) course goals (must address all):
- Apply in practice a range of expression within a specific art while exhibiting rigorous standards of technique.
- Demonstrate content knowledge through an analysis and synthesis of representative examples, ideas and skills.
- Articulate by means appropriate to the discipline the ways in which theory and practice meet in the creation of the specific art form. These means may include verbal, written and observable products and or presentations.
- Show how history, aesthetics, form and composition, techniques and/or pedagogy contribute to the process of creative development.

Ways of Knowing - ordinarily taken in the first two years of college study, these courses emphasize critical analysis and reasoning.
Arts & Humanities (3 credits) course goals (must address all):
- Discuss the context and structures of cultural traditions [in terms] of literature, art, music, culture, or society.
- Describe important movements and processes that have affected the cultural heritage of a particular group.
- Use methodologies associated with the study of cultural traditions in the arts and humanities to reflect on the experiences of a particular society.
- Engage in a critical assessment of how the student's own experience has been affected by particular cultural traditions in the arts and humanities.

Social & Behavioral Sciences (3 credits) course goals (must address all):
- Articulate relevant basic assumptions, concepts, theoretical constructs and factual information of the social and behavior sciences.
- Demonstrate an understanding of relevant social and behavioral science methodologies.
- Apply appropriate problem-solving skills in discipline specific contexts.
- Apply disciplinary knowledge from the social and behavioral sciences to contemporary ethical or social issues.

Biological & Physical Sciences with laboratory (4 credits) and *Biological & Physical Sciences, with or without laboratory* (**3-4** credits) course goals (must address all):

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- Utilize scientific vocabulary and examples to describe major ideas appropriate to a specific scientific discipline.
- Use quantitative reasoning to analyze and/or support scientific information.
- Identify, describe critique, respond to, and construct the various components of the scientific process such as observations, inferences, operational definitions, aspects of scientific design, conclusions, control of variables, etc.
- Explain scientific issues of current importance to society within scientific, technological, historical, societal and ethical contexts.

Writing in a Chosen Field - ordinarily taken in the third year of college study, these courses emphasize the importance of writing across disciplines.

Advanced Writing Seminar (3 credits) course goals (must address all):
- Recognize and employ models and practices of written communication specific to a particular discipline or profession.
- Recognize and employ techniques of formatting and documentation appropriate to a particular discipline or profession.
- Integrate material effectively from outside sources into their own prose.
- Analyze and evaluate complex discipline-based claims and current research questions.
- Demonstrate a developed ability to compose clear, effective prose, including through the practice of revision.
- Produce professional prose that follows accepted conventions of grammar, punctuation, and style.

Perspectives - which ordinarily could be taken between the first and final years of an undergraduate education, these courses emphasize Towson's commitment to expanding and deepening students' understanding of the world around them - including metropolitan, national, and global perspectives. Issues of diversity, difference, and ethics cutting across a range of disciplines would be emphasized as well.

Metropolitan Perspectives (3 credits) course goals (must address all):
- Explain characteristic features of a metropolis and explore how persistent problems, institutional transformations, and creative expression may emerge from this environment.
- Demonstrate their ability to interpret, evaluate, compare, and critique the views and experiences of particular social, economic, and cultural groups in the metropolis.
- Articulate how an individual or a group may have access to influencing public decisions in the metropolis, how they may pursue collective ends, or how they may contribute to community well-being.
- Apply critical analysis to a specific topic or question in order to delineate constituent elements of the situation, to define challenges that are faced, and to examine the potential for constructive resolution or development.
- Recognize the different methods and standards of inquiry that lie behind the evidence they use to develop an argument and be able to relate that understanding to differences of opinion among informed commentators or across different fields of study.

The United States as a Nation (3 credits) course goals (must address all):
- Speak to what characterizes the United States as a nation, whether through consideration of American culture and society primarily as a distinctive tradition or through comparison and contrast with other societies and cultures.
- Define one or more major issues involving American experience past or present and to discuss more than one perspective on those issues.
- Demonstrate a reasonable command of specific knowledge pertinent to the central issues of the course and should demonstrate an ability to use that knowledge in a substantive analysis applying their own judgments and expressing their own understanding.

Global Perspectives (3 credits) course goals (must address all):
- Learn how to examine the influence of major forces of global change such as social, cultural, religious, economic, political, and technological processes and patterns in the world.
- Acquire an understanding of the global or world context and of the major processes and patterns in the world that are transforming relations among different nations and/or cultural groups.
- Develop a better understanding of how their own society relates to the global context and become better prepared to make decisions that reflect this understanding.

Diversity & Difference (3 credits) course goals (must address all):
- Discuss some of the ways in which group distinctiveness is defined in social contexts.
- Demonstrate understanding of a perspective other than their own (even if they are members of a group whose experience is emphasized in the course).
- Present and respond to a position with which they differ in a fair and balanced argument.
- Define at a general level some of the challenges and opportunities presented by the existence of diversity and difference.
- Articulate their own outlook in relation to the topics discussed and to make explicit their associated beliefs and assumptions.

Ethical Issues & Perspectives (3 credits) course goals (must address all):
- Gather and analyze evidence from a variety of sources pertinent to the issue under study, including materials that might support opposing points of view.
- Evaluate the logic of persuasive rhetoric in arguments for all major positions on a topic and formulate cogent counter-arguments to each one.
- Articulate an understanding of the ethical dimensions of significant issues or dilemmas under study.
- Construct and assess possible solutions to problems or dilemmas within an informed ethical and societal context.
- Communicate arguments and conclusions effectively and clearly.

Assessment of general education offerings had lapsed at TU under a prior administration. In fall 2009, the general education course recertification process was reinstituted. All approved general education courses have been placed in a five-year recertification cycle. The university's general education recertification process requires developing assessment plans and reporting results to be compared against the overall general education objectives and learning goals. Courses that successfully demonstrate adherence are recertified for an additional five-year period. Courses not recertified can no longer fulfill general education requirements.

Assessment plans, reports, and analysis of the first year of data collection for two general education categories were due in summer 2010. These included *College Mathematics* and *Scientific Inquiry*. The results of this process have been included in Part Two of this report. Courses included in *Writing for a Liberal Education* submitted assessment plans in summer 2010 and assessment reports on the results of these plans are due in September 2011. Moving forward with the new University Core general education curriculum, collection of course assessment plans and reports under the new system will commence fall 2011. The majority of courses in the old curriculum have sought approval to be included under the new curriculum. Those courses that did not seek certification under the new system will no longer be eligible to fulfill general education requirements effective fall 2013.

Assessment plans for the new University Core are being phased-in to the recertification cycle. The current schedule for plans, data collection and reports is as follows:

University Core Phase in Plan for Course Recertification

	Assessment Plans Due	Data Collection to Begin	Report Due
Arts & Humanities *Social & Behavior Sciences*	February 1, 2012	Summer 2012	June 2013
Metropolitan Perspectives *The United States as a Nation* *Global Perspectives*	September 1, 2012	Spring 2013	June 2014
Towson Seminar *Diversity Difference* *Ethical Issues & Perspectives*	December 1, 2012	Summer 2013	June 2015
Mathematics *Biological & Physical Sciences,* * with laboratory* *Biological & Physical Sciences,* * with or without laboratory* *English Composition*	April 1, 2013	Summer 2013	June 2016
Creativity & Creative Development *Advanced Writing Seminars*	December 1, 2011	Summer 2012	June 2017

For an overview of how these University Core course goals relate to learning outcomes established by MHEC and are aligned with the new university mission, see Attachment D. This template will be used in the next academic year for faculty to indicate how courses fall under MHEC standards and the new university mission statement.

Towson General Education Categories	Towson General Education Course Learning Goals	Written & Oral Communication	Scientific & Quantitative Reasoning	Critical Analysis & Reasoning	Information Literacy & Technology Competency
Gen Ed I. Skills for Liberal Learning					
Writing for a Liberal Education Courses explore ways of writing and thinking in the branches of knowledge and on developing rhetorical strategies for successful college-level expository writing.	Write a paper that has a recognizable purpose or controlling idea.	X			
	Show evidence in the paper that the source texts were analyzed and that those readings shaped the student's writing.	X		X	
	Organize supporting materials appropriately and demonstrate depth of discussion in the paper.	X		X	
	Exhibit a competent command in the paper of phrasing and word choice.	X			
	Write in sentences that are grammatically correct.	X			
Using Information Effectively Courses focus on 1) gathering information from print, human, and electronic sources, 2) critically evaluating information, 3) using it effectively in writing and speaking, and 4) learning about the various approaches to information in different branches of knowledge.	Identify potential sources of information related to a given field of study.	X			X
	Find information that is appropriate for and relevant to a given field of study.	X		X	X
	Explain information and ideas clearly visually, orally, and in writing.	X			X
	Organize information visually, orally, and in writing to present a sound central idea supported by relevant material in a logical order.	X		X	X
	Use information to answer questions and/or solve problems.	X		X	X
	Use technology to analyze and summarize information and/or communicate it to others.	X			X
	Use the work of others accurately and ethically.	X			X
College Mathematics Courses in this category treat concepts and skills in the mathematical sciences at the level of college algebra and above. They emphasize both theoretical foundations and problem solving applications.	Construct and evaluate logical arguments.		X	X	
	Apply and adapt a variety of appropriate strategies to solve mathematical problems.		X	X	
	Recognize and apply mathematics in contexts outside of mathematics.		X	X	
	Organize and consolidate mathematical thinking through written and oral communication.		X	X	
Advance Composition Courses in this category address 1) the discourse models and practices important to a specific discipline and 2) the techniques of formatting, reporting, validation and documentation required to write successfully within the discipline.	Write a paper that is adequately sophisticated, nuanced, and complex for an upper level paper.	X			
	Support the main idea in the paper by correct, strong, and germane evidence.	X		X	
	Show strong reasoning and analysis in the paper and avoid common fallacies of logic.	X		X	
	Write clear and logically related paragraphs, sentences, clauses, and phrases within sentences.	X			
	Utilize correct words, phrases, and disciplinary vocabulary, emphasize when needed, and avoid clichés.	X			
	Vary sentence lengths, leads, and syntaxes and utilize tone and point of view conventional to the discipline.	X			
	Avoid errors in grammar, punctuation, mechanics, and spelling.	X			
	Document sources using format standard to the discipline.	X			
Creativity and Creative Development Courses in this category involve students in a specific creative activity, emphasizing symbolic, affective and imaginative thinking. Students' work must reflect current scholarship in the field, provide reference to theoretical frameworks and methods, and explore the critical standards central to the genre or medium.	Apply expressive range and technical threshold standard of rigor.				
	Demonstrate content knowledge through an analysis and synthesis of discipline specific ideas and skills.			X	
	Articulate the balance of theory and practice for application in the creative process by verbal, written and nonverbal observable products.			X	
	Apply history, aesthetics, composition, techniques and/or pedagogy in the process of creative development.			X	
II) Gen Ed II. Contexts for Liberal Learning					
Scientific Inquiry These courses help students understand the	Utilize scientific vocabulary and examples to describe major ideas appropriate to a specific scientific discipline.		X		

Category	Outcome	C1	C2	C3	C4
quantitative and predictive nature of the natural sciences as well as the nature of the scientific method. In addition, certain courses explore the historical development and the structural nature of the subject. Other courses develop one or more issues of current importance to society and place them in broad scientific, technological, societal and ethical contexts.	Use quantitative reasoning to analyze and/or support scientific information.		X	X	
	Identify, describe critique, respond to, and construct the various components of the scientific process such as observations, inferences, operational definitions, aspects of scientific design, conclusions, control of variables, etc.		X	X	
	Demonstrate knowledge of the historical development and the structural nature of a specific scientific discipline.		X		
	Explain scientific issues of current importance to society within scientific, technological, societal and ethical contexts.		X	X	
American Experience: Arts and Humanities These courses engage students in a critical assessment of how their own experience is affected by American traditions in the arts and humanities or how the methodologies of these disciplines can help them better understand American culture.	Discuss the context of the American experience in terms of literature, art, music, culture, and society.				
	Describe important movements and processes that have affected the American experience.				
	Interpret oral, written and visual materials to explain the impact of American traditions and culture on American society.			X	
	Use methodologies of American traditions in the arts and humanities to reflect on American society.			X	
	Engage in a critical assessment of how the students' own experience is affected by American traditions in the arts and humanities.			X	
American Experience: Contemporary Issues These courses engage students in a critical assessment of how social and behavioral studies of American experience extend their understanding of themselves and others, or how the methodologies of the social and behavioral sciences help them better understand American culture, behavior, or social and political institutions.	Apply the methodologies of social and behavioral sciences to better understand American culture, behavior, and social and political institutions.			X	
	Describe the critical social and cultural issues that have affected the American experience.				
	Use methodologies of the social and behavioral sciences to reflect on American culture, behavior, and social and political institutions.			X	
	Engage in a critical assessment of significant issues in contemporary American experience.			X	
	Recognize the role and power of social and behavior processes in the American experience.				
Western Heritage: Arts and Humanities These courses engage students in understanding how the Western Heritage marks their contemporary experience positively or negatively.	Discuss the context of Western heritage in terms of literature, art, music, culture, and society.				
	Describe important movements and processes that have affected the Western heritage experience.				
	Interpret oral, written and visual materials to explain the impact of Western traditions and culture on American society.			X	
	Use methodologies of Western traditions in the arts and humanities to reflect on Western society.			X	
	Engage in a critical assessment of how their own experience is affected by Western traditions in the arts and humanities.			X	
Western Heritage: Social and Behavioral Sciences These courses engage students in a critical assessment of how social and behavioral studies and their methodologies help them better understand Western culture, behavior, or social and political institutions.	Discuss the context of Western heritage in terms of the social and political institutions of the Western experience.				
	Describe the critical social and cultural issues that have affected the Western experience.				
	Apply the methodologies of social and behavioral sciences to better understand Western culture, behavior, and social and political institutions.			X	
	Engage in critical assessment of significant issues in contemporary Western experience.			X	
	Recognize the role, power of social /behavior processes in the Western experience.				
Western Heritage: Cultural Plurality and Diversity These courses explore race, class, gender, religious or ethnic traditions, or minority issues and investigate how Western prejudgments, system, or traditions contribute to those issues.	Discuss race, class, gender, religious or ethnic traditions, or minority issues in the context of Western traditions.				
	Reflect on how Western prejudgments, systems or traditions contribute to issues in diversity.			X	
	Examine their own experience from the perspective of what we all have in common and how we all differ.			X	
	Engage in a critical assessment of the legal, social, and economic equality issues from the past and today.			X	
	Recognize the role and power of cultural plurality and diversity in Western tradition.				
Global Awareness: Non-Western Cultures, Traditions, Issues These courses focus specifically or comparatively (among non-Western civilizations or between non-Western/Western civilizations) on helping students understand multiple modes of human expression and experience.	Discuss specifically or comparatively (among non-Western civilizations or between non-Western/Western civilizations) multiple modes of human expression and experience.				
	Recognize, value, and appreciate the contributions of diverse cultures.				
	Compile, interpret, synthesize and evaluate evidence about social patterns, processes and systems within non-Western cultures.			X	
	Demonstrate knowledge of beliefs, practices, and/or languages of non-Western societies.				
	Analyze the processes/patterns that explain global events, issues and artifacts.			X	

Attachment B: Program Assessment Report Activity since Last SLOAR Report

Meets - data indicated that learning outcomes were met *NA* - no data available due to assessment strategy revisions *NDR* – no data reported in assessment report **Programs**	**Written & Oral Communication**	**Scientific & Quantitative Reasoning**	**Critical Analysis & Reasoning**	**Technological Competency**
Accounting	Meets	Meets	Meets	Meets
Art + Design	Meets		NA	
Art Education			Meets	
Art History	Meets		Meets	
Biology		NA		
Business Administration	Meets	Meets	Meets	Meets
Chemistry	NA	NA		NA
Communication Studies			Meets	
Computer Science	Meets	Meets	Meets	
Cultural Studies	NA	NA	NA	
Dance Education	Meets		Meets	Meets
Dance Performance	NA			
Deaf Studies	Meets			
E-business	Meets	Meets	Meets	Meets
Early Childhood Education	Meets		Meets	Meets
Economics				NA
Electronic Media & Film	Meets		Meets	Meets
Elementary Education	Meets		Meets	Meets
Elementary/Special Education Integrated	Meets		Meets	Meets
English	Meets		Meets	
Environmental Studies		NDR	NDR	
Exercise Science	NDR			
Family Studies	Meets		Meets	
Foreign Languages	Meets			
Geology	Meets		Meets	Meets
Geography	Meets	Meets	Meets	Meets
Gerontology	NDR		NDR	
Health Education	Meets		Meets	Meets
Information Systems	Meets	Meets	Meets	
Mass Communication	Meets		Meets	Meets
Math		Meets		Meets
Music Education	Meets		Meets	Meets
Nursing		Meets	Meets	
Philosophy			NA	
Physical Education	Meets		Meets	Meets
Political Science	Meets		Meets	
Psychology	Meets		Meets	Meets
Secondary Education – Biology	Meets	Meets	Meets	Meets
Secondary Education – Chemistry	Meets	Meets	Meets	Meets
Secondary Education – Earth Space Science	Meets	Meets	Meets	Meets
Secondary Education – English	Meets		Meets	Meets
Secondary Education – French	Meets		Meets	Meets
Secondary Education – Geography	Meets	Meets	Meets	Meets
Secondary Education – German	Meets		Meets	Meets
Secondary Education – History	Meets		Meets	Meets
Secondary Education – Mathematics	Meets	Meets	Meets	Meets
Secondary Education – Physics	Meets	Meets	Meets	Meets
Secondary Education – Social Studies	Meets		Meets	Meets
Secondary Education – Spanish	Meets		Meets	Meets
Sociology & Anthropology	NA		NA	
Special Education	Meets		Meets	Meets
Sports Management	NA			
Theatre Arts	NA		NA	
Women's Studies	Meets		Meets	
Programs with goals that met learning outcomes	**38**	**14**	**38**	**29**

Attachment C: Schedule of Assessment Reports for Undergraduate Programs

Program/Major	Degrees	Current Cycle Year 3 Report Due	Current Cycle Year 6 Report Due	Current Cycle USM 7-year Report Due	Next Cycle Year 3 Report Due	Next Cycle Year 6 Report Due	Next Cycle USM 7-Year Report Due
Accounting	BA,BS	N/A	2014	2015	2018	2021	2022
Allied Health	BTPS	N/A	2014	2015	2018	2021	2022
Art + Design	BA,BS, BFA	N/A	N/A	N/A	2013	2016	2017
Art Education	BA,BS	2011	2014	2015	2018	2021	2021
Art History	BA	N/A	N/A	N/A	2013	2016	2017
Athletic Training	BA,BS	N/A	2011	2012	2015	2018	2019
Biology, General	BA,BS	N/A	2011	2012	2015	2018	2019
Business Administration	BA, BS	N/A	2013	2014	2017	2020	2021
Chemical Dependency Counseling (w CCBC)	BTPS	2012	2015	2016	2019	2022	2023
Chemistry	BA,BS	N/A	2012	2013	2016	2019	2020
Communication Studies	BA,BS	N/A	N/A	2011	2014	2017	2018
Computer Science	BA,BS	N/A	N/A	2012	2015	2018	2019
Cultural Studies	BA,BS	N/A	2011	2012	2015	2018	2019
Dance Performance & Education	BFA,BS	N/A	2013	2014	2017	2020	2021
Deaf Studies	BA,BS	N/A	2011	2012	2015	2018	2019
Early Childhood Education	BA,BS	2011	2014	2015	2018	2021	2022
Earth-Space Science	BA,BS	N/A	2013	2014	2017	2020	2021
E-Business	BA,BS	N/A	2013	2014	2017	2020	2021
Economics	BA,BS	2011	2014	2015	2018	2021	2022
Electronic Media & Film	BA,BS	N/A	2013	2014	2017	2020	2021
Elementary Education	BA,BS	2011	2014	2015	2018	2021	2022
English	BA,BS	2012	2015	2016	2019	2022	2023
Environmental Science & Studies	BA,BS	N/A	2011	2012	2015	2018	2019
Exercise Science	BA,BS	2012	2015	2016	2019	2022	2023
Family Studies	BA,BS	2012	2015	2016	2019	2022	2023
Foreign Language	BA	N/A	2011	2012	2015	2018	2020
Forensic Chemistry	BA,BS	N/A	N/A	2011	2014	2017	2018
Geography & Environmental Planning	BA,BS	2012	2015	2016	2019	2022	2023
Geography & Land Surveying	BA,BS	2012	2015	2016	2019	2022	2023
Geology	BA,BS	N/A	2013	2014	2017	2020	2021
Gerontology	BA,BS	2011	2014	2015	2018	2021	2022
Health Care Management	BA,BS	2012	2015	2016	2019	2022	2023
Health Science	BA,BS	N/A	2014	2015	2018	2021	2022
History	BA,BS	N/A	N/A	2011	2014	2017	2018
Information Systems	BA,BS	N/A	N/A	2011	2014	2017	2018
Information Technology	BS	N/A	N/A	2012	2015	2018	2019
Integrated Early Childhood/Special Education: Infant/Primary		2011	2014	2015	2018	2021	2022
Integrated Elementary Education - Special Education	BA,BS	2011	2014	2015	2018	2021	2022
Interdisciplinary Studies	BA,BS	2012	2015	2016	2019	2022	2023
International Studies	BA,BS	N/A	N/A	N/A	2013	2016	2017
Law & American Civilization	BA,BS	N/A	2011	2012	2015	2018	2019
Mass Communication	BA,BS	N/A	N/A	2011	2014	2017	2018
Mathematics	BA,BS	2012	2015	2016	2019	2022	2023
Medicinal Chemistry (w UMB)	BA,BS	N/A	2012	2013	2016	2019	2020
Metropolitan Studies	BA,BS	N/A	2012	2013	2016	2019	2020
Middle School Education	BA, BS	N/A	2014	N/A	2018	2021	2022
Molecular Biology, Biochemistry & Bioinformatics	BA,BS	N/A	2011	2012	2015	2018	2019
Music	BM,BS	N/A	2011	2012	2015	2018	2019
Music Education	BA,BS	N/A	2011	2012	2015	2018	2019
Nursing	BA,BS	N/A	2011	2012	2015	2018	2019
Occupational Therapy	BS/MS	N/A	2014	2015	2018	2021	2022
Philosophy	BA,BS	N/A	N/A	N/A	2013	2016	2017
Physical Education	BA,BS	2011	2014	2015	2018	2021	2022
Physics	BA,BS	N/A	N/A	N/A	2013	2016	2017
Political Science	BA,BS	N/A	N/A	N/A	2013	2016	2017
Psychology	BA,BS	2012	2015	2016	2019	2022	2023
Religious Studies	BA,BS	2012	2015	2016	2019	2022	2023
Social Science, General	BA,BS	N/A	2011	2012	2015	2018	2019
Sociology-Anthropology	BA,BS	2012	2015	2016	2019	2022	2023
Special Education	BA,BS	2011	2014	2015	2018	2021	2022
Speech-Language Pathology & Audiology	BA,BS	N/A	2011	2012	2015	2018	2019
Sports Management	BS	N/A	2011	2012	2015	2018	2019
Theatre Arts	BA,BS	N/A	N/A	N/A	2013	2016	2017
Women's Studies	BA,BS	N/A	N/A	N/A	2013	2016	2017

Attachment D: University Core Courses and Related Goals Outcomes

University Core Courses and Related Goals Outcomes		University Learning Outcomes							
		Effective Communication	Critical Analysis			Specialized knowledge in defined fields	Flexible Thought	Working in Multifaceted Work Environments	Local and Global Citizenship and Leadership
		MHEC Learning Outcomes							
Elements of University Core	University Core Courses	Written & Oral Communication	Scientific & Quantitative Reasoning	Critical Analysis & Reasoning	Information Literacy & Technology Competency				
Fundamentals	Towson Seminar								
	English Composition								
	Mathematics								
	Creativity & Creative Development								
Ways of Knowing	Arts & Humanities								
	Social & Behavioral Sciences								
	Biological & Physical Sciences, with laboratory								
	Biological & Physical Sciences, with or without laboratory								
Writing in a Chosen Field	Advanced Writing Seminar								
Perspectives	Metropolitan Perspectives								
	The United States as a Nation								
	Global Perspectives								
	Diversity & Difference								
	Ethical Issues & Perspectives								

University of Baltimore

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

A number of important assessment activities emerged and are at varying states of completion. These activities align with the framework of pertinent Middle States Standards of Excellence:

General Education (Standard 12)	Assessment of Student Learning (Standard 14)	Assessment of Institutional Effectiveness (Standard 7)
The institution's curricula are designed so that students acquire and demonstrate college-level proficiency in general education and essential skills, including oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, technological competency, and information literacy.	Assessment of student learning demonstrates that an institution's students have knowledge, skills, and competencies consistent with institutional goals, and that students at graduation have achieved appropriate higher education goals.	Assessment of Institutional Effectiveness demonstrates that the institution achieves its mission and goals in compliance with accreditation standards.
UB Alignment: Widely agreed upon learning outcomes are established throughout the curriculum. Assessment activities completed or near completion include developing clear statements of learning goals, including expected learning outcomes, for all general education areas and for information literacy, a UB graduation requirement.	UB Alignment: Assessment of written and oral communication and quantitative competency has progressed through the "closing the loop" stage: assessment results are used to improve student learning and advance the institution. For scientific competency, critical thinking, and, to a more limited extent, technological competency, organized and sustained assessment plans have been developed.	UB Alignment: MSB successfully completed its AACSB accreditation processes, which included substantial learning outcomes assessment in all 4 critical competencies. Assessment data informed two successful grant-funded course redesign projects.

The report below explains and describes these activities in much greater detail.

I. Written and Oral Communication

A. Institution's definition of competency

Related Undergraduate Learning Goal: Communicating effectively in various media
Definition: the ability of students to write, read, speak and listen
Outcomes: This set of skills is demonstrated by the ability to:
- express ideas and facts to others effectively in a variety of written formats
- communicate orally in one-on-one and group settings
- make efficient use of information resources and technology for personal and professional communication
- comprehend, interpret and analyze texts.

General Education Definition of Competency in Written Communication: The student can
- Write academic, professional expository prose using accepted standards of grammar and mechanics.
- Use a writing process to improve prose.
- Use writing to inform, persuade, and explain.
- Use writing to address a range of audiences effectively.
- Write and support a thesis.
- Employ advanced conceptual skills, such as analyzing, synthesizing, and evaluating
- Support claims and generalizations with adequate evidence.
- Make efficient use of information resources and technology.
- Comprehend, interpret, and analyze texts.

General Education Definition of Competency in Oral Communication: The student can
- Identify the variables of the communication process
- Select appropriate forms and proper channels of verbal and nonverbal communication
- Develop and organize focused and coherent messages.
- Tailor a message to different audiences and situations.
- Explain and use primary variables that affect oral delivery.
- Explain strategies for projecting confidence and decreasing anxiety.
- Identify obstacles to effective listening.
- Identify, explain, and use rhetorical strategies for informing and persuading.
- Discuss issues relating to the ethical responsibilities of communicators.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Written communication competency is assessed for all undergraduate students at their initial registration. Freshmen take the ACCUPLACER test and are then placed in either WRIT 101 (College Composition), WRIT 101 plus a 2-credit supplemental developmental reading and writing course (DVRW 095: College Reading and Writing II), or DVRW 090 (College Reading and Writing II – 3 credits). Students who successfully complete DVRW 090 take WRIT 101 plus the supplemental DVRW 095 course before they can declare a major field of study at UB. Transfer students who did not complete WRIT 101 or its equivalent at a transfer institution are also required to take the ACCUPLACER test prior to the second registration at UB. Freshman and transfer students who have completed WRIT 101 or its equivalent take a written test (assessed by rubric) for placement in WRIT 300 (Advanced Expository Writing), an upper

division general education course required of all UB undergraduates. The placement process will result in registration directly into WRIT 300, which is arranged to allow for students to develop skills in writing in the individual disciplines or into WRIT 200 (Practicum in Writing), a prerequisite to WRIT 300 based on placement.

Quality of the writing in relationship to the general education outcomes is assessed at the course level, with clear exit standards at each level to ensure that students graduate with the abilities to communicate effectively in writing. In addition, students in the Merrick School of Business (MSB) are required to continue to develop their writing skills, and all MSB faculty have adopted a common rubric employed for assessing students' abilities.

As for Oral Communications, all UB students must take either CMAT 201 (Communicating Effectively) or CMAT 303 (Oral Communications in Business). The learning outcomes provided above are the core learning outcomes for each of these courses, and the courses were reviewed by faculty governance processes to ensure that students demonstrate effective oral communications in a variety of contexts, including individual speeches, group projects, interpersonal communications, presentations, and debates. In addition, students in the Merrick School of Business (MSB) are required to continue to develop their oral presentation skills, and all MSB faculty have adopted the rubric developed by communications faculty for assessing students' abilities.

   C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Student competency in writing in DVRW 090 and DVRW 095 is assessed by portfolio. For DVRW 090, students complete 12 separate writing assignments, each weighted in a manner that reflects the developmental skill that is being built, and each aligned with entry-level learning expectations for WRIT 101 (specifically sentence-level correctness, paragraph organization and development, and expository writing processes). For DVRW 095, students complete 6 writing tasks in the portfolio.   These tasks are intended to scaffold the learning in WRIT 101 by providing support for paragraph-level competency and attention to sentence correctness.   To progress to the next level (WRIT 101 plus DVRW 095 for DVRW 090 students and a pass on DVRW 095), students must earn 80% of the points available in the portfolio (students in DVRW 095 must also pass WRIT 101). Points are assigned using a standard rubric.   To ensure continuous improvement of the DVRW 090 and 095 courses, each summer instructors of these courses engage in professional development activities to ensure that student writing is assessed appropriately. Within the context of this professional development, participants assess samples of student writing to ensure the usability of the assessment instrument, and the scores on all of the portfolios are reviewed to determine where assignments need to be added, deleted, or redesigned.

Student competency in writing in WRIT 101 is assessed using the "Standards for a C Paper" recommended by the Maryland Chief Academic Officers from Statewide English Composition Committee (1998) (http://mdcao.usmd.edu/engl.html). The course coordinator for WRIT 101 recruits and trains instructors (approximately 75% of all sections are taught by adjunct faculty) and, via professional development activities and course review, ensures the instructors are guided by these standards in their grading practices.

WRIT 200 emphasizes writing correctness and appropriateness in the choice of words, sentence structures, and modes of paragraph development. At the end of this course, students must write an essay using the same guidelines as the original placement essay, and these essays are

evaluated using the same rubric used for initial placement. Attachment A shows the rubric used for initial placement.

WRIT 300 is a course that was redesigned in 2008 and 2009 under a generous grant from USM. the purpose of the redesign was to facilitate a means to teach upper division students to apply their knowledge of expository writing to increasingly complex writing tasks in the disciplines. The course redesign resulted in the identification of core writing competencies that are valued across disciplines and in the development of writing tasks that are valued in each discipline. Students register for sections of WRIT 300 that are identified as appropriate for the individual majors. Through this process, students demonstrate common writing competencies in highly individualized writing situations. The core competencies assessed include the following:

- Critical thinking
- Use of general knowledge
- Use of specialized knowledge
- Writing coherence

- Writing clarity
- Grammatical correctness
- Mechanical correctness

The course coordinator for WRIT 300 recruits and trains instructors (approximately 75% of all sections are taught by adjunct faculty) and, via professional development activities and course review, ensures the instructors are guided by the rubric standards in their grading practices.

Finally, the writing competency of students enrolled in courses offered through the Merrick School of Business (MSB) is assessed using a rubric (Attachment B) that was developed in collaboration with the Director of Expository writing, and faculty receive professional development to ensure that writing is assessed consistently.

As discussed in Section B, above, all students must take at least one oral communications course (CMAT 201 or CMAT 303) within the context of UB's general education requirements. The faculty who teach and/or oversee the adjuncts who teach CMAT developed the course learning outcomes and ensure that the assignments provide opportunities for students to demonstrate learning mastery as well as a standard rubric for oral presentations.

D. Describe the results of the assessment work related to this competency.

The major assessment activity in the area of student writing was conducted as part of the WRIT 300 course redesign initiative. In 2009, we conducted a pre-test (n = 190)/post-test (n = 135) assessment of students' abilities to create texts that are coherent, clear, and correct (grammatically and mechanically). For the pre-test, the results are depicted below:

	% above 3 (effective)	**% at 3 (adequate)**	**% below 3 (inadequate)**
Coherence	46	24	37
Clarity	52	26	24
Grammar	63	24	13
Mechanics	53	22	25

Here are the results for the post-test:

	% above 3 (effective)	**% at 3 (adequate)**	**% below 3 (inadequate)**
Coherence	76	14	10

Clarity	81	13	7
Grammar	80	10	10
Mechanics	84	5	10

UB used the result of this assessment activity to continue to improve the course. In particular, the structure of the course presentation has been changed from the original design of having an instructor and a discipline-centered on-line writing coach to training instructors to teach the entire course as a discipline-centered learning experience.

Another related assessment activity centers on course redesign of the developmental reading and writing classes. When UB took in its first class of freshmen in Fall 2007, approximately 12% of the entering freshmen required one or both of the DVRW courses (3.9 % in both; 8% in DVRW 095/WRIT 101 only). However, by Fall 2009, the percentage had risen to close to national standards for placement -- 40% (19 % in both; 20% in DVRW 095/WRIT 101 only). With so many more students placed in developmental reading, and so many more at the lower level, what was needed was a means to scale the instruction to meet the needs of larger sections (class size rose from 6 in DVRW 090 to 2 sections @ 18 students and from 12 in DVRW 095 to several sections of 18) of more students with a wider range of abilities. The result was the portfolio project described above. As a result of the redesign, we were able to increase the number of seats available, keep costs relatively flat, and maintain first time pass rate of 80%.

Finally, oral communications outcomes were assessed within the context of the Corporate Communications program assessment, which was completed in Spring 2010. The findings of the alumni and employer surveys that were conducted for this program review were the needs to continue to improve student learning experiences in writing, oral communications, initiative/leadership skills, and preparedness to work with culturally diverse colleagues and customers. As a result, the faculty is examining the related curricula and will include assessment of these outcomes on the established five-year rotation schedule.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

UB's Undergraduate Learning Goal: Attaining quantitative and scientific knowledge and skills

Definition: the ability of students to perform quantitative and scientific analysis
Outcomes: This set of skills is demonstrated by the ability to:
- solve problems that are quantitative in nature and appreciate the ways of thinking in mathematics
- use mathematical concepts and techniques that can be applied in other disciplines
- discriminate science from non-science and demonstrate an understanding of the scientific method
- attain knowledge of some of the tools of science and to gather and process data.

General Education Definition of Competency in Scientific Reasoning. The student can
- Evaluate scientific reports and discriminate among sources (including peer reviewed sources)
- Discriminate science from non-science and demonstrate that science constitutes the testing of hypotheses about natural phenomena through observation
- Access specific scientific information on a topic

- Use some of the technology commonly used by scientists to gather an process data [optional for non-laboratory courses]
- Quantify and evaluate scientific data and demonstrate an appreciation of the role of variability in this process
- Discuss the fundamental terminology, concepts, and significant historic figures of the discipline being taught

General Education Definition of Competency in Mathematic Reasoning. The student can
- Interpret mathematical models given verbally, or by formulas, graphs, tables, or schematics, and draw inferences from them.
- Represent mathematical concepts verbally, and where appropriate, symbolically, visually, or numerically.
- Use arithmetic, algebraic, geometric, technological, or statistical methods to solve problems.
- Use mathematical reasoning to solve problems, to formulate and test conjectures, to judge the validity of arguments to formulate valid arguments, and to communicate the reasoning and the results
- Estimate and check answers to mathematical problems in order to determine reasonableness
- Apply mathematical and statistical tools in solving problems of business, science, or the social sciences

Analytic and Quantitative standards in all undergraduate business degree programs:
- In solving business problems, students will use appropriate analytical techniques to understand the problem, generate and compare alternatives, and develop recommendations.
- Students will use quantitative tools to analyze a business situation.

  B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Mathematics competency is assessed for all undergraduate students at their initial registration. Freshmen take the ACCUPLACER test and are then placed in either credit-level mathematics (MATH 111: College Algebra or MATH 115: Introduction to Statistics, depending on intended program of study), DVMA 095 (Intermediate Algebra, an imputed credit developmental course that is a pre-requisite to credit-level math courses), or DVMA 093 (Introductory Algebra, an imputed credit developmental course that is pre-requisite to DVMA 095). Transfer students who did not complete a credit-bearing general education course in mathematics at a transfer institution are also required to take the ACCUPLACER test prior to the second registration at UB.

After initial assessment and placement, assessment of mathematic competency occurs at the course level, in the two developmental math courses (DVMA 093 and 095), in MATH 111 and MATH 115, and in a range of quantitative-focused business courses that form the core requirements for all students who receive a degree through MSB.

Student learning outcomes assessment of the biological and physical sciences occurs at the course level in anthropology, biology, physics, and environmental sciences courses.

  C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

In Summer 2010, UB received a generous grant from USM to conduct course redesign of our developmental mathematics courses. As a result, in DVMA 093 and 095, assessment occurs through an individual learning contract, developed on the basis of diagnostic skills assessment. The contract starts at the lowest concept the student has mastery over and then makes a plan to gain mastery over the remaining concepts; students focus on the un-mastered material, and when they get to the material they struggled with in the diagnostics, they are shown ways to make connections between what they have just learned and what they had shown strengths on in the diagnostics. Each topic is structured in this manner:

> Review: Student uses online modules, textbook, and exercises to review concepts. Attendance in lab, where student does problem sets that are graded, is required.

> Test: Result triggers one of 3 results: Demonstrated mastery (B- standard), review and connect lesson (C-standard), or deep learning lesson (did not achieve C-standard). Instructional needs and the rigor of the assignments are adjusted as needed.

> Retest: Student takes unit test. Student progresses with B- standard, next unit. If not, the student works individually or in small study groups with the faculty and/or coaches and then retests. One retest is allowed. Student graded as pass (C-)/fail on retest.

The developmental mathematics learning environment features access to flexible, adaptable learning spaces: a more traditional classroom where instructors provide just-in-time workshops and small-group lectures on a cycle determined by students' needs as well as a math learning studio where students can receive individual and small-group coaching and access to computer-support resources. In the Math Learning Studio, which is open for extended hours, students can work with instructors and coaches to determine the combinations and timing of learning experiences that lead to mastery learning. Students must achieve a 70% (C- standard) to complete the learning contract. The percentage is calculated on the number of units assigned in the contract

Learning outcomes in MATH 111/115 are assessed at the course-level annually. Over a five-year period, each of the outcomes is assessed through identification of common questions and tasks in common outcomes. UB's mathematics faculty use the Arizona Mathematics Rubric (http://www.ubalt.edu/downloads/cla_downloads/MATH111Rubric_fall2007.pdf), which is designed for holistic blind assessment of student competency.

Analytical Thinking and Problem Solving Skills are assessed at the program level for each of the bachelor's degrees offered through the Merrick School of Business (MSB). Attachment C shows the common rubric created to assess student learning in course-embedded outcomes assessment activities. In addition, MSB gave seniors the ETS Major Field Test in Business.

The Division of Liberal Studies, which houses mathematics and science courses, has established a protocol for assessing outcomes using a portfolio model, which examines student performance across several behaviors (items on exams, term papers, practical applications assignments, lab assignments, projects) as appropriate to each course. Data are collected each time the course is offered. Some courses are offered up to three times per academic year (fall, spring and summer), some only once during an academic year. Data for a specific course are pooled across an entire academic year.

> D. Describe the results of the assessment work related to this competency.

The most comprehensive assessment of quantitative competency took place within Merrick School of Business as part of its self-study for the American Association of Colleges and Schools of Business (AACSB). In this assessment project, all of the students enrolled in MGMT 475, a core course for the Bachelors of Business, took the ETS Major Field Test. The overall mean score of MSB students (152) was not discernibly different than the national mean (152.1). However, students performed below the mean in quantitative analysis, scoring between the 30th and 40th percentiles. This finding is consistent with the course-embedded assessment of quantitative assessment, which determined that less than 60% of students assessed met or exceeded the standards for analytical and quantitative reasoning.

As a result of these findings, MSB will be engaging in several important initiatives in the coming years. First, OPRE 201 (Business Statistics) will be redesigned by adapting successful teaching and learning practices that have been developed for the developmental mathematics courses (discussed below). Second, a proposal is working its way through governance processes to require students to pass OPRE 201 with a C or better prior to being eligible to declare a major in a business discipline. In addition, the upper division statistics course (OPRE 303) was moved to the lower division core and renumbered OPRE 202. The change will help to set expectations of the quantitative rigor required to complete the B.S.B.A. program, and better prepare students for the upper division core courses that rely on refine quantitative competency, particularly finance. In addition, queuing theory will be added to the topics covered in OPRE 315 (the upper division decision science course) and simulation will be included in the learning objectives to strengthen analytical reasoning abilities. Finally, students in FIN 331 will be given a pre-test on the first day of class covering basic accounting and algebra concepts; those with deficiencies will be encouraged to receive academic tutoring.

Faculty who teach MATH 111 and MATH 115 conduct annual assessment activities within a five-year schedule to assess each outcome and to use the results to continue to improve instruction. In the most recent assessments, 61 students in MATH 111 and 16 students in MATH 115 participated in a common assessment of this learning outcome: estimate and check answers to mathematical problems to determine reasonableness. A related problem was embedded in a common assignment in the online tool MyMathLab; the standard for student learning mastery was defined as a perfect score, since multiple attempts were permitted. Of the 61 MATH 111 students assessed, 43 (70.1%) of the students met the standard. In MATH 115, 15 of the 16 students (93%) met the standard. For MATH 111, student performance in the online task was then compared to performance on a related task on the mid-term exam. The instructors reported that most of the students did not complete the task of using information to test reasonableness and instead stopped at just graphing the function without providing information about how the answer was derived. The faculty members determined that a change in the course was warranted, requiring students to demonstrate competence more evenly between the two media, MyMathLab and in-class tests.

The redesign of developmental mathematics courses (DVMA 093 and 095) was assessed after the initial pilot in Fall 2010 and again in Spring 2011 after some additional improvements in the sequencing of assignments and in testing processes. Student learning competency was defined by the C- standard pass rate (70%), with learning demonstrated by a combination of on-line activities and a common final exam, blindly evaluated by instructors and learning coaches. The pass rate for DVMA 093 rose from 70% (AY 2010) to 74% (AY 2011). For DVMA 095, the pass rate rose from 64% (AY 2010) to 68% (AY 2011). Using feedback from students' experiences in AY 2011, the course was further improved by adjusting assignments, due-dates,

and communications processes, and we look forward to continued improvements in pass rates. Moreover, the total annual enrollment increased by nearly 22% with a flat budget. Using this data, the developmental mathematics program coordinator is engaged in item analysis to determine discrete learning outcomes that pose inordinate learning difficulties. When these items are identified, the information will result in changes to faculty professional development activities and in instructional materials to accompany the learning contracts.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

UB's Undergraduate Learning Goal: Thinking critically and creatively, analyzing and synthesizing information to solve problems
Definition: the ability of students to analyze carefully and logically information and ideas from multiple perspectives
Outcomes: This skill is demonstrated by the ability of students to:
- analyze complex issues and make informed decisions
- synthesize information to arrive at reasoned conclusions
- evaluate the logic, validity and relevance of data
- solve challenging problems
- use knowledge and understanding to generate and explore new questions

Distributed critical thinking outcomes: Learning outcomes for critical thinking are distributed across several general education courses and graduation requirements. In particular, these related outcomes are presented within these general education areas:

From Arts and Humanities outcomes: The student can demonstrate critical thinking in written or oral discussion of course-related content.

From Behavioral and Social Sciences: The student can describe and illustrate appropriate methodologies used by social scientists to explore social phenomena and to identify and evaluate solutions to personal, cultural, societal, national and/or global problems.

From College Composition: The student can employ advanced conceptual skills, such as analyzing, synthesizing, and evaluating, and can support claims and generalizations with adequate and pertinent examples, details, and evidence.

From Information Literacy: The student can
- Articulate a need for information, evaluate the extent of that need, and identify possible sources to meet that need;
- Select the best method and/or tools to obtain necessary information;
- Develop effective search strategies and revise the search strategies as needed;
- Access sources of information and manage the collection of information;
- Develop and apply criteria in order to evaluate information collected;
- Integrate key concepts from information collected into existing body of knowledge and apply and present that new knowledge;
- Explain and apply ethical, economic and legal guidelines for the use of information.

From IDIS 302 (Ethical Issues in Business and Society), an upper division graduation requirement for all UB degree programs: Students can

- Think critically about ethical issues and ethical theories: Students should exhibit, through writing and class discussion, a high standard of critical, logical and consistent thought.
- Apply theories to specific cases: Students should be able to apply key ethical theories to real-world personal, workplace and global case studies in ethics, and to think responsibly about consequences of ethical decision-making for themselves and others.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

For freshmen, students' critical thinking competencies are assessed through assignments embedded in courses that are essential components of the freshmen experience: IDIS 101 (Applied Learning and Study Skills), IDIS 110 (Information Literacy), and in lower division general education courses in college composition, arts and humanities and behavioral and social sciences.   In addition, freshmen at UB are required to take two learning communities in their first year. The learning communities thematically connect two or three courses in a manner that encourages students to understand the habits of mind of each of the disciplines and to look at common problems and information through intra-disciplinary lenses.
For all students, critical thinking competencies are assessed in IDIS 302 (Ethical Issues in Business and Society). It is an upper-level core curriculum course required of all undergraduate students. The course requires students to critically examine the major ethical issues current in the world of business and society. Emphasis is placed on students gaining a practical understanding of ethical theories and the application of these theories through ethical decision-making. A primary focus of the course is to challenge students to analyze and resolve the kinds of moral problems and ethical dilemmas they may face in their own personal and professional lives.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

In IDIS 101 (2-credit freshman seminar in Applied Learning and Study Skills), critical thinking and information literacy is assessed by means of common assignments. Students will practice information-gathering in a low-stakes (pass/fail) scavenger hunt assignment and then submit the culminating I-search essay[1].

At the end of each academic year, the course coordinator and IDIS 101 instructors collectively assess a random sampling of blind essays using the assessment rubric (Attachment D). An initial subset of the instruments is assessed to calibrate the scoring, and the assessment sheets for these essays are compared to the grade sheets to check for consistency. Information is compiled concerning the number of students who fail to meet, those who meet, and those who exceed the minimum standards. Course coordinator and instructors will review the assessment findings for continued improvement of the course.

In IDIS 110 (Information Literacy), these outcomes are assessed via an annotated bibliography assignment tied to the theme of the students' learning community. The same rubric used for IDIS 101 is used for this project.

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[1] The I-Search essay is a personal narrative of learning through the research process.

IDIS 302 (Ethical Issues in Business and Society) is the other upper-division core course required of all UB students. Critical thinking ability is assessed through common assignments, which include case studies and the creation of a researched and documented Personal Code of Ethics. UB has recently received a course redesign grant for IDIS 302, and one focus of the work will be to adapt the existing course learning objectives into learning outcomes that can be more accurately measured. Because there are common assignments and common rubrics and other assessment standards, UB can develop a means to evaluate student learning and continue to improve the course in ways that enhance students' abilities to think and write critically, to resolve ethical problems, to think responsibly about the consequences of their actions, and to imagine a more expansive and precise moral point of view to guide them in their daily personal and professional lives. Course redesign activities have just begun, and a pilot is planned for Fall 2011.

    D. Describe the results of the assessment work related to this competency.

As noted in Part I, above, UB has been engaged in a long process of evaluating general education learning outcomes. As a result, we have not assessed all of the general education outcomes in a systematic way. We began with outcomes that were not likely to differ greatly from the standards established in 2006-2008, and largely deferred assessment of outcomes that needed more widely won consensus. Therefore, there has not been a great deal of outcomes assessment for Critical Thinking. That being said, UB did engage in three related assessment initiatives: assessment of critical thinking/information literacy outcomes in IDIS 101 (a course required of all freshmen before they can declare an academic major); evaluation of course drift in IDIS 302; and evaluation of ethical decision-making and critical thinking by MSB as part of the AACSB self-study process.

The assignment design and assessment processes for the IDIS 101 assessment initiative were piloted in Fall 2010. Originally, this assignment was used mid-semester as a means of reinforcing effective writing and critical thinking outcomes and as an introduction to a unit on goal commitment. What we discovered through this assessment project is that we were tying too many outcomes to the one assignment and that the most important learning was focused on students' refined abilities to develop and answer a compelling question. What appears in Attachment D is the result of refinement of instruments after that pilot assessment.

As part of the grant-writing processes for course redesign for IDIS 302, the UB team identified a problem with course drift. There was little consistency in the nature, scope and number of assignments, as well as in the standards used to evaluate student work, and it was proposed that, under the course redesign initiative, a core team of instructors, representing each of the colleges, will create and agree on common lectures, class outlines, readings, teaching methods, requirements, assignments, and rubrics for outcome assessments. Syllabi, assignments, readings, rubrics, and on-going class discussions will be prepared and posted for students on-line to meet deadlines and stay on course schedule. The faculty member is the instructor of record for all of the students in the class, but final grades will be based on specific assignments measurable by an outcome assessment rubric and the assessments from student coaches. An integrating capstone assignment, in which students are required to write their own personal Code of Ethics and use it to evaluate the strengths and weaknesses of codes of ethics in their chose profession, will complete the requirements of the course. The faculty member will conduct training sessions for coaches prior to the start of classes and continue mentoring coaches during the course of the

semester.   Faculty load consists of direct instruction of the coaches, evaluation of the integrating capstone assignment, assigning final grades, and delivering lectures face-to-face and on-line.

Finally, as part of the AACSB self-study process, faculty who teach MGMT 475 (an upper division capstone for all BA/BS programs in MSB) and/or courses in the Real Estate and Economic Development program developed rubrics to assess student learning in critical thinking, problem-solving, and research skills. Related assessment projects will be implemented in AY 2012 and AY 2013.

IV. Technological Competency

A. Institution's definition of competency

Learning Objectives for General Education in IT Fluency. A student can
- Explain the basic principles underlying the function of modern information resources, such as computers, networks, and software tools;
- Explain appropriate uses of information technology, including the scope and limits of its benefits, and controversies concerning issues like privacy, intellectual property, and equal access;
- Explain the process of constant innovation that characterizes information technology, requiring critical evaluation of new developments, adaptation of existing practices, and anticipation of change;
- Create and structure documents with hypertext links and graphics in a range of formats, including conventional page presentation as well as screen presentation using appropriate software;
- Collaborate in shared activities using the internet and other digital services;
- Develop and manipulate quantitative data and other structured information using analytical and visualization tools, especially spreadsheets;
- Access existing structured information, and create original data structures using a database system.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

To demonstrate competency in this area, all UB students must take must take COSC 100 (Introduction to Computer Literacy) or an equivalent (MSB students can satisfy this requirement with INSS 315). COSC 100 was created in 2007, but no systematic assessment instruments or initiatives have been developed to determine student mastery of these outcomes in this course.

A related learning goal is assessed in writing courses. This learning outcome states: [students can] make efficient use of information resources and technology or personal and professional communication. Although students are expected to demonstrate their abilities to use technology in this manner, there are no specific related learning outcomes assessment projects completed.

Finally, understanding of business technologies and information systems was assessed using the ETS Major Field Test, which was administered in MGMT 475 as part of the MSB self-study for AACSB.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Students in MSB undergraduate degree programs are required to demonstrate proficiency in the use of business technologies. A common rubric (Attachment E) was developed to assess use of business technologies across the curriculum.

D. Describe the results of the assessment work related to this competency.

The most comprehensive assessment of technology competency took place within Merrick School of Business as part of its self-study for the American Association of Colleges and Schools of Business (AACSB). In this assessment project, all of the students enrolled in MGMT 475, a core course for the Bachelors of Business, took the ETS Major Field Test. As discussed above, the overall mean score of MSB students (152) was not discernibly different than the national mean (152.1). However, students performed above the mean (58th percentile) in the area of understanding information systems (60th percentile).

Faculty analyzed data from the self-study, as well as from the Major Field Test, and INSS 300 (Management Information Systems) assignments were re-tooled to ensure a focus on the development of practical skills, particularly Excel.

Part Three: Evolution of Assessment Activities

The University of Baltimore (UB) has been dramatically transforming its targets for student learning and achievement since 2007. In 2006, UB adopted a comprehensive set of learning goals for all undergraduates after extensive committee work across the schools of law, business, and liberal arts. Shortly thereafter (Fall 2007) UB began admitting freshmen after a hiatus of 32 years to help address an anticipated crisis of capacity for the University System of Maryland. The new first year curriculum was designed with general education needs and student retention very much in mind. Somewhat experimental and topical in nature, the credit bearing general education courses for first year students were developed by faculty in accordance with COMAR standards for general education. The Office of the Provost provided direction and oversight and also built and staffed a sequence of developmental courses. Learning outcomes assessment was distributed across schools and units. Meanwhile MSB and YGCLA developed and implemented more explicit learning goals for every undergraduate major and graduate program with corresponding assessment plans for majors, specializations, and graduate degrees. The resulting assessments of learning outcomes were de-centralized, that is, either the work of the first year instructors and administrators at the general education level (with oversight by the faculty in the corresponding academy unit), or the work of faculty and academic program directors working with associate deans at the upper levels. To strengthen and coordinate these efforts, and in response to recommendations resulting from our 2007 Middle States accreditation self-study, a university-wide assessment committee was formed and an endowed Center for Excellence in Learning and Teaching (CELT) was created. Professor James Dutt was appointed to the directorship of CELT and asked to coordinate UB's assessment of learning outcomes across schools and units.

By 2008, then, UB's institutional structures supported a comprehensive set of plans to assess student learning outcomes at four distinct levels (developmental, general education, baccalaureate learning goals for all students, and academic program specific learning goals for majors and graduate students.) The last of these assessments were also heavily influenced by professional accreditation standards in law, business, public affairs, criminal justice, and psychology. Institutionally, UB committed explicitly in its Strategic Plan of 2008-2012 to strengthening its culture of assessment and invested resources accordingly.

Assessment of student learning outcomes at the course level became well-established throughout the curriculum, but the institutional structures proved unstable. Changes in academic leadership

were a factor. Provost Weiwel assumed the presidency of Portland State University, and Professor Dutt retired after a prolonged period of unpredictable illness. Provost Wood arrived at UB in the summer 2009, and in the fall of 2009 he charged UB's faculty with a comprehensive review and reform of general education as a whole. Provost Wood also began transitioning oversight of the first-year experience to the YGCLA, which, for other strategic reasons, began a transformation into two colleges–a College of Public Affairs, and a College of Arts and Sciences (CAS). Meanwhile, independently and under the leadership of the YGCLA's Associate Dean, multiple committees of disciplinary experts reviewed and revised curriculum guidelines and requirements in each of the state of Maryland's five general education areas. This activity resulted in a comprehensive guide for faculty developing general education courses, with clear lists of learning goals in each are required since Fall 2010.

All of this activity resulted in three, distinct "game-changing" developments during academic year 2009-2010 and 2010-2011 with respect to targeted learning outcomes and assessment: 1) a new set of undergraduate learning goals; 2) a new (and as yet incomplete) governance structure for general education; and 3) a revised set of general education learning goals based on the former learning goals and on a stricter reading of Maryland state standards. To some degree, UB's institutional support for the assessment of learning outcomes is still catching up, but assessment in key areas such as writing and quantitative literacy, as described above, has informed dramatic changes.

Finally, UB is now engaged in increased learning outcomes assessment efforts in anticipation of our five-year periodic review report (PRR) to Middle States, due in June 2012. We have analyzed each of the general education outcomes for where they fit on a four-stage "scale":

Stage 1	Clear statement of key goals, including expected learning outcomes

Stage 2	Organized and sustained assessment plan that includes:
	    a. institutional guidelines, resources, coordination and support for assessment;
	    b. assessment activities and initiatives that are presently underway;
	    c. plans to develop and implement future assessment activities and initiatives

Stage 3	Assessment results demonstrating that the institution and its students are achieving key institutional and program goals
Stage 4	Uses assessment results to improve student learning and advance the institution.

We are moving through a process to ensure that all general education outcomes will have been assessed through stage 2 and that most will be at stage 3 or 4. The efforts described in this brief "history" of general education assessment have contributed greatly to UB's institutional abilities to undertake this work.

Attachment A: WRIT 200/300 Placement Rubric

ARC	200 RANGE		300 RANGE	
	POOR	**INADEQUATE**	**ADEQUATE**	**EFFECTIVE**
Introduction	Introductory paragraph is missing or is solely a thesis statement.	Introductory paragraph provides insufficient context for the topic. Direction of essay unclear.	Introductory paragraph successfully introduces the topic by providing sufficient context.	Introductory paragraph is engaging, marked by sophistication in approach or style.
Thesis	Thesis statement is missing or abandoned for the rest of the essay.	Thesis statement lacks sufficient clarity; thesis is too broad or general.	Thesis statement is adequately clear and indicates a position.	Thesis is complex and specific, effectively unifying the essay.
Audience	Essay demonstrates poor sense of audience.	Essay fails to demonstrate sufficient sense of audience.	Essay demonstrates adequate sense of audience with appropriate diction and necessary background information	Essay effectively addresses audience.
Paragraph	Paragraph structure is erratic and marked by severe lack of development.	Paragraphs are inadequately developed and inconsistent in usage of topic sentences and transitions.	Body paragraphs are unified and developed, adequately employing topic sentences and transitions.	Body paragraphs advance the thesis, marked by effective transitions and development through specific detail.
Support	Essay lacks evidence or logical reasoning to support claim.	Evidence provided is insufficient in amount, variety of style, or logic; evidence is incorrect or irrelevant.	Evidence is accurate; types of evidence are varied, logical, and relevant.	Essay employs sophisticated evidence, demonstrating complexity.
Sentence competency	Sentence structure errors significantly interfere with meaning.	Essay is marked by sentence structure errors or overly simple or convoluted sentences.	Essay contains few sentence structure errors; sentences are complex and vary in structure.	Sentences are sophisticated in style and structure.

Three scores in the 200 range result in 200 placement, as does a single score of "Poor" in paragraph, support, or sentence competency.

Attachment B: MSB rubric for Oral Communications

Performance Area	3: Exceeds Standards	2: Meets Standards	1: Fails to Meet Standards
Organization	Presenter follows logical sequence and provides explanations/elaboration.	Presenter follows logical sequence, but fails to elaborate.	Presenter does not follow logical sequence (jumps around in presentation).
Eye Contact	Presenter seldom returns to notes, maintaining eye contact with audience throughout the presentation.	Presenter maintains eye contact with audience most of the time, but frequently returns to notes.	Presenter reads most or all of report, making little to no eye contact with audience.
Delivery	Presenter speaks clearly and loud enough for all in audience to hear, makes no grammatical errors, and pronounces all terms correctly and precisely.	Presenter's voice is relatively clear, but too low to be heard by those in the back of the room. Presenter makes several major grammatical errors, and mispronounces some terms.	Presenter mumbles, mispronounces terms, and makes serious and persistent grammatical errors throughout presentation. Presenter speaks too quietly to be heard by many in audience.
Conclusion:	Effectively summarizes the presentation and provides a sense of closure.	Provides an adequate summary &/or recommendation that is reasonable given the information/analysis presented.	Weak or no conclusion provided (it is too vague to be of any practical value) or the recommendation is weakly related to the analysis.
Responsiveness: a) Q&A b) time	Addresses all questions in a manner that demonstrates a thorough command of the topic(s) of the presentation. Speaker uses the allotted time effectively. Finishes on time.	Presenter demonstrates an ability to address most questions in a thoughtful and effective manner. Speaker finishes on time but has to rush through last points to finish on time.	Presenter cannot address basic questions about the topic or addresses them in a superficial manner. Speaker does not finish on time or finishes well before allotted time.
Multimedia Support and Visual Aids: Charts, animation, graphs, handouts, posters, videos, slides, sound	Presentation includes a balanced use of appropriate multimedia that enhances the overall presentation (easy to read, attractive, informative, and error free).	Presentation includes limited multi-media that enhance the overall presentation. Easy to read and informative, but not outstanding.	Presentation includes little or no multimedia or uses it in distracting or ineffective manner (difficult to read, has errors &/or typos, etc.).

Attachment C: MSB assessment rubric for quantitative problem solving

Quantitative Problem-Solving Assessment Rubric (UG)

	3: Exceeds Standards	2: Meets Standards	1: Fails to Meet Standards
Creates data files and uses software to perform analysis	Data is entered correctly without errors. Excel is used effectively and efficiently to correctly perform required analysis. Spreadsheet is well-organized and readable.	Data entry/Excel formulas, functions, or data analysis results are incorrect due to a few minor errors.	There is a major error or numerous minor errors in data entry and use of Excel. Spreadsheet is poorly organized and difficult to read.
Applies appropriate procedures	Applies the appropriate statistical procedures to analyze the problem. Explains why procedures are appropriate for the problem.	There are minor errors in the choice of the statistical procedures to analyze the problem. Not all of the factors that influence the appropriate statistical procedures have been identified.	Applies inappropriate procedures. No approach taken or approach was unclear.
Analyzes the problem	Analysis complete. Interpretation of the statistical results obtained is logical, correct, and explained clearly.	Analysis incomplete or incorrect due to a few minor errors in the interpretation of results.	Analysis incomplete or incorrect due to a major error or numerous minor errors in the interpretation of results. An analysis of results was not attempted or impossible to follow.
Communicates the results	Recommendations are consistent with the results obtained. Results and recommendations are presented in a coherent and logical manner with complete sentences; appropriate grammar, spelling, and use of statistical terminology and symbols; and correct units of measurement.	Recommendations are understandable but not always consistent with the results obtained. There are minor problems with organization, composition, use of statistical terminology and symbols, and/or correct units of measure.	Recommendations are inconsistent with the results obtained and poorly communicated.

Attachment D: Information Literacy/Critical Thinking Assessment Rubric

Assessment Criteria					
Competency	*Novice*	*Developing*	*Proficient*	*Accomplished*	*N/A*
Define and articulate the need for information	Cannot develop a thesis statement	Develops a clear thesis; formulates a question based on information needed	Defines/modifies information to achieve a manageable focus and can identify key concepts and terms	Combines existing information and original thought, experimentation and/or analysis to produce new information.	
Identify, find, understand and use sources in a variety of formats	Does not recognize that knowledge is organized into disciplines; can't locate information beyond local and print resources	Recognizes that knowledge is organized into disciplines and identifies the value differences of potential resources	Identifies the purpose/audience of potential sources; re-evaluates the information needed; differentiates between primary and secondary sources.	Recognizes the use and importance of primary and secondary sources; can construct information from raw data in primary sources	
Retrieves information using a variety of methods	Cannot retrieve information effectively from any source	Uses various search systems in a variety of formats	Uses various systems to locate information resources and identifies specific sites for exploration	Uses specialized services (on-site or on-line)/other forms of inquiry to retrieve primary information	
Refines the search strategy	Cannot assess the quantity, quality, and relevance of search results.	Revises and repeats searches effectively	Identifies gaps in retrieved information and determines if search strategy should be revised	Assesses quantity, quality, and relevant search results to determine need for alternative information retrieval systems	
Extracts, records, and manages the information and its sources	Cannot select appropriate information technologies	Selects appropriate sources; can create organizing system	Differentiates between types of sources; understands the elements/syntax of citation systems (APA, MLA, or other)	Using various technologies to manage information; can correctly cite information from a wide range of sources in a given editorial style	
Follows copyright laws, regulations, institutional policies and etiquette related to the access and use of information	Does not follow appropriate laws, policies, and "netiquette"	Understands what plagiarism is and does not plagiarize	Complies with institutional policies on information resources and preserves the integrity of information sources,	Obtains, stories, and disseminates text, data, images and sounds within legal guidelines.	

			equipment, systems and facilities.		
Acknowledges the use of information sources	Does not acknowledge sources	Inappropriately acknowledges sources	Usually acknowledges sources in an appropriate style	Consistently cites courses in an appropriate styles and posts permission granted notices for copyrighted material, where applicable.	

Attachment E: Applications of Business Technologies Rubric

	3: Exceeds Standards	2: Meets Standards	1: Fails to Meet Standards
Spreadsheet/Database Interface Skills (Excel file)			
Data Extraction	Creates an Excel file containing a worksheet comprising of columnar data imported through an interface with the requisite Microsoft Access database query.	Creates an Excel file containing a worksheet comprising of columnar data imported through an interface with a Microsoft Access database query that is similar to, but other than, that specified.	Fails to create Excel file/worksheet; or large amounts of data are missing/distorted; or data appear entered by means other than an interface with a database query.
Data Reorganization	Creates a functional PivotTable and a functional PivotChart within the Excel file, based on the imported columnar data.	Creates a functional PivotTable or a functional PivotChart within the Excel file, based on the imported columnar data, but not both.	Creates a new chart within the Excel file, based on the imported columnar data, but does not format it as a PivotChart, and does not create a PivotTable.
Data Integrity	All data items occupying the ROW, COLUMN, DATA, and PAGE fields in the PivotTable and PivotChart are exactly as specified.	The data item occupying the DATA field in the PivotTable/PivotChart is the one whose values are measurable via a "ratio" or "interval" scale. Only some of the other data items are in their specified spots.	The data item occupying the DATA field in the PivotTable/PivotChart is one whose values are measurable only via a "nominal" or "ordinal" scale, rather than a "ratio" or "interval" scale.
Application to Business Environment (Word processed report)			
Information Extraction	Report contains comparative observations likely obtained by interactive use of the PivotTable/PivotChart, equal to or greater than the required number.	Report contains some comparative observations likely obtained by interactive use of the PivotTable/PivotChart, but fewer than the required number.	Report contains few or no observations that are comparative in nature.
Information Relevance	All observations are interpreted in the language of various business constructs, making them meaningful for lower- and mid-level managerial decision making.	Some observations are interpreted in the language of various business constructs, making them meaningful for lower- and mid-level managerial decision making.	Few or no observations are interpreted in the language of business constructs, and do not provide much meaning for lower- and mid-level managerial decision making.

University of Maryland – Baltimore County

University of Maryland Baltimore County
Student Learning Outcomes Assessment Report (SLOAR) 2011
Submitted to the Maryland Higher Education Commission
June 30, 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

UMBC engages in the assessment and evaluation of its academic programs and administrative activities on a continuous basis. In 2008, our campus developed an Assessment Plan for improving institutional effectiveness through the shared governance process and convened the UMBC Assessment Committee, composed of faculty and staff representatives of Academic Affairs and other administrative units, to guide the campus in its initial stage of implementation. Building on UMBC's history of assessment, the plan established a better documented approach to assessment than existed at the time of the *UMBC 2007 SLOAR*. UMBC's Assessment Plan consists of plans from each college and school, the general education assessment plan, and the assessments plans of all administrative divisions and academic support units. In addition, all academic departments created program-level plans for student learning outcomes assessment, which were approved by the dean prior to implementation on a biennial schedule. UMBC now has a comprehensive process to ensure that our administrative units and academic programs are assessed on a regular basis and that the results of these assessments are used to ensure continuous improvement. The results of these efforts are decisions related to program content, program delivery, administrative practice, and/or allocation of resources to ensure improved institutional effectiveness. Assessment has been institutionalized as a component of regularly scheduled activities that occur annually and periodic academic program reviews that are conducted on a seven-year cycle with a subsequent internal third-year progress review.

Overall responsibility for implementation of the *UMBC Assessment Plan* rests with the Provost; the Vice Presidents assume responsibility for assessment within their divisions, and the Deans oversee implementation of assessment plans within their academic units. To support comprehensive assessment, the UMBC Faculty Development Center provides departments and faculty with resources and guidance for the development of effective program-level and general education course assessment. In addition, the Office of the Provost has sponsored a series of workshops guided by external and internal experts to support the development and implementation of effective assessment. Workshops held in 2008 helped department chairs and faculty members understand the process and develop program-level assessment plans. Additional workshops were held in 2010 and 2011 to guide administrators, departments and faculty in the

use of direct evidence in course-level assessment of general education functional competencies. The Division of Student Affairs also has sponsored a series of assessment workshops and hosts an assessment and research committee.

The UMBC General Education Committee (GEC) is responsible for monitoring general education assessments and results. In collaboration with the Council of Deans (COD) and the Assessment Committee, the GEC reviews assessment data and provides reports regarding general education and UMBC's Assessment Plan to the Provost and the COD. The Provost and the COD disseminate the Committee's analysis and recommendations to the academic departments and the campus community for discussion and policy-making purposes. The section below outlines a streamlined process that was adopted at the recommendation of the GEC to efficiently and effectively integrate general education student learning assessment with the institutional processes that are already underway.

General Education and Assessment: A Streamlined Process
(Approved by the Provost April 2009; Amended by GEC March 2010)

Initial and Continuing Course Review for General Education Designation *(UMBC Assessment Plan, II.F)*
▪ Initial course review for general education designation is conducted by the GEC. The review focuses on: 1) accessibility to a broad undergraduate student community; 2) whether the course meets criteria for the proposed distribution area; and 3) whether the course addresses a minimum of one of the five functional competencies.
▪ Continuing review of general education courses is conducted by the GEC in accordance with the seven year Academic Program Review (APR) cycle. The department will resubmit GEP courses which have not been reviewed since the last APR.

Review of Course Level Learning Outcomes *(Assessment Plan II.G)*
▪ As part of the biennial submission of department assessment reports, departments will provide a summary of learning outcomes for one general education course.
▪ Course selection will be made by the department to ensure that, over time, a sample of courses addressing the various functional competencies is represented
▪ Information submitted will include: 1) summary of how the course addresses the distribution area(s) designated; 2) summary of how the course addresses and measures each of the functional competencies designated; 3) examples of learning activities and assessment criteria for measuring designated functional competencies; 4) summary of assessments results on student learning outcomes regarding designated functional competencies; and 5) changes made or proposed to improve student learning.

Review of Program Level Learning Outcomes
▪ As part of the seven year APR cycle, departments will provide a summary of assessment of an identified sample of general education courses.
▪ The report will summarize information on: 1) assessments and outcomes that are consistent with the review of course level learning outcomes; 2) strengths and weaknesses of the courses; and 3) changes made or proposed at the course and/or program levels to improve teaching and enhance student competencies.

I. Written and Oral Communication

 A. Institution's definition of competency

- Understand and apply both the verbal and nonverbal aspects of communication, by utilizing fundamental rhetorical strategies and conventions, such as purpose, audience, genre, tone, format, and structure.
- Understand writing as a process that involves multiple drafts, incorporating feedback, revising, editing, and proofreading.
- Identify, select, and evaluate appropriate sources, including print and electronic texts, cultural artifacts, or artistic creations.
- Acknowledge and document sources used to support an argument or presentation.
- Develop a foundation for cross-cultural communication.

 B. Level(s) at which the competency is assessed (e.g., department, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

For example, the American Studies Department submitted a biennial assessment report in 2010-11 and included assessment results for their course AMST 382 that meets the general education requirement and addresses the functional competencies of oral and written communication and critical analysis and reasoning. The department submitted this report to the Dean of the College of Arts, Humanities, and Social Sciences and to the university-wide General Education Committee for review and feedback.

 C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The functional competency of oral and written communication is usually directly assessed by faculty evaluating samples of students' written work or their oral presentations using a rubric or scoring the work against a set of criteria based on the functional competency. The department as

a whole or a designated group of faculty then reviews data on average rubric scores and the percentage of students meeting some predetermined level of mastery of the competency as represented in the rubric scores. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

> D. Describe the results of the assessment work related to this competency.
> *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

All courses that address the functional competency of oral and written communication assess students' learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

Examples from department general education courses addressing this functional competency:

AMST: *Functional Competencies Addressed: I. Oral and written communication and III. Critical and analytical reasoning.* The instructor of AMST 382 used rubrics to evaluate written communication skills and critical analysis and reasoning skills in students' final papers, a policy analysis. The instructor found students performed well on the rubric in general with an average score on the criteria of 3.7 and 3.9 out of 5 respectively. But the instructor also felt that students needed to improve in their ability to select and evaluate primary and secondary sources and provide adequate supporting evidence for their proposed policies. Ideas for addressing these needs include devoting more class time to research practices and policy analysis process.

DANC: *Functional Competency Addressed: I. Oral and written communication.* Faculty teaching DANC 201, a general education course, added a discussion board and student oral presentations to the course to address this functional competency. Students were evaluated on both quality and quantity of discussion board postings. Oral presentations were also graded on content, use of sources, and quality of research, in addition to presentation and demonstration of a grasp of the content. The instructor found that these strategies increased student engagement in the course, but the quality of the students' discussion board postings was highly variable. Changes planned include making the qualities of a good post clearer to students at the beginning of the course.

HIST: *Functional Competencies Addressed: I. Oral and written communication and III. Critical and analytical reasoning*. The instructor of HIST 345, a general education course, used a rubric to evaluate students' papers both for the students' ability to communicate effectively in writing in terms of constructing arguments (functional competency I) and to identify scholarly arguments

and analyze primary sources (functional competency III). Her results showed that students were able to construct an argument and draw conclusions, but they were not able to analyze written arguments to her satisfaction. She proposed creating more effective assignments that trained students to question sources, not just read them. Her plan is that learning to question will help students learn to analyze.

Examples from department major courses with learning outcomes that mirror this functional competency:

ENGL: *Learning Outcome*: *Students will be able to engage in research using appropriate methodology.* The English department analyzed samples of student papers in their six senior seminars using a rubric based on the program learning objectives. The data they gathered revealed that their students' skills in conceiving, conducting and writing research were weak for 20-30% of their graduates. Indirectly, their senior exit survey also confirmed this finding. They are instituting a requirement for two junior level courses that develop students' research skills and will reassess their students' progress in the next two-year cycle after making this change.

GWST: *Learning Outcome: Students will develop skills in information literacy, critical thinking, effective research, and effective writing.* Instructors in the capstone course, GWST 495, evaluated student work in terms of how well students were prepared for and exhibited effective research practices. Instructors also interviewed students about their perceptions of their abilities to carry out research projects. In their written report instructors noted that students needed more support in engaging scholarship effectively, framing research questions and drafting research findings. Assignments in prerequisite courses, GWST 100 and 300 were subsequently redesigned to focus more on developing students' research skills. The instructors in the capstone course conduct evaluations of student work yearly to monitor the effects of these changes.

MLLI: *Learning Outcome: Students will expand their written and oral communication skills in the language.* All of the language programs offered through MLLI employ extensive rubrics to assess students' written and oral communication skills in the language. They also survey students' perceptions of their achievement of these skills. The Spanish program, as an example, analyzed their students' oral and written communication skills using detailed rubrics and determined that students were significantly more proficient in oral expression than in writing. They propose curricular changes to SPA 300 and 400 to emphasize writing skills in the language more specifically. They also are considering a Spanish Writing Center for student support modeled after the new pilot of the German Writing Center.

II. Scientific and Quantitative Reasoning

   A. Institution's definition of competency

- Understand and use mathematical and scientific methods of inquiry, reasoning, processes, and strategies to investigate and solve problems.
- Organize, interpret, draw inferences, and make predictions about natural or behavioral phenomena using mathematical and scientific models and theories.
- Recognize the ethical and social implications of scientific inquiry and technological change, and distinguish science from non-science and pseudoscience.
- Recognize that mathematical, statistical, and scientific evidence requires evaluation.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

As one example, the Chemistry Department submitted a periodic assessment plan in 2010 that included assessment of CHEM 101 and 102, general education courses that address the scientific and quantitative reasoning functional competency. The department submitted this report to the Dean of the College of Natural and Mathematical Sciences for review.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The functional competency scientific and quantitative reasoning is usually directly assessed using student performance on tests, such as standardized national exams (e.g. course-specific American Chemical Society exams), or specific questions on tests or questions answered during classes using classroom response systems ("clickers") that address the functional competency. In laboratory classes faculty may assess student work on laboratory reports typically scored with a rubric. The department as a whole or a designated group of faculty then reviews data on student performance. They compile information on the percentage of students meeting some predetermined level of mastery of the competency as represented in the test scores, scores on individual questions, or rubric scores on laboratory reports. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

D. Describe the results of the assessment work related to this competency.
     Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of scientific and quantitative reasoning assess students' learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

Examples from department general education courses addressing this functional competency:

The Biology Department courses that address the general education functional competency of scientific and quantitative reasoning include 100 and 100 laboratory (Concepts of Biology), 301 (Ecology and Evolutionary Biology), 302 and 302 laboratory (Genetics). Faculty teaching the courses ask questions that are related to the functional competency on exams and/or during class via clickers. In addition, the laboratory portion is evaluated by review of student laboratory reports. The Department Assessment Committee reviewed the reports from the course instructors and concluded that numerical scores provided for each evaluation criterion for each course met the expectations for student learning of the department.

The Chemistry Department administers the American Chemistry Society's exam for general chemistry at the end of the two-semester sequence of CHEM 101 and 102, courses that meet the general education requirement and address the functional competency of scientific and quantitative reasoning. The class averages on these exams are above the national average which the department feels meets their expectation of student success.

Examples from department major courses with learning outcomes that mirror this functional competency:

PHYS: *Learning Outcome: Students will be able to formulate problems in the language of mathematics and to use both mathematical and computational skills to solve physical problems.* The department assessed this outcome for the BS program in PHYS 424, quantum mechanics, by examining the results on specific exam questions pertaining to that outcome, as well as homework and in-class observation. Based on three semesters of student learning data, the department recommended emphasizing and monitoring this skill starting earlier in their curriculum and is adding assessment data from PHYS 220, Computational Physics, to their overall plan.

III. Critical Analysis and Reasoning

    A. Institution's definition of competency

- Identify and formulate questions and problems and evaluate various methods of reasoning and verification.
- Identify and evaluate stated and unstated assumptions, supporting evidence and data, alternative points of view, and assess implications and consequences of particular courses of action.
- Construct cogent arguments, provide supporting evidence, articulate reasoned judgments, and draw appropriate conclusions.
- Apply fundamental critical thinking skills to the analysis and interpretation of a variety of subjects, including ideas and issues, cultural artifacts, or aesthetic works.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

For example, the Anthropology Department submitted a biennial assessment report in 2010-11 and included assessment results for their course ANTH 211 that meets the general education requirement and addresses the functional competencies of oral and written communication, scientific and quantitative reasoning, critical analysis and reasoning, and technological competency/information literacy. The department submitted this report to the Dean of the College of Arts, Humanities, and Social Sciences and to the university-wide General Education Committee for review and feedback.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The functional competency of critical analysis and reasoning is usually directly assessed by: faculty evaluating samples of students' written work using a rubric or scoring the work against a set of criteria based on the functional competency, and/or faculty using student performance on specific tests, such as national exams, or questions on course exams, or questions answered during classes using classroom response systems ("clickers"). The department as a whole or a designated group of faculty then review data on average rubric scores or exam performance and the percentage of students meeting some predetermined level of mastery of the competency as demonstrated by these scores. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of critical analysis and reasoning assess students' learning at least indirectly through student surveys of their own perceptions of how

well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

ANTH: *Functional Competencies Addressed: Functional Competencies Addressed: I. Oral and written communication. II. Scientific and quantitative reasoning, III. Critical and analytical reasoning, and IV. Information literacy.* Instructors in the ANTH 211 course address the multiple functional competencies in a variety of assignments. One assignment that requires intellectual work that encompasses all the functional competencies is that of a comparison paper near the end of one section. As the department describes it, the grading rubric used to assess the assignment "evaluates students' abilities to develop a strong comparison (competencies 2, 3, and 4) and a clear line of argument (competency 3) that is presented in a well-structured, well-written essay (competency 1)." An observation assignment requires students to analyze a topic using the systematic observation skills of the discipline in connection with class readings and discussions in theory. The grading rubric as the department notes, "evaluates students' adherence to the research method and their use of observational field notes as evidence (competency 2), the presentation of a claim and a grounded argument (competency 3) that adheres to formal science writing styles (competency 1)."

DANC: *Functional Competencies Addressed: III. Critical and analytical reasoning*. The instructor of DANC 202, a GEP course, evaluated select essay exam questions for students' ability to analyze the issue involved. Her results suggested that students were not taking a deep enough approach to their thinking on issues. She worked with the Director of the Faculty Development Center both to reframe the essay questions to evoke a deeper response from students and to think about activities to model this kind of analysis during class.

ECON: *Functional Competencies Addressed: III. Critical and analytical reasoning*. The department administered the Test of Understanding in College Economics (TUCE) exam to students in the ECON 101 and 102 courses, in some cases pre-test as well as post-test. The developers of the TUCE exam provide a means to analyze test question responses based on cognitive emphasis. One of these emphases is that of "explicit application of basic terms, concepts, and principles in order to solve problems or recognize incorrect, improbable, or unsupportable applications of economic theory." Student results on questions classified for this cognitive emphasis allow a measure of students' demonstration of their critical and analytical reasoning. The instructors found that students' performance on questions of this type was as good as, if not significantly better than, the performance of students at a series of comparable institutions.

IV. Technological Competency

   A. Institution's definition of competency

▪   Use information technology as one tool for solving problems, identifying and evaluating information sources, and analyzing reports and presentations.

- Use a variety of online or technology-assisted means to present work, such as web pages, email, online forums, word processing, and presentation and spreadsheet software.
- Understand the essentials of technology, including hardware and software, networks, and systems.

UMBC currently separates the functional competency of information literacy from technological competency, but we combine these in this report as per MHEC practice. The functional competency of information literacy at UMBC is described as the ability to:

▪Identify and access a variety of documentary sources of information effectively and efficiently via traditional and electronic-based retrieval systems.
▪Evaluate information sources and content in terms of accuracy, authority, bias, and relevance.
▪Use information effectively to support a particular argument or to produce a result.
▪Respect and observe appropriate laws and institutional policies regarding the legal and ethical retrieval and use of information.

    B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The general education functional competency is assessed at the course level. Faculty teaching courses designated as fulfilling the general education requirement gather both direct and indirect data on student learning outcomes related to that functional competency and appropriate to the discipline. Departments report these data biennially for a sample of courses and as part of the academic program review cycle every seven years. The General Education Committee gathers these results and reviews them for each department.

Department and program goals that mirror functional competencies are assessed in capstone experiences, such as specific courses, internships, or research courses, and are reported in annual or biennial assessment reports (depending on the college) and academic program reviews. These assessment reports are reviewed by the Dean of the respective college and by the university Assessment Committee. Department academic program reports are reviewed by an external team during the review process and by university senior administration.

    C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Technological competency may be directly assessed through performance on specific exam questions and presentation of projects that require knowledge of and use of various technological skills and tools when these are scored with a rubric.

The functional competency of information literacy is usually directly assessed by: faculty evaluating samples of students' written work using a rubric or scoring the work against a set of criteria based on the functional competency, and/or faculty using student performance on specific tests or questions on course exams. The department as a whole or a designated group of faculty then review data on average rubric scores or exam performance and the percentage of students meeting some predetermined level of mastery of the competency as demonstrated by these scores. If the student outcomes fall outside of a department expectation, then the department recommends various changes in curriculum or pedagogy to address the deficiency.

Two indirect measures of assessment typically gathered by departments include student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

    D. Describe the results of the assessment work related to this competency.
       Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

All courses that address the functional competency of technological literacy and information literacy assess students' learning at least indirectly through student surveys of their own perceptions of how well they meet the competency and overall student grades on work that requires students to demonstrate the competency.

In this section we include specific examples of department efforts to assess this functional competency, both in the general education courses departments offer that are designed to address this functional competency, and in some department courses for the major program that have learning outcomes that mirror this functional competency.

Examples from department general education courses addressing this functional competency:

ANTH: *Functional Competencies Addressed: I. Oral and written communication. II. Scientific and quantitative reasoning, III. Critical and analytical reasoning, and IV. Information literacy.* Instructors in the ANTH 211 course address the multiple functional competencies in a variety of assignments. One assignment that requires intellectual work that encompasses all the functional competencies is that of a comparison paper near the end of one section. As the department describes it, the grading rubric used to assess the assignment "evaluates students' abilities to develop a strong comparison (competencies 2, 3, and 4) and a clear line of argument (competency 3) that is presented in a well-structured, well-written essay (competency 1)." An observation assignment requires students to analyze a topic using the systematic observation skills of the discipline in connection with class readings and discussions of theory. The grading rubric as the department notes, "evaluates students' adherence to the research method and their use of observational field notes as evidence (competency 2), the presentation of a claim and a grounded argument (competency 3) that adheres to formal science writing styles (competency 1)."

Examples from department major courses that mirror this functional competency:

HIST: *Learning Outcome: Students will be able to demonstrate basic research techniques used by historians.* Faculty evaluated a sample of papers from the senior capstone courses for demonstration of the student learning outcomes. They also compared some student work from HIST 201 to determine if students showed greater development of these skills as they progressed to the senior course. The department determined that students showed acceptable levels of achievement of the program goals in the capstone courses. They did determine, however, that certain skills needed strengthening, such as the ability to use proper citation of sources. The department decided that students did not have enough additional practice in research skills between the 200-level course and the capstone course. They held a department seminar to discuss pedagogical ways to build a better bridge between the two courses in their other courses. They also discussed curricular ways to address this issue by possibly changing some 400-level courses into 300-level ones to help better sequence this skill development.

SOCY: *Learning Outcome: Students will be able to understand and apply social science research methods to collect and analyze data.* In SOCY 301 students learn about different data collection and analysis methods, including statistical software such as SPSS. Students demonstrate their achievement of this learning outcome related to the functional competency by their performance on a set of questions addressing this outcome administered at the beginning and again at the end of the course. The average score on the post-test was significantly higher than that on the pre-test. The department considered this increase sufficient in meeting its expectations for this learning outcome.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

Assessment has become a constant and dynamic feature of our institutional culture. We have made great progress on program level assessment at UMBC and have gained significant momentum for general education assessment and the use of outcomes to improve student learning. Our approach has always engaged faculty "in the trenches," as well as deans and the senior administration in this process and, although not always seamless, it has served us well. A review of the assessment summary reports provided to date by the College of Arts, Humanities and Social Sciences (CAHSS), the College of Natural and Mathematical Sciences (CNMS), and the College of Engineering and Information Technology (COEIT) reveal that departments recognize the value of assessment to determine how students are performing in their programs or courses and of using that data to improve student success. UMBC will continue to increase the use of direct evidence in the assessment of functional competency student learning outcomes. First, the Faculty Development Center has continued to make the processes of assessment as direct and transparent as possible by working closely with departments and faculty to efficiently and appropriately incorporate direct measures into their work. Second, UMBC has continued to strengthen a "culture of assessment" through promotion of a "learning-centered" model of teaching as inquiry. In that regard, the University has begun a new Teacher-Scholar Program this spring to cultivate a mindset of learning-centered inquiry within a supportive faculty cohort. Best practices from this Program will be disseminated to deans, chairs and faculty by the Faculty Development Center.

Evolution of General Education Assessment since the 2007 SLOAR

2007
- UMBC creates a new set of general education requirements.
- UMBC adopts five functional competencies identified by MSCHE and MHEC as general education student learning goals.

2007 - 2008
- New general education program (GEP) goes into effect.

- Systematic assessment of key general education with large enrollments and selected First Year Seminars (FYS) assessment initiated with reliance on indirect evidence.
- UMBC Assessment Plan adopted and GEC charged with oversight of general education Student Learning Outcomes (SLO) assessment.

2008 - 2009
- Program-level department assessment plans reviewed, revised and approved.
- First round of biennial *program-level* assessment initiated.
- GEC assesses campus "readiness" to move forward with distinct general education course-level assessment; simplifies reviews of assessment outcomes and proposes *General Education and Assessment: A Streamlined Process*.
- UMBC Assessment Committee revises Assessment Plan to incorporate the GEC proposal.
- UMBC Faculty Senate approves revised Assessment Plan.

2009 - 2010
- Second round of biennial program-level assessment initiated.
- General education assessment summaries included in APR self-study reports.
- GEC review of biennial reports and APR self-study reports determines that substantial progress had been made. Many reports reflect the adoption of both direct and indirect assessments as well as the use of data for improvement; some provided clear alignment of instruction, assessment and the general education functional competencies. However, the GEC identified continuing challenges to complete implementation of effective general education assessment of student learning outcomes.
- The GEC report recommends several actions: 1) Guidance and reference materials for effective general education assessment should be provided to departments and individual faculty through the UMBC Faculty Development Center; 2) Principles and mechanisms for assessment of general education courses should be consistent with those already identified by departments for program-level assessment; 3) To facilitate consistency and coherence of reporting, specific course review guidelines should be included in the APR self-study instructions and the biennial report template.
- UMBC Assessment Committee endorses, and the Faculty Senate approves, the GEC recommendations and amends *General Education Assessment: A Streamlined Process* to include specific guidelines (i.e., "Information submitted will include:") for course-level and program-level general education reviews.

2010 - 2011
- Series of General Education Functional Competencies Assessment Workshops conducted by internal and external experts for administrators, chairs, and faculty. Includes targeted workshops for departments preparing for Academic Program Review (APR).
- Second series of workshops focuses on assessment of GEP Writing Intensive courses.
- Under the leadership of a new director with assessment expertise, Dr. Linda Hodges, the Faculty Development Center now serves as primary resource to department and individual faculty for the development of effective student learning assessment.
- Preliminary review of biennial general education course assessments submitted June 1, 2011 indicate continued increases in use of direct evidence to assess student learning outcomes to functional competencies and outcomes to improve student learning.

Progress in Departments Using Assessment to Drive Changes to Practice

Colleges' Dept Reports AY 2009 and 2010	% Proposing Changes Based on Assessment	% Using Direct Measures of Assessment	% Proposing Changes from Direct Measures
CAHSS depts (23)	78%	52%	39%
CNMS depts (4)	25%	100%	25%
COEIT depts (5)	40%	60%	20%

Examples of Using Assessment of Learning Outcome to Improve Teaching and Learning

PART II of this report provides specific examples of using the results of course-level assessment of functional competencies to improve teaching and learning. Often in these examples assessment results allow faculty to recognize the need for pedagogical or curricular change to support students' intellectual development. For example, faculty in several departments, including American Studies, English, and History, discovered through their assessment of student writing that students needed more support in the development of research skills and use of proper disciplinary conventions for citation in research arguments. In the case of American Studies the faculty plans to strengthen classroom activities to support this skill development in students in the course being assessed. The History Department also plans to change pedagogical practice, but they recognize that this skill development needs to start sooner in the curriculum. Thus, they added more emphasis on this kind of work in certain key courses earlier in their sequence of courses. The English Department came to a similar conclusion. The Physics Department likewise in assessing their students' quantitative skills in a senior capstone course realized that students were not receiving enough practice in this kind of work in the 200-level courses. Thus, the assessment of specific courses affects the entire department curriculum.

Some departments' assessment efforts point out the need for more student support. The Spanish faculty, for example, recognized that students needed more help in writing in a new language than faculty could provide in class. Thus, they plan a Spanish Writing Center modeled after the German Writing Center to supplement classroom activities.

In some cases, the results of assessment confirm that course activities are allowing students to meet the department expectations for their learning. This finding may help keep departments focused on those practices that are more effective in promoting student learning and prevent curricular drift or random choices in pedagogical practice. When assessment results do not meet department standards, then faculty may begin to recognize the challenges students face in developing the habits of mind faculty value. These challenges provide meaningful opportunities for faculty and curricular development.

University of Maryland – College Park

University of Maryland, College Park
2011 Student Learning Outcomes Assessment Report
June 30, 2011

Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standards 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities.

At UMD, assessment practices have become embedded in the institutional culture, and have led to the following: Periodic review and revision of plans with regard to improving student learning; establishment of a cyclical review process; establishment of structural processes for informing the campus with regard to assessment results; and the incorporation of assessment results in short-term and long-term campus planning.

The assessment of student learning in academic programs is coordinated through the Provost's Commission on Learning Outcomes Assessment, established in 2003. Charged by the Provost to work with all campus units as they develop learning outcomes and to establish a new standard for assessment at the University of Maryland, the Commission consists of three interacting groups of UMD faculty and administrators, and is chaired by the Associate Provost and Dean for Undergraduate Studies.

- The Planning Team establishes the agenda for and oversees the work of the entire Commission, and is comprised of leadership in Undergraduate Studies and Institutional Research, Planning and Assessment.
- The Deans' Steering Committee, comprised of six college deans, serves as an advisory board for the Planning Team and meets as needed to discuss and decide policy issues.
- The College Coordinators serve as liaisons between the planning team and their respective deans and colleges. Each college designates one or two faculty members or academic administrators to serve as coordinators.

The assessment of student learning has been an institution-wide collaborative process focused on learning outcomes at course and program levels. Through this process, learning outcomes and assessment plans were developed for each undergraduate major and graduate program offered at the University. The assessment of student learning in each program has progressed over the past several years with the following highlights:

- In fall 2005, faculty in each degree program established program learning outcomes and the assessment methods that would be used to measure them. The Provost established that each program would assess the stated learning outcomes by March of 2010 and subsequently at least every four years.
- During that first cycle of assessment, programs submitted their plans for assessment in the fall, and submitted results and analysis the following spring. Concurrently, program and college assessment committees reviewed the assessment results and made recommendations for further action as appropriate. The College Coordinators submitted

assessment results and subsequent curricular actions and changes on behalf of their deans to the Provost via the Commission.

- The College Coordinators acted as peer reviewers at the institutional level and used rubrics to review and provide peer feedback for each program. These reviews were conducted on behalf of the Provost; at the conclusion of each year, the Chair submitted a summary report to him, along with each set of program feedback, which the Provost subsequently shared with each Dean.
- At the conclusion of that four-year cycle, each Coordinator summarized the assessment of student learning process in their college and provided analysis of how it would be improved.
- In this academic year (Fall 2010), the cycle of review has changed. From this year forward, each program will submit one report in the fall which summarizes the changes they have made in the past year due to assessment results, the results of assessments they administered in the past year, and a plan for assessments in the upcoming year. The peer review of those documents by the College Coordinators will continue.

The materials shared in Part Two of this document will exemplify this campus-wide and embedded process. Due to the size of the institution, and the responsibility each program has to state its programs goals and objectives based on disciplinary needs, the assessment of student learning resides mostly at the program level. Therefore this report represents each competency by way of a sampling from across campus of projects that investigate those areas. There are two notable exceptions to this decentralization of assessment. One is the assessment of the general education program, an example of which is included in one of the competency areas, and the future of which is detailed in Part Three. The other exception is our University Libraries, which has taken on the responsibility of assessing information literacy at the campus level.

Part Two: Assessment of Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable.

I.   WRITTEN & ORAL COMMUNICATION

Institution's definition of competency
Goal: Using standard English, University of Maryland undergraduates will communicate clearly and effectively in writing and orally for different audiences and purposes.

Level(s) at which the competency is assessed (Example #1)
This outcome was measured by assessing a sample of papers from 300- and 400-level classes written by English majors. The students are expected to be able to write persuasively using five criteria (see below).

Process used to evaluate competency (i.e., methods, measures, instruments)
Indicators for this standard include the demonstrated ability to: Acknowledge opposing points of view; use language effectively and grammatically; support points; develop an argument; and

state a thesis. One hundred papers were drawn from a pool of papers written by senior English majors in the following courses: Spring 2009 – ENGL304, ENGL410, ENGL440, ENGL478R; and Fall 2009 – ENGL404, ENGL408A, ENGL439F, ENGL451. Each paper was read by two members of the Undergraduate Curriculum Committee and analyzed for those five indicators.

Results of the assessment of this competency
The following percentages of students met the following criteria: Acknowledges opposing points of view (32%, with a significant number of papers showing this criterion as not applicable to the assignment); uses language effectively and grammatically (81%); supports points (92%); develops an argument (81%); and, states a thesis (82%). Four of the five indicators were achieved by 80% or more of the students. The average for all indicators was 74%.

The Undergraduate Curriculum Committee met to review the results of this outcome. As a result of this discussion they decided to make several changes. In the future, the department will collect longer papers written towards the end of the semester, since these papers are likely to allow a better analysis of all the indicators. The first indicator, "Acknowledges opposing points of view," will be deleted, since most teachers do not formally require this of students in analytical papers. The fourth indicator, "Develops an argument," will be revised for clarity to read "Develops a coherent argument." These assessment results and revisions to the process were presented to the full faculty in Fall 2010 for discussion and implementation.

Level(s) at which the competency is assessed (Example #2)
Journalism requires 90 percent of students (assessed at the college level) to demonstrate written and oral communications skills through the ability to report relevant news stories at a level acceptable to a professional news outlet. The measure is taken in JOUR320 and JOUR360, which are intermediate reporting courses for print and broadcast. All majors must take one or the other. Students typically take this course in the second semester of their sophomore year or the first semester of their junior year.

Process used to evaluate competency
JOUR320 and JOUR360 instructors require students in all classes to submit two assignments each. The assignments are selected at the start of the semester and there is discussion among faculty to make sure the assignments are similar in nature. The students upload the assignments onto the college's electronic assessment website database, called J-Portfolio. The instructors review both assignments and then evaluate them for their research, writing and self-editing. They are provided detailed rubrics on the website and rank the assignments on a 1 to 5 scale. Results are shared with the students to help them improve.

Results of the assessment of this competency
The results showed that the writing students hovered just at or slightly below the goal for success for several semesters. The results showed that 10 percent, sometimes more, of the students in some semesters were not proficient in research, writing and/or editing. The faculty reviewed these results and agreed that the problem was likely due to the instruction students received in JOUR201, the beginning news-writing and reporting class, taught primarily by adjunct instructors. In spring 2010, the Programs and Curriculum Committee recommended adopting lead instructors for all courses with multiple sections to address consistency problems like the

ones identified in JOUR320. The faculty agreed to adopt lead teachers for several courses in fall 2010, including JOUR201.

The lead instructor for JOUR201 in fall 2010 is a teacher who has taught the course since 1999. She held a training session for all adjuncts in August and again in January and is assisting the instructors with syllabi and assignments, observing them in their classrooms to provide encouragement and feedback and talking to students about their experience in JOUR201. While this is the largest of the College's skills classes, this oversight and assistance also is occurring in other classes – editing, intermediate reporting, online reporting, ethics and law. Although it is too soon to measure the impact, anecdotally adjunct and other faculty say they find the feedback helpful and believe it has improved their teaching methods.

Level(s) at which the competency is assessed (Example #3)
Lesbian, Gay, Bisexual, and Transgender (LGBT) Studies assesses the written communication, as well as critical reasoning and research skills, of its undergraduates by their performance on the final written paper for the 400-level capstone course of the LGBT Studies certificate (LGBT488).

Process used to evaluate competency
The required written papers are assessed through the use of rubrics. Skills covered in the rubrics include:
- Student writes fairly clearly and coherently in a long essay;
- Student synthesizes and applies major concepts pertaining to the lives, experiences, identities, and representations of LGBT persons;
- Student makes effective use of the research methods and vocabulary of LGBT Studies;
- Student distinguishes his or her own argument from the argument in a critical source.

Results of the assessment of this competency
According to LGBT's rubrics, in 2009-10, 85% of the student papers in LGBT488 met all five of the assessment indicators, with two partially failing. The department's goal was to have at least 75% of students meeting most of the assessment indicators.

In response to the low quality of the papers that did not meet the evaluation criteria, LGBT Studies will work closely with instructors to encourage students' more timely progression in their research and writing (including submission of a detailed outline of the essay as well as a rough draft for a peer review session prior to the final deadline date). LGBT Studies is also building an archive of teaching tools related to improving writing skills and working harder to ensure student compliance with writing prerequisites and with the hierarchy of courses within the program itself, since lower-division LGBT courses focus substantially on building students' writing skills.

II.   SCIENTIFIC AND QUANTITATIVE REASONING

Institution's definition of competency
Goal: University of Maryland undergraduates should understand and be able to apply basic scientific and mathematical reasoning to their research efforts and critical analyses.

Level(s) at which the competency is assessed (Example #1)
Students in the Psychology Department are required to complete two 400-level Psychology laboratory courses. This assessment occurs in one of these courses, Psychology 433: "Basic Helping Skills: Research and Practice." In this course, students are expected to demonstrate competency in understanding and applying basic research methods in psychology, including research design, data analysis, and interpretation. Specifically, students will demonstrate the ability to:
- Formulate testable hypotheses;
- Select and apply appropriate methods; collect, analyze, interpret, and report data using appropriate statistical strategies;
- Recognize limitations in applicability of results; and
- Demonstrate technological competency and information literacy related to research methods.

Process used to evaluate competency
The department developed the following rubric to assess student competency in psychological research methods:
- Accomplished/Excellent: Shows exceptional understanding of research methods that will enable the student to make a scholarly contribution.
- Proficient/Good: Has good foundation in research methods and shows evidence of being able to apply knowledge to new problems.
- Developing: Shows some understanding of research methods but not able to apply knowledge to new problems.
- Novice/Inadequate: Does not understand basic principles of research methods.

The department then collected a representative sample of 28 final student projects fromPSYC433. The final project required students assess their own growth in the use of helping skills over the course of the semester by comparing their performance in a mock helping session early in the semester with their performance in a similar helping session later in the semester. The project required students to synthesize a number of skills developed over their time in the major with a particular emphasis on research methodology. Using the rubric above, the Director of Undergraduate Studies reviewed and scored the 28 projects. The department set a goal of 75 percent of students scoring "Proficient/Good" or higher.

Results of the assessment of this competency
The assessment results were as follows:
- Accomplished/Excellent: 2/28 (7 percent)
- Proficient/Good: 20/28 (71 percent)
- Developing: 6/28 (22 percent)

The department thereby determined that students were meeting the goal of at least 75 percent demonstrating proficiency in research methods (78 percent demonstrated proficiency or excellence). The department did find, however, that students were demonstrating proficiency in the department's four other learning outcomes at higher success rates, and therefore decided to implement a change aimed at improving student research method competency anyway. The department developed a new research methods course to be incorporated into the major.

Level(s) at which the competency is assessed (Example #2)

All UMD students are required to take at least two courses in the physical and/or life sciences as part of their CORE General Education requirement. The following assessment is of the CORE Life Sciences and is therefore at the University Level. Students are assessed on their ability to: 1) communicate about science using appropriate oral and written means, and 2) demonstrate understanding of the broad principles of science and the ways scientists in a particular discipline conduct research.

Process used to evaluate competency
Students were asked to read an article and answer questions related to a chosen concept. They had to be able to fully explain the concept as they understood it and be able to tell how this concept related to the article. Furthermore, they had to cite examples from the article relating to the concept about which they were writing.

In this assessment, 734 students were evaluated. Of these 734 students, 324 were in a post-test group, and the remaining 409 were in a pre-test group.

Results of the assessment of this competency
In measuring students' ability to identify relevant scientific concepts:
- 90% of the students had a good understanding of at least one broad principle of science
- 4% had a basic understanding of at least one broad principle of science
- 4% had some understanding of at least one broad principle of science
- 2% had inadequate understanding of at least one broad principle of science

In the area of being able to explain key concepts in the article:
- 31% had a good understanding
- 27% had a basic understanding
- 27% had some understanding
- 15% had inadequate understanding

In having the ability to understand the context of the article and apply this understanding:
- 24% had good understanding
- 42% had a basic understanding
- 29% had some understanding
- 4% had inadequate understanding

These results indicated that students appear to learn facts well, but that they are more challenged by communicating about science. The findings were consistent for both the pre-test and the post-test samples.

These results influenced the planning of the Marquee Courses in Science and Technology as well as the design of the new General Education plan for UMD. For the Marquee courses, more writing assignments were inserted into those courses in the year following this assessment. In addition, many of the courses incorporated presentations or poster sessions where students made public explanations of their poster. The new General Education plan includes more emphasis on writing and critical thinking in all disciplines.

III.   CRITICAL ANALYSIS AND REASONING

Institution's definition of competency
Goal: University of Maryland undergraduates should learn and develop critical reasoning and research skills that they can apply successfully within a wide range and intersection of disciplines inside and outside of academia.

Level(s) at which the competency is assessed (Example #1)
Students in the Classics department are required to demonstrate the ability to interpret the cultural context of texts through a variety of methodological approaches at the advanced level. Specifically, the assessment includes a sample of students enrolled in several upper-level Greek and Latin courses.

Process used to evaluate competency
Students' critical analysis and reasoning skills are assessed in a final exam and project. Evaluators look for demonstrated knowledge of the historical context of works of Latin and/or Greek literature; ability to place works of Latin and/or Greek literature in their generic tradition; a demonstrated understanding of the cultural context of works of Latin and/or Greek literature; and the ability to interpret primary source material through one or more applied methodologies. The department reviews a sample of exams and papers from courses taken by majors in the department. Selected faculty summarize and report their findings in writing to the department. 100% of majors should achieve proficiency in their ability to critically analyze primary texts in Latin and/or Greek at the advanced level.

Results of the assessment of this competency
Three members of the Classics faculty examined two final exams and two final project from LATN410 (Latin Historians), three final exams from GREK301 (Scenes from Athenian Life), and three final projects from GREK472 (History and Development of the Greek Language). These exams and final projects asked students to analyze the following: the historical context of literary works; the place of literary works in their generic tradition; and the cultural context in which literary works were produced. Students were also asked to interpret literary texts or material culture through one or more applied methodologies. The results were as follows:
- Historical Context: Outstanding 5, acceptable 6, unacceptable 1, not applicable 18
- Generic Tradition: Outstanding 7, acceptable 9, unacceptable 1, not applicable 13
- Cultural Context: Outstanding 5, acceptable 5, unacceptable 4, not applicable 16
- Applied Methodologies: Outstanding 5, acceptable 4, unacceptable 4, not applicable 17

(Note: these numbers represent the number of exams multiplied by the three readers. In general the three readers agreed in their assessment of individual exams.)

The Classics department reviewed their findings and found that, in general, their criteria for assessment should be reconsidered and tailored to the different orientation of the Greek as opposed to Latin courses. In both categories they believe all four rubrics are addressed extensively as it stands, but the rubrics need to be made explicit in course syllabi and assessed with a more diverse pool of samples.

Additionally, two major issues arose during evaluation: 1) It is the general consensus that language itself is an integral part of the cultural rubric; 2) there is some argument as to whether cultural and historical context are separable. The second of these is contingent on the instructor and course, and could be addressed individually. As a result of these findings, the Classics department developed two specific goals for individual courses: 1) Educate students in the literary, cultural, and historical background of ancient texts (where applicable) 2) discuss the applied methodologies used in approaches to texts.

Level(s) at which the competency is assessed (Example #2)
Students in an Electrical and Computer Engineering course are expected to understand and apply principals of engineering ethics, and demonstrate the following: (i) Ability to make informed ethical choices; (ii) a robust understanding of and ability to correctly apply the Engineering Code of Ethics; (iii) an understanding of professional and ethical issues in an international context; and (iv) an understanding of and ability to identify conflicts of interest (COI) as well as how to appropriately handle them.

Process used to evaluate competency
Students' understanding and application of principals of engineering ethics are assessed by a Course Oversight Committee (COC), which includes the instructor and others involved in teaching the course. The COC uses the following procedures:
1. The COC established rubrics with four dimension to evaluate students' performance for each competency (i.e., undeveloped, developing, competent, and mastery)
    a. Each of the four dimensions (i-iv) has its own rubric with the separate competency levels defined by detailed performance characteristics.
2. The course instructor applied the rubrics to relevant exam questions/assignments which were specifically designed to distinguish between the different competency levels.
3. Assessment spreadsheets were used to record, tabulate, and graphically display results.
4. The COC wrote a report documenting its activities. The report was then reviewed by the Undergraduate Affairs Committee for further evaluation, synthesis, and action.
5. The indicator for success is 80% of the students achieving competency or mastery.

Results of the assessment of this competency
Results over a number of semesters indicated students were having great difficulty dealing with ethical issues and dilemmas in a sustained and sophisticated fashion. The long-range solution to this was the introduction of a 3-credit undergraduate course dealing with the ethical and social dimensions of engineering that is now a requirement for freshmen.

A total of 95 electrical engineering students were assessed in ENEE200 during the last academic year – 78 in Fall 2010 and 17 in Winter 2011. For Fall 2010 the result for the "Conflicts of

Interests" dimension (iv) were: Mastery: 0%; Competent: 24%; Developing: 38%; Undeveloped: 37%. Based on these results the following modifications were made prior to Winter 2011: (1) More lecture time and discussion were devoted to COI; (2) when relevant, an effort was made to highlight COI issues throughout the course; and (3) students were required to watch an ethics video, "Henry's Daughters" which had a number of COI scenarios. With these changes, there was a marked improvement in Winter 2011: Mastery: 0%; Competent: 76%; Developing: 23%; Undeveloped: 0%.

IV. TECHNOLOGICAL COMPETENCY

Institution's definition of competency
Goal: University of Maryland undergraduates will be able to understand basic technologies and how these relate to their specific disciplines, and will be able to apply these technologies to their research and academic efforts.

Level(s) at which the competency is assessed (Example #1)
Students enrolled in a geography course are required to demonstrate an understanding of the fundamental principles, concepts, and knowledge of geographic technologies used in the acquisition, processing, and analysis of spatial geographic data.

Process used to evaluate competency
The geography department developed a rubric to assess students' ability in a geographic information systems courses. The rubric identified the following ratings to assess student technological competency, students competency is either:
- Accomplished: Exhibiting 90-percent level grasp of material;
- Proficient: Exhibiting 80-percent level grasp of material;
- Acceptable: Exhibiting 70-percent level grasp of material;
- Novice: Exhibiting between 50- and 60-percent level grasp of material; or
- Unacceptable: Exhibiting less than 50-percent level grasp of material.

Students were assessed in six different laboratory assignments within the information systems courses, in competency areas such as, digitizing, geodatabases, computer cartography, and spatial analysis. The analysis continued across four semesters, and the department goal is that at least 80 percent of the representative samples of students meet the "Acceptable" level according to the rubric.

Results of the assessment of this competency
At least 80 percent of students performed at or above the "Acceptable" level on all six laboratory assignments. Moreover, the Technical Assessment Committee then collected anecdotal data from the faculty teaching the course across all four semesters to determine if there was a common thread among students who had not performed as hoped on the assignments. The committee determined that, in many cases, those students had not developed adequate quantitative skills before enrollment in rigorous technical courses such as Geography 373. Their resulting action was to make one Calculus course and Geography 306 (Introduction to Quantitative Methods for the Geographic Environmental Sciences) pre-requisites for Geography

373, which – together with Geography 372 (Remote Sensing) – serves as the gateway for more technical advanced courses in the department.

Level(s) at which the competency is assessed (Example #2)
All of the undergraduate teacher preparation programs require that candidates demonstrate competency on the Maryland Teacher Technology Standards (MTTS). To achieve proficiency on the MTTS standards, teacher candidates must demonstrate the ability to: Use technology to interpret and analyze preK-12 student and school data to develop data-driven instructional decisions; and design, deliver and assess learning experiences that integrate technology, are data-driven, and are designed to improve preK-12 student achievement.

Process used to evaluate competency
Teacher education candidates complete a Professional Teaching Portfolio to document their competence on the MTTS. This portfolio is completed during the senior year, as part of the students' year-long internship in a Professional Development School. The technology portion of the Portfolio rubric (see examples from the early childhood and elementary education programs) is used to evaluate candidates' performance on the MTTS.

Results of the assessment of this competency
Students performed very well on the portfolio in the Elementary Education Program and received an overall portfolio score rating (33.92) that fell within the *Proficient Threshold* (30-37). Students achieved ratings that placed them at the upper level of the Proficient range in all of the Portfolio subsections, except for *Technology Integration*, where students received an average rating of 7.19. This score falls on the lower end of the Proficient range (6-10).

The *Technology Integration* section, which is a new component of the Portfolio, was administered for the first time this past academic year. The intent of this programmatic change was to infuse more technology into the Portfolio and to ensure that students make demonstrable progress on meeting the MTTS Standards. Based on the findings from the first administration of this instrument, the rubric has been expanded to include additional indicators related to "understanding the legal, social, and ethical issues related to technology use;" and "designing, implementing, and assessing learning experiences that incorporate the use of technology in a curriculum-related instructional activity to support understanding, inquiry, problem-solving, communication and/or collaboration." The program will continue to monitor student progress on this aspect of the Portfolio and make programmatic revisions, as appropriate.

V. INFORMATION LITERACY [additional competency]

Institution's definition of competency
Goal: University of Maryland undergraduates will learn and develop information literacy skills that they can successfully apply within a wide range and intersection of disciplines inside and outside academia.

The University Libraries' information literacy program exists to teach individuals the concepts and logic of information access and content of resources, to prepare individuals to make both

immediate and lifelong use of information effectively, to foster information independence and critical thinking, and to promote awareness of the paramount importance of information literacy in achieving academic excellence. The University Libraries tie their learning outcomes to the Association for College & Research Libraries (ACRL) Information Literacy Competency Standards for Higher Education.

Level(s) at which the competency is assessed (Example #1)
Course level; Library Day for ENGL101 – Academic Writing, a fundamental studies course that satisfies the English composition writing requirement for undergraduates.

Learning Outcomes:
1. At the end of the session, students will be able to choose appropriate library resource(s) for their information need. ACRL Standard 1 (2b. 2c.)
2. At the end of the session, students will be able to differentiate between scholarly and popular sources. ACRL Standard 2 (2d.)
3. At the end of the session, students will be able to construct one (or more) search strategies using Boolean logic. ACRL Standard 2 (2d.)

Process used to evaluate competency
In spring 2010, 32% or 479 students attending 22 sections of ENGL101 were directed at the end of class to complete an online assessment form linked to a library page. The six-question assessment form (2 questions per learning outcome) was built using Zoomerang.com; the Libraries have a subscription to this software for assessment purposes. The goal is that eighty percent of students will answer questions correctly.

Results of the assessment of this competency
For learning outcome 1, two questions were asked; the results were combined. Seventy-nine percent of students learned how to differentiate between a catalog and a database. For learning outcome 2, two questions were posed; the results were combined. Seventy-nine percent of students learned how to differentiate between popular and scholarly sources. For learning outcome 3, two questions were posed; the results were combined. Sixty-six percent of students could identify which search strategy would retrieve the best results.

Overall, they are satisfied with the learning goals and measures established for this information literacy program. They believe the program is making a solid impact in successfully introducing first-year students to key research resources needed to support their academic writing. For learning outcomes 1 and 2, the criteria were met within 1% point. No further action needed at this time.

For learning outcome 3, the criterion was not met. This is attributed in part to the poor design of one of the questions; the wording was confusing. The question will be either rewritten or the learning outcome will be rethought. Only 65% of students learned how Boolean logic is applied. Last year several changes were proposed to the training program for instructors. Other changes were made this year so that the delivery of content was consistent across the board. Short tutorials were developed to supplement the Library Day curriculum in fall 2009. In addition, an enhanced series of Research and Library Skills Exercises has been established. Finally, adding a

fourth learning outcome is being considered for next year to assess how students select and configure search terms for information discovery on their topics.

Level(s) at which the competency is assessed (Example #2)
Course level; Library workshop for ENGL392 – Legal Writing, a fundamental studies course that satisfies the undergraduate professional writing requirement.
<u>Learning outcomes for session:</u>
1. Students will be able to distinguish between a primary and secondary source for this discipline. ACRL Standard 1 (2c.)
2. Students will be able to recognize key uses for Westlaw. ACRL Standard 2 (2f.)
3. Students will be able to recognize the correct citation format for a law review article. ACRL Standard 2 (5c.)

Process used to evaluate competency
In fall 2009 and spring 2010, students were asked questions and directed to email their responses to the librarian. Nine sections of this course were assessed over the fall and spring semesters. A total of 97% of the students responded to the assessment over two semesters, for 153 responses. The goal is that eighty percent of students will answer the questions correctly.

Results of the assessment of this competency
For learning outcome 1, combined results reveal that 86% of students were able to distinguish between a primary and a secondary source as it pertained to legal research. However, there was a marked decrease in the number of students who correctly answered this question in spring 2010 (80% versus 92%). For learning outcome 2, results reveal that 86% of students were able to correctly describe the key uses for Westlaw (i.e., case law, law reviews, and determine if a law is still considered 'good law.') For learning outcome 3, results for the first two sections tested showed that 52% of students could identify a law review article based upon its citation. The wording on the assessment form was revised for the remaining seven sections to make the example citation clearer to interpret. Cumulative results for the remaining sections reveal that 88% of the students were correctly able to identify a citation from Harvard Law Review.

It is speculated that the first criteria may have been more easily met in the fall because the information about "primary versus secondary" sources was listed clearly as part of the table of contents, on the first page of the guide. The guide was revised for the spring and inadvertently the "primary versus secondary" information was not included in the table of contents. This may mean that, before the revisions, the students really didn't learn the differences between the sources, but learned to look at the guide instead. Although it would have preferable for the students to remember the differences, at least they knew to use the guide.

To improve this instruction program, in ENGL392 an online guide has been provided to make it easier to read and to incorporate additional examples of citations and screen captures of major resource strategies and guides. For the future, the program will add the delineation of "primary" versus "secondary" sources to reinforce concepts covered in class.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

The improvement in teaching and learning as a result of the work detailed in Part Two is included in those sections above. Because UMD's learning assessment efforts are done to improve programs, the changes are evident at those levels.

The assessment of student learning at the University of Maryland, College Park, has evolved since the inception of the Provost's Commission on Learning Outcomes Assessment in 2003. Learning outcomes have become ingrained in the academic and functional processes of the university. We will share two examples below: The redesigned general education program; and the creation of a new course management and academic workflow system.

General Education

The University of Maryland is currently in the process of implementing a redesigned General Education program. In 2009, a Task Force was charged by the Provost and the Chair of the Campus Senate to design this new general education program. The Task Force completed its work in the spring of 2010 and the proposed program was approved by the University Senate in April 2010. Afterward, a plan for implementing this program was developed and approved by the University Senate in February, 2011. We are currently on target for putting this plan into effect for students entering in the fall of 2012.

One of the key elements of this new General Education program is that all components of the program are defined by sets of learning objectives as opposed to course content. During the summer of 2010, twelve committees consisting of over 60 faculty members were charged with defining the learning outcomes for each of the course categories in the new General Education program. Their work was driven by both their expertise in the relevant fields and our expectations regarding the skills and knowledge that every student who earns a University of Maryland degree should acquire, independent of their chosen major. Assessments from our existing CORE general education program were used to guide the committees to ensure that these objectives were emphasized. The learning outcomes for the new General Education program as constructed by these committees are attached as an appendix to this document.

Given the revisions of general education, it was decided that all courses offered at the University that will be used to satisfy a general education requirement need to be submitted for review. This applies to both new courses and existing CORE general education courses. The primary evaluative tool used to measure a course's appropriateness for the new General Education program is the course's learning outcomes goals. We are currently in the process of reviewing, revising, and approving more than 500 courses for the new program. In order to streamline this process, a new web-based course submission and review system was developed. The bulk of the information provided by people proposing courses for the new program consists of answers aimed at demonstrating how a course will ensure that students who complete the course will meet the relevant learning outcomes.

In the process of reviewing courses, we have already seen a number of programs that have made significant modifications to their courses in order to make them align more closely with the new learning outcomes. We have also had a number of courses that required revision as deemed by the review committees in order to assure that the outcomes can be met. More syllabi will now include course learning outcomes. This practice will clarify for students what skills and knowledge they can expect to gain from a course. This has been a process that has engaged the entire campus, with a very strong focus on learning outcomes.

Of course, the ultimate success of the new General Education program will depend strongly on our assessment of its ability to meet the intended goals. We are currently in the process of developing a detailed assessment plan so that, when the program rolls out in fall 2012, we will be able to perform useful assessment from the beginning.

Kuali Student

The campus is also in the process of implementing a new curriculum management system as part of the larger Kuali Student project which will replace our current mainframe and standalone student information systems. This system "…will be a modular, open source, standards-based next generation student system..." [http://www.kuali.org/ks]. It is being developed by seven Founder institutions (of which UMD is one), and an additional five Partner institutions, with support from the Andrew W. Mellon Foundation. This system will integrate functionality into one system that currently exists across several systems often challenged to communicate with each other, such as program proposal and approval, course proposal and approval, admissions, scheduling, and student registration. It is in its development phase, and over the next several years modules will be made available to the public for any institution to adopt. The first module, Curriculum Management, was released publicly in March 2011.

As a founding institution, UMD has been at the design table since the inception of this project, and has been instrumental in promoting functionality in the system that would support learning outcomes assessment. During development and at integral scope decision points, representatives from the other institutions did not appreciate nor agree with our insistence on including the ability to state and track learning outcomes in the system at the course, program and institution level. UMD dedicated many of its own development resources to move this functionality into the system, and has succeeded in integrating it into the curriculum management module. The system will support the identification of learning outcomes at the course and the program level. In addition to "free text" learning outcomes, the system also allows users to "tag" the learning outcomes with category labels; the category labels are organized by type and include skills, accreditation elements, and subject-specific categories. Additionally, users can search for learning outcomes by keyword or category and copy them into a new course or program; this allows programs to re-use standard learning objectives should they desire.

The combination of fully developed learning outcomes and category tags will facilitate searches of the curriculum inventory. Students will be able to search for courses based on learning outcomes and therefore can tailor their course selection based on skills that they wish to acquire. Department heads and program managers can use the system to create a curriculum map, easily

identifying the skills, subjects and accreditation areas most frequently addressed in the courses which lead to program completion. Representatives from partnering institutions have since acknowledged that this is a key aspect of Kuali Student, and that institutionalizing the collection of learning outcomes as it has will benefit every institution that utilizes it.

Selected references to learning outcomes from the Kuali Student website:

"…During the course of exploring Enrollment, a new vision emerged for an expanded "Academic Plan." The new vision turned into the Kuali Student Learning Plan (LP). The LP represents a highly personalized, customizable capability that allows learners and their advisers to plan, track, and evaluate individual learning goals and outcomes over the course of their academic career. LPs place learners at the center of their own learning experience, allowing them to manage and to monitor their progress, records and information within a self-defined, contextual framework. The LP is an andragogic approach to learning, empowering learners to map, and assess their own goals, experiences, and outcomes…."

"…In addition to the eight functional areas, Kuali Student will develop a concierge service that will support students in their academic planning by anticipating student needs, suggesting possible goals, allowing students to explore different goals, evaluating current progress and comparing proposed goals with existing and historical outcomes…."

Conclusion

The University of Maryland is incredibly proud of our progress in the establishment and assessment of student learning outcomes, and in the way that the importance of student learning has been integrated into the fabric of university processes. We will continue to develop in this capacity, and look forward to accomplishing even more before the next report is written.

Appendix: General Education Learning Outcomes

Fundamental Studies

Academic Writing
Courses in Academic Writing must address all 6 of the Learning Outcomes.
On completion of an Academic Writing course, students will be able to:
- Demonstrate understanding of writing as a series of tasks, including finding, evaluating, analyzing, and synthesizing appropriate sources, and as a process that involves composing, editing, and revising.
- Demonstrate critical reading and analytical skills, including understanding an argument's major assertions and assumptions and how to evaluate its supporting evidence.
- Demonstrate facility with the fundamentals of persuasion as these are adapted to a variety of special situations and audiences in academic writing.
- Demonstrate research skills, integrate their own ideas with those of others, and apply the conventions of attribution and citation correctly.
- Use Standard Written English and edit and revise their own writing for appropriateness. Students should take responsibility for such features as format, syntax, grammar, punctuation, and spelling.
- Demonstrate an understanding of the connection between writing and thinking and use writing and reading for inquiry, learning, thinking, and communicating in an academic setting.

Professional Writing
Courses in Professional Writing must address all 7 of the Learning Outcomes.
On completion of a Professional Writing course, students will be able to:
- Analyze a variety of professional rhetorical situations and produce appropriate texts in response.
- Understand the stages required to produce competent, professional writing through planning, drafting, revising, and editing.
- Identify and implement the appropriate research methods for each writing task.
- Practice the ethical use of sources and the conventions of citation appropriate to each genre.
- Write for the intended readers of a text, and design or adapt texts to audiences who may differ in their familiarity with the subject matter.
- Demonstrate competence in Standard Written English, including grammar, sentence and paragraph structure, coherence, and document design (including the use of the visual) and be able to use this knowledge to revise texts.
- Produce cogent arguments that identify arguable issues, reflect the degree of available evidence, and take account of counter arguments.

Oral Communication
Courses in Oral Communication must address at least 6 of the 9 Learning Outcomes.
Learning Outcomes in **bold** are **required**.
On completion of an Oral Communication course, students will be able to:

- Demonstrate an understanding of the role of oral communication in academic, social, and professional endeavors.
- Demonstrate effectiveness in using verbal and nonverbal language appropriate to the goal and the context of the communication.
- Demonstrate an ability to listen carefully.
- Demonstrate an enhanced awareness of one's own communication style and choices.
- Demonstrate an ability to communicate interpersonally and interculturally with others in conversation, interview, and group discussion contexts.
- Demonstrate skill in asking and in responding to questions.
- **Demonstrate competency in planning, preparing, and presenting effective oral presentations.**
- **Use effective presentation techniques including presentation graphics.**
- Demonstrate awareness of communication ethics in a global society.

Mathematics

Courses in Mathematics must address at least 3 of the 5 Learning Outcomes.
On completion of a Mathematics course, students will be able to:
- Interpret mathematical models given verbally, or by formulas, graphs, tables, or schematics, and draw inferences from them.
- Represent mathematical concepts verbally, and, where appropriate, symbolically, visually, and numerically.
- Use arithmetic, algebraic, geometric, technological, or statistical methods to solve problems.
- Use mathematical reasoning with appropriate technology to solve problems, test conjectures, judge the validity of arguments, formulate valid arguments, check answers to determine reasonableness, and communicate the reasoning and the results.
- Recognize and use connections within mathematics and between mathematics and other disciplines.

Analytic Reasoning

Courses in Analytic Reasoning must address at least 4 of the 6 Learning Outcomes.
On completion of an Analytic Reasoning course, students will be able to:
- Demonstrate proficient application of the skills required by the Mathematics Fundamental Studies requirement, including the ability to communicate using formal or mathematical tools.
- Distinguish between premises and conclusions, or between data and inferences from data.
- Understand the differences among appropriate and inappropriate analytical methods for drawing conclusions.
- Apply appropriate analytical methods to evaluate inferences and to reason about complex information.
- Systematically evaluate evidence for accuracy, limitations, and relevance, and identify alternative interpretations of evidence.
- Use formal, analytical, or computational techniques to address real-world problems.

The I-Series

Courses in the I-Series must address at least 4 of the 6 Learning Outcomes.
On completion of an I-Series course, student will be able to:
- Identify the major questions and issues in their I-series course topic.
- Describe the sources the experts on the topic would use to explore these issues and questions.
- Demonstrate an understanding of basic terms, concepts, and approaches that experts employ in dealing with these issues.
- Demonstrate an understanding of the political, social, economic, and ethical dimensions involved in the course.
- Communicate major ideas and issues raised by the course through effective written and/or oral presentations.
- Articulate how this course has invited them to think in new ways about their lives, their place in the University and other communities, and/or issues central to their major disciplines or other fields of interest.

Distributive Studies

History and Social Sciences
Courses in History and Social Sciences must address at least 4 of the 7 Learning Outcomes.
Learning Outcomes in **bold** are **required**.
On completion of a History and Social Sciences course, students will be able to:
- **Demonstrate knowledge of fundamental concepts and ideas in a specific topical area in history or the social sciences.**
- Demonstrate understanding of the methods that produce knowledge in a specific field in history or the social sciences.
- Demonstrate critical thinking in evaluating causal arguments in history or in the social sciences, analyzing major assertions, background assumptions, and explanatory evidence.
- Explain how culture, social structure, diversity, or other key elements of historical context have an impact on individual perception, action, and values.
- Articulate how historical change shapes ideas and social and political structures.
- Explain how history or social science can be used to analyze contemporary issues and to develop policies for social change.
- Use information technologies to conduct research and to communicate effectively about social science and history.

Humanities
Courses in the Humanities must address at least 4 of the 7 Learning Outcomes.
Learning Outcomes in **bold** are **required**.
On completion of a Humanities course, students will be able to:
- **Demonstrate familiarity and facility with fundamental terminology and concepts in a specific topical area in the humanities.**
- Demonstrate understanding of the methods used by scholars in a specific field in the humanities.

- Demonstrate understanding of the creative processes and techniques used by practitioners in a specific field of the visual, literary, or performing arts.
- Demonstrate critical thinking in the evaluation of sources and arguments in scholarly works, or in the evaluation of approaches and technique in the visual, literary, or performing arts.
- Describe how language use is related to ways of thinking, cultural heritage, and cultural values.
- Conduct research on a topic in the humanities using a variety of sources and technologies.
- Demonstrate the ability to formulate a thesis related to a specific topic in the humanities and to support the thesis with evidence and argumentation.

Natural Sciences

Courses in the Natural Sciences must address at least 4 of the 6 Learning Outcomes.
Learning Outcomes in **bold** are **required**.
On completion of a Natural Sciences course, students will be able to:
- Demonstrate a broad understanding of scientific principles and the ways scientists in a particular discipline conduct research.
- Apply quantitative, mathematical analyses to science problems.
- Solve complex problems requiring the application of several scientific concepts.
- Look at complex questions and identify the science and how it impacts and is impacted by political, social, economic, or ethical dimensions.
- Critically evaluate scientific arguments and understand the limits of scientific knowledge.
- Communicate scientific ideas effectively.

In addition to the Learning Outcomes above, on completion of a Natural Sciences course with a laboratory experience students will be able to:
- **Demonstrate proficiency in experimental science by: making observations, understanding the fundamental elements of experiment design, generating and analyzing data using appropriate quantitative tools, using abstract reasoning to interpret data and relevant formulae, and testing hypotheses with scientific rigor.**

Scholarship in Practice

Courses in Scholarship in Practice must address at least 4 of the 7 Learning Outcomes.
Learning Outcomes in **bold** are **required**.
On completion of a Scholarship in Practice course, students will be able to:
- **Demonstrate an ability to select, critically evaluate, and apply relevant areas of scholarship.**
- Articulate the processes required to bring about a successful outcome from planning, modeling, and preparing, to critiquing, revising and perfecting.
- Demonstrate an ability to critique existing applications of scholarship, in order to learn from past successes and failures.
- Demonstrate an ability to collaborate in order to bring about a successful outcome.
- Recognize how an application of scholarship affects or is affected by political, social, cultural, economic or ethical dimensions.
- Produce an original analysis, project, creative work, performance or other scholarly work that reflects a body of knowledge relevant to the course.

- Effectively communicate the application of scholarship through ancillary material (written, oral, visual and/or all modes combined).

Diversity

Understanding Plural Societies
Courses in Understanding Plural Societies must address at least 4 of the 7 Learning Outcomes.
On completion of an Understanding Plural Societies course, students will be able to:
- Demonstrate understanding of the basis of human diversity: biological, cultural, historical, social, economic, or ideological.
- Demonstrate understanding of fundamental concepts and methods that produce knowledge about plural societies.
- Explicate the processes that create or fail to create just, productive, egalitarian, and collaborative societies.
- Analyze forms and traditions of thought or expression in relation to cultural, historical, political, and social contexts, as, for example, dance, foodways, literature, music, and philosophical and religious traditions.
- Articulate how particular policies create or inhibit the formation and functioning of plural societies.
- Use a comparative, intersectional, or relational framework to examine the experiences, cultures, or histories of two or more social groups or constituencies within a single society or across societies, and within a single historical timeframe or across historical time.
- Use information technologies to access research and communicate effectively about plural societies.

Cultural Competence
Courses in Cultural Competence must address at least 3 of the 5 Learning Outcomes.
Learning Outcomes in **bold** are **required**.
On completion of a Cultural Competency course, students will be able to:
- Describe the concept of culture.
- Explain how cultural beliefs influence behaviors and practices at the individual, organizational, or societal levels.
- Analyze their own cultural beliefs with respect to attitudes or behaviors.
- Compare and contrast differences among two or more cultures.
- **Effectively use skills to negotiate cross-cultural situations or conflicts.**

University of Maryland – Eastern Shore

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011
University of Maryland Eastern Shore

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities

Provide a summary of institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

This section provides an overview and analysis of the UMES' assessment process based on institutional assessment (Standard 7), General Education assessment (Standard 12), and assessment of student learning (Standard 14) as they relate to Middle States Commission on Higher Education.

UMES utilizes an Institutional Effectiveness Management Model (see Figure 1) grounded in shared governance to ensure buy-in from and implementation by the University community. This process is also a tool for guiding implementation and evaluation of the overall effectiveness of UMES in fulfilling its mission including resources; leadership and governance; administrative structures and services; institutional integrity; and assurance that institutional processes and resources support appropriate student learning and other outcomes. Considered in a continuous cycle of planning and evaluation, the model considers four key components-Strategic Planning, Budget Allocation Task Force recommendations, student learning assessment planning, facilities management, and technology planning. Mission, Goals and Values drive the institutional Effectiveness Management Model of UMES. The current mission statement, goals and core values were developed through a participative process by the entire University. As an integral part of the Institutional Effectiveness Management Model, the Student Learning Assessment Plan is a comprehensive process that focuses on the contentious improvement of student learning. Every component of the UMES Institutional Effectiveness Model is designed to facilitate the University's accomplishment of its mission.

The assessment of institutional effectiveness includes four major components, they are: (1) developing clearly articulated goals, (2) implementing strategies for achieving the goals, (3) assessing the achievement of the goals, and (4) using the results of the assessment. The process of assessing student learning outcomes is analyzed under two-sections for improvement, General Education assessment (Standard 12) and assessment of student learning in the programs/majors (Standard 14).

Figure1. 1: UMES Institutional Effectiveness Management Model

Continuous Improvement — Strategic Plan → Budget Allocation Task Force Recommendations

Institutional Effectiveness

UMES Mission Goals Values

Facilities Management & Technology Plan ← Student Learning Assessment Plan

Outcome Evaluation
IE Measures

A. Strategic Objectives/ Outcomes
B. Peer Performance Measures
C. Managing for Results Objectives
D. Internal/External Audit Reports
E. Minority Achievement Reports

Assessment at UMES is a systematic, proactive, data/informed and collaborative process. This process occurs at different levels—course, program, department, school or institutional level. Direct and indirect measures used include strategic operational plan outcomes, student learning, and Discipline Specific Accreditation outcomes measures. Student learning assessment is monitored by the University Assessment Council, comprising of all academic department chairs, and a student representative. Members meet twice every semester to monitor the student learning assessment plan outcomes and make recommendations for change in the University-wide assessment process and policies. Student learning assessment involves systematic collection and analysis of program assessment data within the major and in General Education. Every academic program offered by UMES developed an assessment plan that includes program Mission (always tied to the University Mission), goals, and student learning outcomes with a clear process for measuring them and using the results to improve the teaching and learning process.

The University's General Education courses are adequately structured and delivered through the Maryland Higher Education Commission's (MHEC) mandated six curriculum areas: Area I:Arts and Humanities, Area II: Social and Behavioral Sciences, Area III: Biological and Physical Sciences, Area IV: Mathematics, and Area VI: Emerging Issues. The University's General Education requirements provide students with the ability to develop a comprehensive educational foundation that will effectively support a student's choice of major. Each graduate should be a competent communicator in both written and spoken language, and competent in reasoning, (quantitatively and scientifically). Students should have an appreciation and understanding of the arts and an awareness of the contemporary issues trends. Additionally, each student should be competent in utilizing technology as a tool to produce word processing documents, spreadsheets/graphics, databases, and PowerPoint presentations. In addition, using technology communicates ideas and evaluates the ideas of others (Standard 12). The University has developed operational definitions for the five competencies identified by Middle States: (1) Written and Oral Communication, (2) Critical Analysis and Reasoning, (3) Scientific and Quantitative Reasoning, (4) Technological Literacy and (5) Information Literacy and has developed a course mapping matrix that identifies in which courses these competencies are taught. Direct measures include internal comprehensive examination for oral communication skills, external national Educational Testing Services (ETS) examinations for general education, national Accuplacer examination for written communication, and national Certiport (IC[3] FastTrack) examination for technology assessment

UMES uses the *Student Learning Outcomes Assessment Process* (SLOAP) for assessing students in their majors. SLOAP uses a set of guidelines established in 2005 by the Assessment Council that provides each academic department with a format for planning and implementing an effective assessment process. The program requires that each assessment plan have clearly articulated expected student learning outcomes, aligned with program goals, core courses/capstone experiences, and assessment methods that yield meaningful results to be used for continuous improvement of student learning and instruction. The results and/or recommendations from academic programs assessments become critical inputs for the Strategic Plan, the budget process, facilities management, and technology plans.

Part Two: Four Major Competency Areas
For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

The ability to prepare essays, other written assignments and spoken presentations that demonstrate clarity, coherence, and organization.

B. Level(s) at which the competency is assessed (e.g., department, program, and course)

Written Communication

Since the 2007 SLOAR report, UMES continues to require assessment external to the English 101, and English 102 courses and the assessment is on the institutional level. After extensive review of available assessment instruments for written communication on the college level, UMES elected to continue to use the College Board's Writeplacer Plus that is administered online. UMES has labeled this examination the English Proficiency Examination (EPE). To satisfy the communication competency, the EPE is administered to all students, who must pass the examination to graduate.

Oral Communication

Establishing a process to critique oral communication skills proved to be more challenging than the one for creating the process for critiquing written communication. After a long deliberation process that included the review of other direct measures of assessment (e.g. ratings of student skills in the context of class activities, portfolios of student work, and scores on nationally-normed instruments) it was determined that oral communication evaluation would best be evaluated using performance-based assessment that would be conducted as the final oral assessment in the general education course ENGL 203 (Fundamentals of Contemporary Speech) taught by faculty in the English Department.

Process (es) used to evaluate competency (i.e., methods, measures, instruments)

Written Communication

Students are still required to write a 500 essay on topics randomly selected by the software from a list of ten (10) topics determined by the University. A unique feature of Writerplacer Plus is that it uses artificial intelligence (AI) to evaluate the essay. Pilot testing by the English department faculty has verified that the online test results are comparable to faculty evaluation of the same essay and this process was used to develop the cut score. Upon completion of the EPE, WritePlacer Plus provides students with immediate feedback on their examination score and students are directed to print a hardcopy of their results for their records.

Oral Communication

English Department faculty in conjunction with the General Education Committee created a standard course syllabus for all ENGL 203 (Fundamentals of Contemporary Speech) sections with agreed upon learning outcomes and assignments, established the performance prompt for the oral communication assessment, established the criteria used to judge student performance (creation of standard rubric), and established the mode for student feedback.

C. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.
   Written Communication:

   Every semester when English 102 is offered, students are administered the EPE. During 2007-2008 and 2008-2009 academic years, 90.2% and 92.5% of our students respectively performed at the proficiency level of seven and above on the 12 point scale, with the proficiency cut off score of seven. This was strong performance by our students. In 2009-2010 the College Board revised the WriterPlacer Plus scoring rubric and the percentage of our students who were assessed as proficient was 70%. Since students cannot graduate at UMES without passing the EPE, those who were unsuccessful were given the opportunity to retake the examination after receiving further instruction, and all students passed.

   Oral Communication:

   The oral communication assessment, a pilot project using the oral communication rubric and 94 students participated in the pilot and 70% were found to be proficient. Full implementation of the assessment will be in place during the 2011-2012 academic year.

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

   The ability to identify and apply basic scientific principles to enhance understanding of our universe; to assign and use numbers, read and analyze numerical data, create models, draw inferences and support conclusion.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

   The GenEd Committee conducted a trend analysis for the GenEd courses that were used by the majority of the academic disciplines and then mapped into those courses to show the link between the general education competencies. The results indicated that specific mathematics, natural science and philosophy courses required quantitative reasoning skills. The GenEd Committee elected to use external an assessment instrument to collect data on student proficiency in this area.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

   The Voluntary System of Accountability (VSA) required each institution to select one of three general education assessment instruments and the University elected to administer the national standardized assessment instrument, the ETS Proficiency Profile.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

   Beginning in fall 2009, UMES administered the ETS Proficiency Profile to freshman and senior students every semester except spring 2011. The results of testing provided individual student raw scores, average scores and in addition to a these scores, proficiency classifications (proficient, marginal or not proficient) that measured how well students have mastered each level of proficiency within mathematics, natural and

social sciences. Initial results have provided entry level scores that can be compared to national data that will be used as benchmark data to improve student proficiency in critical thinking. These data provide us with an opportunity to ensure that our GenEd courses are providing our students with the necessary content and experiences needed to improve their scores. The data on natural sciences are provided as sub scores with standard deviations and mean scores. The University has identified the national sub scores, standard deviations and means scores to be used as a benchmark. The next step in the process will be to establish target goals in this area.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

The ability to demonstrate in writing and speaking to use logic and balanced thinking; formulation of solutions to problems by objective consideration of all possible alternatives; and demonstrate recognition of importance of ethics.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

The evaluation of critical thinking is conducted by external institutional assessment.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

A review of the GenEd sequence identified courses in all five curriculum areas that provide students with opportunities to develop critical thinking skills. Critical thinking skills transcend all curriculum areas and are deemed vital for higher order learning not only in GenEd but also in the major field. Beginning fall 2009, the ETS *Proficiency Profile* was used to evaluate critical thinking skills for freshman and senior students. Critical thinking assessment data provided proficiency classifications (proficient, marginal or not proficient) with only one level of proficiency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The critical thinking data for the freshman students from fall 2009 until fall 2010, paralleled the data obtained from our senior students. Proficiency data obtained revealed a need to increase our efforts in providing students with opportunities to increase their critical thinking skills and will be used to establish a target goal in the area in critical thinking. The critical thinking assessment results have had a positive impact on both the GenEd and major field curricula. The impact on the GenEd curriculum has been the review and modification as needed to the specific GenEd courses that have been identified as high frequency courses that include critical thinking.

IV. Technological Competency

A. Institution's definition of competency

Information Technology at UMES involves the use of hardware, software, services, and supporting infrastructure to manage and deliver information using voice, data and video.

The overarching outcome pertaining to this competency is effective utilization of technology in the communication of ideas; and the management, organization, and examination of information. Specific student learning outcomes include students will be able to (1) describe the essential components of a computer system and distinguish between system and software usage; (2) define and identify the basic components of a database; (3) identify and define basic internet terminology and activities; (4) demonstrate the ability to utilize Microsoft Word to create and edit documents, author reports and newsletters, merge documents, and create tables and charts; (5) demonstrate their knowledge and skills to utilize Microsoft

Excel to create and edit spreadsheets, manage large notebooks, and create and print graphs; (6) create a simple database using Microsoft Access; (7) use Microsoft Outlook to send, organize, compose, edit, and merge messages; and (8) use Internet Explorer and a variety of search services to locate and evaluate resources.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Assessment of technological competency occurs at the freshman level mainly in two courses—BUED 212 (Computer Concepts) and CDSP 120/121 (Introduction to Computing)—offered by the Departments of Business Management and Accounting, and Math and Computer Science, respectively. BUED 212 introduces students to electronic information processing. Emphasis in this course is placed on various computer concepts and applications. Contemporary computer software for word processing, spreadsheets, and databases relevant to business and industry are explored.

CSDP 120/121 is designed for non-technical majors covering different applications of modern computing systems. The course surveys computing hardware and software systems; and introduces students to the present state-of-the art word processing, spreadsheet, and database software. Applications to other disciplines, such as medicine, administration, accounting, social sciences, and humanities are also considered.

In addition to course level assessment, UMES also incorporates institutional level assessment for technological competencies.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Even though the committee had identified courses in the GenEd sequence that require students to use their technology skills and courses were technological competencies are taught and evaluated; the committee decided to develop an assessment protocol that did not require course-embedded assessment. To this end, UMES reviewed several available external assessment tools for measuring technology proficiency; the IC^3 FastTrack by Certiport was selected. IC^3 tests relevant digitals skills and helps institutions define their students' technology proficiency. The IC^3/GS3 FastTrack assessment is certified and based on the globally recognized IC3 standard. There are 75 questions comprising the assessment. These questions are divided into three components: Computing Fundamentals, Key Applications, and Living Online. The assessment test uniquely pulls from a bank of questions, randomizing questions for each testing session. IC^3/GS3 FastTrack is programmed and timed for universal standard. Candidates have 60 minutes to complete the assessment. IC^3/GS3 FastTrack provides features that allow the testing center to:

- assess student digital literacy in one-hour performance-based test
- track individual and school-wide digital literacy with custom reporting
- measure student digital literacy against the globally recognized Certiport IC^3/GS3 fastTrack standard; and
- lay a foundation for addressing accreditation requirements for student digital literacy.

To ensure that UMES students meet the technological competency required by Middle State Commission on Higher Education (MSCHE) and to provide an objective and external validation of Student Learning Outcomes, the University decided to use Microsoft Professional Certification and/or IC^3 Track to assess technological competency.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The pilot assessment was done in spring 2011 with volunteer students from BUED 212/213 classes. Students enrolled in BUED 212 were selected for this pilot study because they were just entering this course and had not been formerly instructed in technology at UMES; whereas the students enrolled in

BUED 213 had already taken BUED 212. Therefore, the data from students enrolled in BUED 213 were used as control group data. One hundred and five (105) students participated in the pilot testing program during spring 2011 for IC^3/GS3 FastTrack and the students were drawn from BUAD 212/213. The primary purpose of the testing was to establish a proficiency cut-off score. At the completion of the Pilot testing the program members of the subcommittee on technology assessment analyzed the results to determine the cut-off score. A combined score of 1,000 is the maximum possible score. Test scores ranged from 307 to 853 with an average score of 593. The initial cut-off score was set at 500. Implementation of this assessment will begin in fall 2011.

Any students taking this assessment and not meeting the cutoff score will be able to select one of two options to obtain the necessary skills. They can enroll BUED 212, CSDP 102, or attend a specialized workshop series offered to meet the students' needs based on their assessment results. After the completion of the course or workshop students will be retested.

Even though departmental assessment continued during this process, data collection was put on hold until the assessment protocol selection had been completed.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

<u>Modifications and Adjustments to Assessment Activities Since 2007</u>

In 2008, the new leadership in Academic Affairs reconstituted the General Education Committee (GenEd) with the Assistant Vice President for Academic Affairs, who is also a tenured associate professor in the Department of Education, as Chair. Other members included representatives from each of the four schools (i.e., Agriculture and Natural Sciences, Arts and Professions, Business and Technology, Pharmacy and Health Professions), and Library Services. In addition, there were departmental representatives for each of the GenEd curriculum areas (Fine Arts, Biological Sciences, English and Mathematics), making a total of 15 members. The GenEd Committee reviewed requirements by MHEC for any changes or updates and then matched the MHEC sequence to the UMES GenEd sequence. The committee reviewed and modified the student learning outcomes identified for each curriculum area and then review all the courses in each curriculum areas to verify that each course was the right fit for each of the six curriculum areas.

At the time of the 2006 Middle State Commission on Higher Education's (MSCHE) site visit, and the last SLOAR report, assessment of GenEd was course embedded and each program specified its course requirements from the six curriculum area. The curriculum organization did not easily lend itself to assessment of competencies. Therefore, the GenEd committee conducted mapping of GenEd courses onto competencies/general education expected student learning outcomes (see Appendix A). This process ensured that relevant courses for general education competencies were identified, resulting in the adjustment of and deletion of some courses and inclusion of new courses for three of the six GenEd curriculum areas (see Appendix B)

As a result of the 2006 site visit, the Middle States review team suggested that:

- UMES begin to consider assessing "proficiencies," rather than "areas of instruction. Proficiency may be evaluated in the ways that transcends the units of instruction and individual academic departments.
- The team suggests that the University better define "course-embedded" assessments so that there is a consistency among faculty and administration as to what this implies. This clarity can be achieved though the institution's continuing commitment to faculty development on student learning outcomes assessment.

After the Middle States visit, the state of Maryland initiated the Voluntary System of Accountability (VSA) in fall 2008. The VSA required each Maryland higher education institution to select an external general education assessment instrument from a list three nationally standardized instruments (e.g., Collegiate Learning Assessment (CLA), Collegiate Assessment of Academic Proficiency (CAAP), and Educational Testing Service (ETS) Proficiency Profile (formerly Measurement of Academic Proficiency and Progress (MAPP)). These three instruments were selected by the VSA initiative because they recognized the reliability and validity of all three instruments and each provides student proficiency data in writing, critical thinking and reading.

In order to select the best instrument for General Education assessment, the University faculty and administrators: 1) attended workshops on all three instruments, 2) collected and reviewed published materials obtained on each instrument, 3) attended on-campus faculty workshops and/or webinars, provided by the vendors and 4) administered demo versions of two of the instruments (CLA and ETS Proficiency Profile) to members of the GenEd Committee. After an extensive review of the current state of its general education sequence and the review of several general education assessment instruments, UMES has elected to administer the ETS Proficiency Profile test. This General Education test measures proficiency in critical thinking, reading, written communication and mathematics in the context of humanities, social sciences and natural sciences as well as academic skills developed, as opposed to subject knowledge taught, in general education courses. Use of this test is one of a series of multiple measures of GenED skills and competencies that will help ensure that the UMES fulfills MSCHE's requirement for General Education (Standard 12) and institutional effectiveness (Standard 14).

In addition to adding ETS Proficiency Profile to the University's assessment protocol for direct measures, the University has added the two other new measures of student learning outcomes: 1) course-embedded assessment for oral communication, and Certiport IC[3]/GBS FastTrack external assessment for competency in technology. The University continues to use the national WritePlacer Plus by Accuplacer as an external measure for written communication; however, College Board has recently modified and made its scoring rubric for the WriterPlacer Plus more rigorous making the examination stronger assessment tool.

<u>**Impact of Assessment on Teaching and Learning**</u>
Oral communication

Establishing a process to critique oral communication skills proved to be more challenging than the one for creating the process for critiquing written communication. Due to changes in leadership, department chairs for English and Modern Languages, a process was just recently put in place. After a long deliberation process that included the review of other direct measures of assessment (e.g. ratings of student skills in the context of class activities, portfolios of student work and scores on nationally-normed instruments), it was determined that oral communication evaluation would best be evaluated using performance-based assessment that would be conducted as the final oral assessment in the general education course ENGL 203 (Fundamentals of Cotemporary Speech) taught by faculty in the English Department. The process used to create this assessment was as follows: 1) identifying the oral communication competencies in conjunction with the work completed by the GenEd committee, 2) creating a standard course syllabus for all ENGL 203 sections with agreed upon learning outcomes and assignments, 2) creating standard assignments with linked assessments, 3) establishing the performance prompt for the oral communication assessment, 4) establishing the criteria used to judge student performance (creation of standard rubric) , and 5) establishing the mode for student feedback rubric). The process of creating standardized course syllabus with common student learning outcomes and combining that with a common oral communication assessment is going to increase student participation in the learning process. We will know the desired behaviors for success and will be have to participate in their assessment.

The oral communication assessment, a pilot project using the oral communication rubric and 94 students enrolled in ENGL 203, revealed that only 70 of the students in the pilot project were found to be proficient in oral communication skills. Lessons learned from these data impact how the evaluation process will be implemented for the next testing. Students enrolled in ENGL203 during this next semester will be given the opportunity to be evaluated using the rubric on three other oral presentations prior to the last oral presentation that will be used to collect data on student proficiency. Students' presentations will be videotaped to provide further student feedback and opportunity for student self-evaluation.

Written Communication

The results of student proficiency in written communication has resulted in the English faculty taken steps to increase the success of the student enrolled in ENGL 102 by ensuring the standardization of the course syllabus that includes common assignments, tests, and course textbook. Students must receive a grade of "C" to pass any of the English composition courses and are referred to the campus *Writing Center* when instructors identify students with deficiencies. Additionally, students who do not pass the EPE are referred to the Writing Center for remediation based on the diagnostic data that is provided by WritePlacer Plus on the printed results. The EPE coordinator ensures that the *Writing Center* receives a copy of the students' diagnostic information.

Administration of the ETS Proficiency Profile

Even the process of developing the process for administering the ETS Proficiency Profile had a positive impact on the curriculum offerings in the academic disciplines. The VSA required that freshman and senior students be tested and the need to identify senior students promoted the discussion on identifying courses in each department that was would have primarily seniors in the class composition. These discussions lead to the merits of capstone courses and a review of programs that provided these courses. After the lengthy discussions, each department decided to develop a capstone course and seniors enrolled in these courses were to be selected for testing.

Critical Analysis and Reasoning; and Scientific and Quantitative Reasoning

A review of the GenEd sequence identified courses in all five curriculum areas that provide students with opportunities to develop critical thinking skills. Critical thinking skills transcend all curriculum areas and are deemed vital for higher order learning not only in GenEd, but also in the major fields. Beginning fall 2009, the ETS Proficiency Profile was used to evaluate critical thinking skills for freshman and senior students. Critical thinking assessment data provided proficiency classifications (proficient, marginal or not proficient) with only one level of proficiency. Proficiency data obtained will be used to establish a target goal in the area in critical thinking. The critical thinking assessment results have had a positive impact on both the GenEd and major field curricula. The impact on the GenEd curriculum has been the review and modification as needed to the specific GenEd courses that have been identified as high frequency

courses that include critical thinking. Additionally, academic departments have elected to infuse critical thinking across the curriculum in each academic discipline. This task was completed in three Phases. Phase 1, required each department to review their program outcomes and link them to the Middle States Competencies. Phase 2, demonstrated the link between program outcomes, Middle State Competencies (general education competencies), departmental courses, and course related assessments and criteria. Phase 3, required course syllabi modifications that included the student learning outcomes, related assessment tasks and assessment criteria. (Appendix C) This progress will provide a continuing cycle of both course-embedded and external assessments that leads to continuous course improvement and student learning.

Course Redesign

The data from the ETS Proficiency Profile has made is even more evident that our students are in need of assistance in the area of Mathematics and other courses in the natural and social sciences. To this end, the University has written two proposals, one from the Lumina Foundation and to other to University System of Maryland (USM) to acquire funding to assist us in our course redesign efforts for two of our gatekeeper mathematics courses (Math 101 and 109), Psychology 200, Art 101 and Biology 101. All proposals were funded and the faculty had already begun work on these course redesigns.

Integration of Competency Assessment into the University Structure

The data from the ETS Proficiency Profile have made it evident that critical thinking skills is an area in which our students need improvement and it further believed that a change in test results in this area will require not only a change in way critical thinking skills are taught in the GenEd sequence, but also the way it is fostered in the academic disciplines. By infusing critical thinking skills development both in the GenEd sequence and the academic disciplines builds the integration of competency assessment into the University structure.

In addition to mapping the critical thinking skills with courses in each academic discipline, the same mapping was conducted for all of the competency areas. The long term plan is to eventually develop activities in the identified courses to teach and reinforce the GenEd competencies. The University has started the process of developing a campus-wide writing across the curriculum program. Whereas the EPE is used to access our freshman student writing skills, the ETS Proficiency Profile will be used to evaluate value added for our seniors.

In order to see a measureable different in our assessment data, a shift in the assessment climate on campus is required. Faculty and staff must embrace the conceptual framework of the Institutional Effectiveness Management Model. The fact that assessment of student learning outcomes is ongoing from the freshman to the senior year bridges the integration of competency assessment in the University structure. Future workshops will be required to assist all faculty in understanding that assessment as an integral part of teaching and learning process.

Conclusion

Since the last SLOAR report in 2007, UMES has made considerable progress in reviewing, modifying and strengthening its GenEd curriculum and restricting its assessment process for General Education. There is now a greater focus on aligning General Education learning outcomes with the GenEd Program mission and in ensuring that the assessment tools used provid3e meaningful data for identifying areas of the curriculum, student learning, or instructional strategies that need improvement. The implementation of four new assessment instruments and processes will yield new data that will assist the University in further curriculum redesign and enhancement. Departments that offer General Education courses in general and those offering courses that speak to the five competencies in particular, that are reported to both the Middle States Commission on Higher Education have embraced the idea that meaningful assessment is required to develop and enhance the curriculum. Our course redesign efforts during the reporting period provides further evidence that assessment results are being used to improve student learning, instruction, and curriculum. In addition, a review of the competency of critical analysis and reasoning has resulted in the infusion critical thinking assessment in GenEd courses and in specific courses in the academic disciplines. All academic departments are currently examining General Education competencies for their programs and infusing these competencies into their academic disciplines. At the same time, a General Education Assessment Committee has been reconstituted to ensure that systematic collection, analysis and use of assessment results become an integral part of the strategic planning process with a visible organizational structure within the Division of Academic Affairs. UMES

recognizes that building the foundations of lifelong learning through a strengthened General Education curriculum, and instruction in general is a continuous process; therefore, more work remains to be done for continuous improvement.

APPENDIX A: DEPARTMENTAL MAPPING OF GENERAL EDUCATION REQUIREMENTS AND COMEPTENCIES

General Education Curriculum Areas Total = 40-43 credits	MS Competency #1 *Written and Oral Communication* (ability to prepare essays, other written assignments and spoken presentations that demonstrate clarity, coherence, and organization)	MS Competency #2 *Critical Analysis and Reasoning* (ability to demonstrate in writing and speaking to use logic and balanced thinking; formulation of solutions to problems by objective consideration of all possible alternatives; demonstrate recognition of importance of ethics)	MS Competency #3 *Scientific and Quantitative Reasoning* (ability to identify and apply basic scientific principles to enhance understanding of our universe; to assign and use numbers, read and analyze numerical data, create models, draw inferences and support conclusions)	MS Competency #4 *Technological Literacy* (ability to use hardware, software, services to manage and deliver information.	MS Competency #5 *Information Literacy* (defined as the provision of a framework which enables students to identify, retrieve, evaluate, and use information effectively and efficiently (includes social, legal and economic issues; students acquire skills necessary to succeed in academic and professional arenas
I. Arts and Humanities (9 credits)					
ENG 203 plus one course in each of 2 disciplines	X	X		X	X
Discipline A: Arts 101		X			
Discipline B: History					
II. Curriculum area (Social	*Written and Oral Communication*	*Critical Analysis and Reasoning*	*Scientific and Quantitative*	*Technological Literacy*	*Information Literacy*

Sciences			*Reasoning*		
HIST 101	X	X		X	X
PSYC 200	X	X		X	X
SOCI101	X	X		X	X
POLI 200	X	X		X	X
HIST 201	X	X		X	X

III. Curriculum Areas (Biological Phys Sciences	*Written and Oral Communication*	*Critical Analysis and Reasoning*	*Scientific and Quantitative Reasoning*	*Technological Literacy*	*Information Literacy*
ENVS 101		X			X
BIOL 101		X	X		X
BIOL 103		X	X		X

IV. Curriculum (Math)	*Written and Oral Communication*	*Critical Analysis and Reasoning*	*Scientific and Quantitative Reasoning*	*Technological Literacy*	*Information Literacy*
Math 102	X	X	X	X	X
Math 109	X	X	X	X	X

V. Curriculum Area (Languages)	*Written and Oral Communication*	*Critical Analysis and Reasoning*	*Scientific and Quantitative Reasoning*	*Technological Literacy*	*Information Literacy*
ENGL 101	X	X		X	X
ENGL 102	X	X		X	X
ENGL 305/310	X	X		X	X
VI. Curriculum Area (Emerging Issues)	*Written and Oral Communication*	*Critical Analysis and Reasoning*	*Scientific and Quantitative Reasoning*	*Technological Literacy*	*Information Literacy*
GNST 100	X	X			X

APPENDIX B: General Education Sequence Modification

In spring 2007, a General Education (GenED) taskforce was established and reconstituted under new leadership in fall 2008. The committee composition included faculty from all four academic schools in the Division of Academic Affairs and a member of the library faculty. The configuration of the committee allowed for direct communication with the faculty on pertinent decisions as they related to the GenED sequence. The charge of the committee was to: (a) examine current general education courses required for students to meet the Maryland Higher Education Commission (MHEC) and Middle States Competencies, (b) define general education student learning outcomes and make specific recommendations for changes, (c) identify an assessment process using the student learning outcomes and (d) select the appropriate assessment instruments.

The GenED committee reviewed requirements by MHEC for any changes or updates and then matched the MHEC requirements to the UMES GenED sequence. The GenED committee reviewed the courses in each curriculum area to verify that each course was the right fit for that Curriculum Area. This review was conducted by using five basic guidelines: 1) did the course meet the MHEC guidelines, 2) did the course match the modified student learning outcomes, 3) did the course add value and currency to the curriculum area, 4) did the enrollment data verify student usage, and 5) did the course met the criteria for lower-level courses. By implementing these guidelines, modifications were made in Curriculum Areas I, II, and VI.

In Curriculum Area I, Discipline B: four courses were removed (HIST 333, HIST 334, HIST 341 & HIST360) and three courses were added (HIST101, HIST102, & PHIL201). One course was added in Discipline C: ASLS203. Additional changes to Curriculum Area I, Discipline D: five courses were removed (ENGL215, ENGL218, ENGL 328, ENGL 329, & ENGL401).

In Curriculum Area II, Discipline A: one course was removed (HIST112H) and four courses were added (HIST 102/H, HIST201, HIST 202, & PHIL201). Additional changes in Curriculum II, Discipline B: four courses were removed (HUEC361, HUEC 280, & SOWK200, SOWK200H).

In Curriculum Area VI: two courses were removed (ENGL412 & ENGL413) and in addition to the First Year Experience (FYE) course (GNST100) that is already in this area; each academic department developed its own FYE course that included six common goals contained in the original GNST100 course. This requirement made it possible for students to change their major without penalty of having to repeat this course in their major.

The above adjustments notwithstanding, the general conclusion of the GenEd Committee, was that the UMES' curriculum for General Education was appropriate for providing students the General Education competencies they need to be successful.

Program Outcomes	Competencies	Related Courses	Related Assessment
1. Students will demonstrate knowledge of history taking and skills in performing physical examinations directed at selected medical conditions.	• Communication skills (oral and written) • Critical Analysis and Reasoning • Information Literacy • Diversity	Didactic: PHAS 316 Physical Diagnosis II Clinical: PHAS 400 Internal Medicine Clerkship	**CL: 1, 2, & 3** Students produce a written Hx & PE paper using communication processes purposely to make meaning in physical assessment contexts. Connects discrete modes of communication and integrates them effectively within the frameworks of medical disciplines. A portfolio review of student clinical work: Typhon logs, Hx & PE papers and Journal Article critique with rubric likert scale 1-4; 70=proficient ;Students must prepare Grand Rounds Case Study: Oral/PPT evaluated by jury which must address style, content, delivery, medical fund, therapeutic management and citation. Med Challenger/ End-of- Rotation summative exams and Objective Structured Clinical Exam (OSCE) requiring 80% proficiency.
2. Students will demonstrate knowledge of the indications, normal and abnormal results, and cost effectiveness for diagnostic or laboratory studies relevant to selected medical conditions and skill in selecting, collecting and interpreting diagnostic and laboratory results.	• Scientific and Quantitative • Critical Analysis and Reasoning • Technology Competency • Information Literacy	Didactic: PHAS 303 Clinical Laboratory Procedures Clinical: PHAS 409 Family Medicine I Clerkship	**CL: 1, 2, & 3** Students demonstrate clinical reasoning in laboratory practicum reports and didactic summative exams= 70 % proficiency A portfolio review of student clinical work: Typhon logs, Hx & PE papers and Journal Article critique with rubric likert scale 1-4; 70=proficient ;Students must prepare Grand Rounds Case Study: Oral/PPT evaluated by jury which must address style, content, delivery, medical fund, therapeutic management and citation. Med Challenger/ End-of- Rotation summative exams and OSCE requiring 80% proficiency;

University of Maryland – University College

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011
University of Maryland University College (UMUC)

Part One: Summary of Assessment Activities

Introduction

This report accounts for learning outcomes assessment activities at the University of Maryland University College (UMUC) since the 2007 SLOAR. UMUC has moved its assessment process forward through the following institution-wide efforts:

- changes in organizational structure and institutional leadership
- a new curricular and assessment design
- advances in assessment methods
- investments in professional development

Collectively, these efforts create a process to improve student learning. Each of area of activity is delineated below. Further details regarding assessment efforts at UMUC are available in the 2010 revision of the Institutional Plan for Learning Outcomes Assessment.[1]

Organizational Structure and Institutional Leadership

During 2008, the administration of assessment in the School of Undergraduate Studies (SUS) was re-designed to be embedded at the program level, with the goal of more deeply engaging academic directors and faculty in the assessment process. A newly created position, Assistant Director, Outcomes Assessment, now works with directors and faculty to implement assessment at the program level; the Assistant Director also coordinates assessment efforts directly with the Associate Dean of Academic Affairs. An assessment committee of academic directors also has responsibility for assessment within SUS. A team from the Office of Evaluation and Assessment, within the university's Office of Institutional Effectiveness (OIE), further supports the school's assessment work. The OIE team offers technical expertise regarding assessment methods, instrument creation, data analysis, and management of the assessment system. Finally, at the institutional level, the university has designated an assessment oversight committee, which includes undergraduate and graduate, OIE, and faculty advisory council (FAC) representatives.

New Curricular and Assessment Design

In 2008–2009, all undergraduate degree programs reviewed and revised program-level learning outcomes. SUS then held workshops with program directors to develop plans and set timelines for assessment development. Program directors and faculty collaboratively created plans. In 2010, SUS began a curricular revision process, Supporting Educational Goals for Undergraduate Excellence (SEGUE).[2] All programs have undergone revision and refocusing through SEGUE. Alumni, employers, hundreds of faculty members, and administrators informed outcomes and a curricular design that reflects what students need to do outside of UMUC. New program outcomes led to new program maps, and courses were revised to match the new maps. Key assessment points for program outcomes and general education hallmarks (corresponding to

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[1] Institutional Plan for Learning Outcomes Assessment: http://www.umuc.edu/outcomes/pdfs/Inst_Plan_2010.pdf

[2] SEGUE - For more information, see http://intranet.umuc.edu/segue/index.shtml (username and password available on request); or contact segue@umuc.edu.

general education outcomes that MHEC terms competencies) provided a basis for the new assessment maps. Assessments and rubrics were developed with clear alignment to the outcomes. Appendix B provides an example of a "Program Outcome Guide" (POG) that shows the program outcomes, related courses, and assessments developed during the SEGUE redesign process. Every program developed as part of SEGUE has created a similar POG.

Advances in Assessment Methods

The standardized ETS Proficient Profile (EPP, formerly MAPP) is used to conduct institutional-level assessment. EPP assesses written communication, quantitative reasoning, and critical reasoning and analysis. Scores for EPP are reported as norm and criterion referenced. In Part II of this report, the criterion scores are presented as percentages at each skill proficiency level. A new sampling method was used for EPP implementation. The method allowed for propensity score matching[3] as a more advanced (than descriptive statistics) approach to calculating value-added in learning. For students graduating from UMUC, EPP scores are correlated with students' GPAs and the percentage of general education they completed at UMUC. Those correlations support the use of EPP scores as a valid indicator of student learning.

To provide more meaningful program- and course-level assessment, beginning in the summer of 2009, there has been a systemic shift to using authentic assessments: assessments based on real-world tasks and skills. Such assessments ask students to produce a project, report or some performance similar to those they would be asked to produce in their field of work. Developing student competencies through authentic applications helps students apply critical-thinking and problem-solving skills that are crucial to their careers.

Finally, in 2009 the undergraduate school developed a computer-based test item data bank (TIDB). Directors and instructors developed new test items for course final exams to build a database of quality multiple-choice, short answer, and essay items used by faculty to develop various versions of the final exams. The items were developed according to specific directions, including alignment to course outcomes and multiple levels of cognitive skill.

Investments in Professional Development

UMUC has made a number of professional development opportunities related to outcomes assessment available to faculty and staff. These have included: from 2008 to 2011, training sessions held by nationally recognized experts (e.g., Dr. Trudy Banta and Dr. Peter Facione) who presented on the development of assessment practices, including testing critical thinking, methods of assessment, and designing an outcomes driven curriculum; from 2007 to 2008, trainings conducted 2008 on assessment concepts, development of assessment plans, design and use of rubrics, and aligning assessments with mission and outcomes; the 2009 Faculty Summer Institute, which for selected faculty provided a focus such issues as classroom assessment, rubric norming, and reliability; a series of training sessions in 2009 to 2010 on test development and item writing to improve course-based tests; a 2010 Faculty Summer Institute track focused on outcomes driven curriculum and assessment; and a 2011 workshop with expert, Dr. Darren Cambridge, on e-portfolios.

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[3] Propensity score matching (PSM) is a statistical method used to identify causality in research that cannot be conducted as a true experiment. PSM creates an unbiased estimate of the treatment group mean. UMUC used PSM to match incoming students (control group) to graduating students (treatment group) for value-added analysis.

Part Two: Four Major Competency Areas

I. Written and Oral Communication

A. Institution's definition of competency

At UMUC, the written communication competency is defined such that graduates will be able to:

(1) communicate effectively to a target audience,
(2) use expected conventions of format and organization in writing,
(3) use credible reasoning and evidence in communication,
(4) satisfy standards of writing style and grammatical correctness,
(5) produce an acceptably researched and documented, extended essay, and
(6) incorporate sufficient use of appropriate research, supporting evidence, and relevant sources.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Written communication is assessed with school-wide general education assessments and at the program and course levels with assessments embedded within courses.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The written communication competency is assessed with part of a final exam in the general education course, WRTG 101: Introduction to Writing. In WRTG 101, a common rubric is used across sections to assess the competency. Written communication is also assessed in specific program courses that emphasize writing (e.g., a project in a research methods course). Therefore, each program created a rubric or a test tailored to assess writing in that field.

At the institutional level, the ETS Proficiency Profile (EPP) is also used to assess written communication. The EPP was administered in 2007-2008 and in 2009-2010. For the 2009-2010 administration, a sampling design that allowed for value-added analysis from incoming (i.e., new, first-time bachelors degree seekers) to graduating was implemented for the first time. That analysis is shown below. In addition to the value-added analysis, the criterion referenced scores (percent proficient) from the EPP are also shown. The written communication level definitions for EPP are listed in Appendix A.

Note: UMUC administrators are in discussion with both MHEC and MSCHE officials regarding the assessment of oral communication. Given the online nature of the university's academic programming, the discussion has centered on either establishing a strategy feasible and scalable for implementation in the online setting or for exempting UMUC from this core competency area. Importantly, oral communication is the only mandated MHEC competency area where systematic learning outcomes assessment is not currently underway.

D. Describe the results of the assessment work related to this competency

The results focus on the general education level assessments conducted by the EPP exam and in

WRTG 101. Additional assessments have been conducted at the program level. Results for all of the programs cannot be included in this report; however, two examples of program level results from the assessment of written communication are provided below.

A comparison EPP scores from the 2007-2008 administration of the exam and the 2009-2010 administration of the exam shows that UMUC students' proficiency increased 5% at level 1, 2% at level 2, and remained constant at level 3. Table 1 summarizes the results of the EPP written communication scores from 2007 to 2010.

Table 1: Total Group Descriptive Analysis of EPP Written Communication from 2007 – 2010

Proficiency Level	AY 2007-2008 (n = 2,674) % at Proficient	AY 2009-2010 (n = 733) % at Proficient	Comparison
Level 1	54%	59%	+ 5%
Level 2	18%	20%	+ 2%
Level 3	7%	7%	equal

The written communication proficiencies improved from at all 3 levels in the 2009-2010 academic year. Table 2 shows the percent of students who scored as proficient (P), the percent of students who scored as less than proficient (L), and the gains from incoming to graduating students.

Table 2: EPP Written Communication Proficiency Comparison in 2009-2010

Proficiency Level	Incoming		Graduating		Gains
	P	**L**	**P**	**L**	
Level 1	52%	48%	64%	36%	Graduating are + 12%
Level 2	17%	83%	23%	77%	Graduating are + 6%
Level 3	6%	94%	7%	93%	Graduating are + 1%

Table 3 shows how UMUC mean scores compared to the ETS group, analyzed by the level of the institution as described by the Carnegie method, as well as to all of the institutions combined. UMUC students scored higher than associate, masters, and all institutions combined, equal to bachelors institutions, and lower than doctoral institutions. (Note that UMUC is a masters level institution in the Carnegie designation.)

Table 3: Comparing EPP Written Communication of 2010 Graduates to National Groups

Competency	Institution Type											
	UMUC		**Associate**		**Bachelors**		**Masters**		**Doctoral**		**All**	
Written Communication	n = 417		N = 4,103		N = 25,080		N = 42,649		N = 20,602		N = 84,844	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
	115.24	4.92	114.3	5.1	115.2	5.0	115.1	4.8	115.3	4.8	115.1	4.9

Table 4, below, shows the value added by a UMUC education, based on a comparison of Fall 2009 incoming students and graduating students in Spring 2010. A value-added model using propensity scores based on students' number of transfer credits to equate (i.e., "match") was used to assess gains from entrance to graduation. The results showed an adjusted mean difference of

2.25 (SE = .85, t = 2.61, p < .01). *The difference is statistically significant value-added.*

Table 4: EPP Written Communication Propensity Score Value-Added Analysis for 2009-2010

Written Communication	Possible Range	Graduating Mean	Incoming Mean	Mean Difference	Standard Error	t	p
	100 to 130	115.30	113.04	2.25	.86	2.61	.01

In addition to EPP results, the common rubric in WRTG 101 was used during 2009-2010 in a sample of 12 course sections. Students performed well overall, with 81% of students meeting or exceeding expectations based on overall score. Table 5 shows the overall scores and each rubric dimension analyzed by proficiency level.

Table 5: WRTG 101 Proficiencies

WRTG 101 Rubric Scores	Proficiency Level		
	Exceeds Expectations	**Meets Expectations**	**Does Not Meet Expectations**
Overall	51%	30%	19%
Dimension 1: The thesis is clearly stated in an appropriate place in the beginning of the essay.	52%	35%	13%
Dimension 2: The thesis is an effective argument.	41%	42%	17%
Dimension 3: The thesis addresses the topic given and is defensible from the reading material.	39%	47%	14%

Space permits only a few examples of the many program-level assessments that have been conducted of writing skills. Table 6, below, summarizes program level data from Global Business and Public Policy (GBPP), which used a written communication assessment embedded into the course BMGT 392: Global Business Management in Spring 2010. A large majority of students met or exceeded expectations for written communication in both dimensions – structure (88%) and spelling & grammar (91%).

Table 6: GBPP/BMGT 392 Written Communication Proficiency

Rubric Dimensions	Proficiency Level		
	Exceeds Expectations	**Meets Expectations**	**Does Not Meet Expectations**
Structure	40%	48%	12%
Spelling & Grammar	57%	34%	9%

Below, an additional example of program-level results is provided. The Political Science program used an assessment in the course GVPT 444: American Political Theory in Spring 2010. In all four rubric dimensions, a large majority of students met or exceeded expectations for written communication. The results are shown in Table 7.

Table 7: Political Science/GVPT 444 Written Communication Proficiency

Rubric Dimensions	Proficiency Level		
	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
Thesis	40%	46%	14%
Accuracy	34%	49%	17%
Content	29%	51%	20%
Organization	37%	54%	9%

II. Scientific and Quantitative Reasoning
A. Institution's definition of competency

At UMUC, the scientific reasoning and quantitative reasoning competencies are assessed separately.

The scientific reasoning competency is defined such that graduates will be able to:

(1) describe basic concepts, principles, and common themes of the natural, social, and behavioral sciences,
(2) cite the strengths and limitations of scientific methods of inquiry,
(3) form relevant, reasonable, and sound scientific questions, and
(4) think critically to recognize and weigh alternative scientific evidence, explanations, and theories.

The quantitative reasoning competency is defined such that graduates will be able to:

(1) demonstrate understanding of basic quantitative and mathematical principles,
(2) interpret quantitative information and ideas, and
(3) communicate quantitative information effectively.

B. Level at which the competency assessed (e.g., department, program, course)

Scientific reasoning and quantitative reasoning are assessed at the course, program, and school levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

A cumulative final exam in BIOL 101: Concepts of Biology is used to assess scientific reasoning. The content was developed in cooperation with a panel of national experts, and aligns with the course outcomes. Scientific reasoning is also assessed at the course and program levels, as appropriate for the given field of study and work.

Quantitative reasoning is assessed with a final exam in the general education courses MATH 106: Finite Mathematics and MATH 107: College Algebra. The MATH 106 and MATH 107 final exams contain 30 items that align to the course outcomes. Quantitative reasoning is also assessed at the program and course levels with assessments that are embedded into courses

where they are appropriate for each program. Across the undergraduate school, the EPP is also used to assess quantitative reasoning. The quantitative reasoning level definitions for EPP are listed in Appendix A.

If a student opts to take it, the standardized placement test, ACCUPLACER is used. ACCUPLACER provides an indicator of students' quantitative reasoning when they enter the university. The score helps students to select their first math course, subsequently their more efficient mastery of the quantitative reasoning competency. ACCUPLACER provides an additional set of data for assessing quantitative literacy and designing appropriate interventions.

D. Describe the results of the assessment work related to this competency.

Scientific Reasoning
The BIOL 101 exam was administered in 2007 – 2008. There were 398 students sampled. The students' scores averaged a 65%. The reliability of the scores was .85. Examining student performance across semesters in 2007-2008, 59% of students met or exceeded expectations in Spring 2007. In Fall 2007, 55% of students met or exceeded expectations. In Fall 2008, 61% of students met or exceeded expectations. In Fall 2010, another revised exam was administered (the advances in the assessment based on the 2007 – 2008 results are described in the appropriate section below). There were 173 students in the sample. The students' scores averaged 67%.That is an improvement from the previous administration. The reliability of the exam also improved to .88. Table 8 shows students' performance before and after revisions.

Table 8: BIOL 101 Student Performance Before and After Revisions

Grade	Spring 2007 (before revision)	Fall 2007 (after first revision)	Fall 2008 (after second revision)
Exceeds Expectations	22%	18%	25%
Meets Expectations	37%	37%	36%
Approaching Expectations	5%	8%	6%
Does Not Meet Expectations	36%	37%	33%

An example of assessing scientific reasoning at the program and course levels is an authentic assessment scored with a rubric, embedded in the course ENMT 301: Environment and Ecosystems Management, which is required in the Environmental Management program. Table 9 shows the dimensions of that rubric with the associated proficiency scores from Spring 2010. On both of the key aspects of the assignment, the majority of students met or exceeded expectations.

Table 9: Environmental Management/ENMT 301 Scientific Reasoning Proficiency

Rubric Dimensions	Proficiency Level		
	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
Compare and Contrast these three factors for arctic tundra and tropical rain forest	50%	19%	31%
How humans have impacted these three factors	47%	25%	28%

Another example of assessing scientific reasoning at the program and course levels is an authentic assessment scored with a rubric, embedded in the course GERO 302: Health and Aging, which is in the Gerontology program. Table 10 shows the dimensions of that rubric with the associated proficiency scores from Spring 2010. All of the students met or exceeded expectations on all of the rubric dimensions.

Table 10: Gerontology/GERO 302: Health and Aging Proficiency

Rubric Dimensions	Proficiency Level		
	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
Identifies Biological Factors	71%	29%	0%
Identifies Psychological Factors	14%	86%	0%
Identifies Social Factors	29%	71%	0%
Identifies Economic Factors	29%	71%	0%
Discussion of Interactions Between Factors	21%	79%	0%

Quantitative Reasoning

The MATH 106: Finite Mathematics final exam used for outcomes assessment. It was created in 2009 and was administered for analysis in 2009-2010. The reliability of the exam was .79. Table 11 shows the descriptive statistics including sample sizes, means, standard deviations, minimum scores, maximum scores, and scores at each quartile. Twenty-five percent of students scored a 73% or higher.

Table 11: Descriptive Statistics of the MATH 106 Final Exam

Semester	n	Mean	SD	Min	25th Percentile	Median	75th Percentile	Max
Spring 2010	138	61%	16%	20%	50%	60%	73%	100%

A final exam in MATH 107: College Algebra is used for outcomes assessment was created in 2008. In 2009, item analysis was used on the test scores. The Spring 2009 exam scores had a reliability of .90. In Spring 2010, the exam scores had a reliability of .88. Over the five-year span of collecting and analyzing data for MATH 107, the top quartile of students never had an average below 77% and had a maximum average of 90%. The descriptive statistics including sample sizes, means, standard deviations, minimum scores, maximum scores, and scores at each quartile are shown in Table 12.

Table 12: Descriptive Statistics of the MATH 107 Final Exam

Semester	n	Mean	SD	Min	25th Percentile	Median	75th Percentile	Max
Spring 2008	187	67%	24%	13%	47%	70%	87%	100%
Summer 2008	41	72%	20%	30%	62%	70%	90%	100%
Fall 2008	90	61%	25%	3%	43%	67%	80%	100%
Spring 2009	62	68%	24%	13%	53%	73%	87%	100%
Spring 2010	138	59%	22%	13%	40%	60%	77%	100%

A comparison of UMUC's EPP scores from the 2007-2008 administration of the exam and the 2009-2010 administration of the exam shows that UMUC students' proficiency were nearly equivalent at all 3 proficiency levels. Table 13 summarizes the results of the EPP quantitative reasoning scores from 2007 to 2010.

Table 13: Total Group Descriptive Analysis of EPP Quantitative Reasoning from 2007 – 2010

Proficiency Level	AY 2007-2008 % at Proficient	AY 2009-2010 % at Proficient	Comparison
Level 1	41%	40%	- 1%
Level 2	22%	45%	+ 23%
Level 3	6%	15%	+ 9%

The quantitative reasoning proficiencies improved from incoming to graduating at all 3 levels in the 2009-2010 academic year. Table 14 shows the percent of students proficient (P), the percent of students less than proficient (L), and the gains from incoming to graduating students for each proficiency level.

Table 14: Quantitative Reasoning EPP Proficiency Comparison

Proficiency Level	Incoming		Graduating		Gains
	P	L	P	L	
Level 1	36%	64%	44%	56%	Graduating are + 8%
Level 2	20%	80%	25%	75%	Graduating are + 5%
Level 3	6%	94%	8%	92%	Graduating are + 2%

Table 15 shows how UMUC means and proficiency levels in quantitative reasoning compared to the ETS group, analyzed by the level of the institution.

Table 15: Comparing EPP Quantitative Reasoning to 2010 Graduates to National Groups

Competency	Institution Type											
	UMUC		Associates		Bachelors		Masters		Doctoral		All	
Quantitative Reasoning	n = 417		N = 4,103		N = 25,080		N = 42,649		N = 20,602		N = 84,844	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
	113.66	6.19	113.6	6.3	114.2	6.2	114.0	6.1	114.6	6.3	114.2	6.2

Propensity score matching based on students' age, gender, ethnicity, and military status to measure valued-added between the incoming and graduating groups, showed an adjusted mean difference of 1.53 (SE = .79, t = 1.95, p = .05) for quantitative reasoning. The value-added is not statistically significant, but the p-value of .05 is just above statistical significance (i.e., .049). The results are presented in Table 16.

Table 16: EPP Quantitative Reasoning Propensity Score Value-Added Analysis for 2009-2010

Quantitative Reasoning	Possible Range	Graduating Mean	Incoming Mean	Mean Difference	Standard Error	t	p
	100 to 130	113.66	112.12	1.53	.79	1.95	.05

Finance (FINC) in the course FINC 330: Business Finance in Spring 2010 is an example of a program level assessment for quantitative reasoning. The program used an authentic assessment scored with a rubric on three aspects of financial analysis. The results are shown in Table 17.

Table 17: Finance/FINC 330 Quantitative Reasoning

Rubric Dimension	Score					
	1	2	3	4	5	6
Reasoning behind differences in required rate of return on equity and required rate of return on debt	36%	28%	5%	28%	3%	N/A
Analysis of cost of equity using: (1) the capital asset pricing model and (2) the dividend valuation model	0%	13%	38%	36%	10%	3%
Analyzing the cost of capital	26%	26%	20%	18%	10%	N/A

Note. N/A = not applicable because "6" is not a score used on that dimension

ACCUPLACER results were analyzed to include all students from Fall 2007 through Spring 2010 to determine its usefulness in aiding student success through proper course placement. Three thousand three hundred twelve (3,312) students took the test in that period. Among students who took a course (n = 1,630) for all possible course placements (MATH 009, MATH 012, MATH 106, or MATH 107), the majority, 88%, of students took the course into which they placed based on their ACCUPLACER score. Among the students who took the course they placed into, 68% were successful in that course. Among students who took a course above the one they placed into, 73.5% were successful. Among students who took a course below the one they placed into, 88.3% were successful.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

The critical analysis and reasoning competency is defined such that graduates will be able to:

(1) make linkages or connections between diverse facts, theories, and observations,
(2) use reasoning to recognize, develop, defend, and criticize arguments and other persuasive appeals,
(3) distinguish among assumptions, emotional appeals, speculations, and defensible evidence,
(4) weigh support for conclusions to determine how well reasons support conclusions, and
(5) develop credible responses to complex questions.

B. Level at which the competency assessed (e.g., department, program, course)

This competency is assessed at the course, program, and school levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The EPP is used to assess critical analysis and reasoning. Additionally, academic programs created measures that capture critical analysis and reasoning, as it exists in each particular field. Unlike written communication and quantitative reasoning, the critical analysis and reasoning proficiency is one level on the EPP. The lower levels of the subtest measure reading skills. The critical analysis and reasoning proficiency level definitions for EPP are listed in Appendix A.

D. Describe the results of the assessment work related to this competency.

As shown in Table 18, UMUC outperformed the ETS group in critical analysis and reasoning.

Table 18: Total Group Descriptive Analysis of Critical Analysis & Reasoning from 2007– 2010

Critical Analysis and Reasoning	AY 2007-2008			AY 2009-2010		
	UMUC	**ETS**	**Comparison**	**UMUC**	**ETS**	**Comparison**
	9%	4%	UMUC is + 5%	8%	7%	UMUC is + 1%

The critical analysis and reasoning proficiencies improved from incoming to graduating in the 2009-2010 academic year. Table 19 shows the percent of students proficient (P), the percent of students less than proficient (L), and the gains from incoming to graduating students.

Table 19: Total Group Descriptive Analysis of EPP Critical Analysis & Reasoning from 2007–2010

Critical Analysis and Reasoning	Incoming		Graduating		Gain
	P	**L**	**P**	**L**	
	7%	93%	9%	91%	Graduating are + 2%

Table 20 shows how UMUC mean scores and proficiency levels in compared to the ETS group, analyzed by the level of the institution. UMUC students' mean critical analysis and reasoning scores are higher than all of the institution types and all institutions combined.

Table 20: Comparing EPP Critical Analysis & Reasoning of 2010 Graduates to National Groups

Competency	Institution											
	UMUC		**Associates**		**Bachelors**		**Masters**		**Doctoral**		**All**	
Critical Analysis and Reasoning	n = 417		N = 4,103		N = 25,080		N = 42,649		N = 20,602		N = 84,844	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
	112.93	6.88	111.6	6.5	112.4	6.7	112.1	6.5	112.4	6.6	112.2	6.6

A propensity score model based on students' age, gender, ethnicity, and military status to compare the incoming and graduating groups, showed an adjusted mean difference of 2.70 (SE = 1.28, t = 2.10, p = .03) for critical analysis and reasoning. The value-added for critical analysis and reasoning is statistically significant. The results are presented in Table 21.

Table 21: EPP Critical Analysis & Reasoning Propensity Score Value-Added Analysis for 2009-2010

Critical Analysis and Reasoning	Possible Range	Graduating Mean	Incoming Mean	Mean Difference	Standard Error	t	p
	100 to 130	113.07	110.36	2.70	1.28	2.10	.03

An example of program-level results is from Global Business and Public Policy (GBPP), which used an assessment embedded in the course BMGT 392: Global Business Management in Spring 2010. A large majority of students met or exceeded expectations for the competency on all dimensions of the rubric. The proficiency levels for each dimension are presented in Table 22.

Table 22: GBPP/BMGT 392 Critical Analysis and Reasoning Proficiency

Rubric Dimensions	Proficiency Level		
	Exceeds Expectations	Meets Expectations	Does Not Meet Expectations
Clear Statement of Purpose	18%	68%	14%
Market Success Analysis	23%	67%	10%
Market Entry Analysis	28%	59%	13%
Strategy Selection	26%	57%	17%
Implementation Strategy	21%	63%	16%

Another example of program-level data is from Human Resources Management (HRMN), which used a critical analysis and reasoning assessment, embedded into the course HRMN 495: Contemporary Issues in Human Resource Management Practice in Spring 2010. Nearly all students scored above the mid-point score of three (3) for critical analysis and reasoning on all dimensions of the rubric. The scores for each rubric dimension are presented in Table 24.

Table 24: HRMN/HRMN 495 Critical Analysis and Reasoning

Rubric Dimensions	Scores				
	5	4	3	2	1
Purpose and Problem	38%	49%	12%	1%	0%
Assumption and Point-of-View	15%	57%	21%	7%	0%
Evidence and Concepts	14%	65%	14%	7%	0%
Interpretation and Conclusions	18%	53%	21%	8%	0%
Implications	28%	50%	15%	7%	0%

IV. Technological Competency

A. Institution's definition of competency

The Technology competency is defined such that graduates will be able to:

(1) identify the basic parts and functions of computers, information systems, networks, and the relationships between data and information in the computer environment
(2) analyze issues faced by information system professionals, including security, ethical, and privacy problems,
(3) explain the issues in managing information systems,
(4) effectively use the Internet to find, evaluate, and present information, and
(5) create simple word processing documents, spreadsheets, databases, and presentations.

B. Level at which the competency assessed (e.g., department, program, course).

This competency is assessed at the course, program, and school levels.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments).

The technology competency is assessed with the Fluency in Technology (FIT) exam, administered in IFSM 201: Introduction to Computer-Based Systems. The FIT exam has 75 multiple-choice items aligned to the Board of Regents 15 technology learning objectives. Every three years, the data from the FIT exam is analyzed, and disseminated to stakeholders for discussion. As with the other competencies, the technology competency is also assessed with course-embedded measures based on how it fits into the given program.

D. Describe the results of the assessment work related to this competency.

For the 2007-2008 FIT exam results, mean percentage correct among a sample of 871 students was 71%. The lowest score was 22%, but the highest score was 99%. The reliability of the exams was .88. In the appropriate section below the changes made to the exam based on the results are described. The FIT exam was again administered in Fall 2010 for formal analysis. In Fall 2010, 31% of students scored below a "C" level of 70% correct on the exam. Thirty percent (30%) of students scored at a "C" level (70% to 79% correct). Thirty-three (33%) of students scored at a "B" level (80% to 89% correct). Six percent (6%) of students scored an "A". The reliability of the exam was .84. The exam is going to be revised in the next assessment cycle.

At the program and course level, the technology competency was assessed in the course CMSC 230: Computer Science II, which is in the Computer Science program. An authentic assessment scored with a rubric was used. On a 3-point scale, a large majority of students (75%) exceeded expectations. The results by proficiency level are shown in Table 25.

Table 25: Computer Science/CMSC 230 Technology Proficiency

CMSC 230 Technology Competency Proficiencies	Proficiency Level		
	Exceeds Expectations	**Meets Expectations**	**Does Not Meet Expectations**
	75%	12.5%	12.5%

In the Computer and Information Science program, within the course CMIS 102: Introduction to Problem Solving and Algorithm Design, a set of test items was used to assess the technology competency. The results by proficiency level are shown Table 26.

Table 26: Computer and Information Science/CMIS 102 Technology Proficiency

CMIS 102 Technology Competency Proficiencies	Proficiency Level		
	Exceeds Expectations	**Meets Expectations**	**Does Not Meet Expectations**
	27%	23%	50%

Part Three: Evolution of Assessment Activities

Since 2007, UMUC has undertaken a systematic and expansive effort to embed additional assessments at the program level. The purpose of these program-level assessments is to measure general education competencies (hallmarks) specifically as they are needed within each academic field. These efforts have begun providing richer information on student learning, and over time will allow better informed programmatic decisions related to student writing, critical thinking, scientific literacy, quantitative literacy and technology fluency.

Across degree programs, assessment instruments have been revised based on outcomes assessment data. Rubrics to measure key competencies have been revised for clarity, and are now more accessible to students and better aligned with course content. Item analyses of the general education tests have led to item revisions, increasing test length, and re-aligning test items to learning outcomes. The reliability of those tests has improved over time.

As part of the SEGUE curriculum redesign process, key competencies have been more tightly integrated at every level and in every undergraduate program. To improve curricular alignment and to ensure that outcomes address skills needed by students in the real world, all programs have completed a comprehensive revision of their program outcomes, course outcomes, formative assessments, and summative (outcome) assessment.

To focus assessment efforts more immediately on student learning, UMUC has emphasized formative (in vivo) as well summative (outcomes based) assessment. Each program has identified and implemented additional formative assessments at the course level. These assessments help instructors to identify learning weaknesses prior to a summative outcome measure, allowing instructors an opportunity to refocus efforts to meet students' needs during the course. Support modules for student learning are also being developed to address more specific student learning needs, without the burden of added coursework.

The overall process of assessment has grown to include data from courses, programs, internal general education measures across the undergraduate school, and the external, standardized ETS Proficiency Profile (EPP). This has created rich and still growing sets of data that are being analyzed together to identify connections among multiple measures and multiple outcomes. The EPP and its precursor the MAPP exam have now been administered multiple years since 2004, and significant improvements were made in the most recent implementation. The 2009-2010 administration of the EPP was improved by changing the sampling to separate incoming students (i.e., new, first-time bachelors degree seekers) from graduating students to measure value-added. This change will over time allow for longitudinal comparison of student achievement.

Written Communication
To advance the assessment of written communication, beginning in 2010-2011, the WRTG 101 rubric scores have been normed in sessions with multiple-raters to assess inter-rater reliability. Written communication assessment is being advanced further by assessing in the advanced level writing courses, WRTG 391: Advanced Research Writing, WRTG 393: Advanced Technical Writing, and WRTG 394: Advanced Business Writing. Data from those courses are part of a study to examine the relationship between early (WRTG 101) performance and later writing

performance. A third important advancement in the assessment of written communication was course-embedded, program-level assessment. A well-triangulated view of learning is now possible as these data are analyzed in combination: results of the EPP; students' work in lower and advanced level general education courses – WRTG 101, WRTG 391, WRTG 393, and WRTG 394; and program level assessments incorporated to assess written communication needed by students in their particular field.

Scientific and Quantitative Literacy

For the BIOL 101 exam, there were changes made after the 2007-2008 administration of the test based on an item analysis of the test data. The exam was re-designed to include more and better test items to identify what students do not understand, exam items were mapped to revised course outcomes, and more formative self-assessments were added to the course to improve the summative final exam scores. The revised assessment tool was administered in 2008. Based on an item analysis it was determined that some of the items needed revision. A new version of the exam was administered in Fall 2010. The scores showed improved reliability. The exam was administered again in Spring 2011 and will be analyzed again to make improvements, if needed.

In MATH 106: Finite Mathematics and MATH 107: College Algebra, results of the final exams led to such changes as revision of the course objectives, and embedding of self-assessment tools in the online course content. Additionally for MATH 106, item statistics were examined and the exam was improved. In MATH 107: College Algebra, based on an item analysis, some items needed improvement. Those items will be revised for the next administration of the exam.

Critical Thinking and Reasoning

More focus in the SEGUE curriculum redesign project was made on real-world skills to help students develop the critical thinking needed in the workforce. The assessment of critical thinking and reasoning has also evolved to include course-embedded measures of the competency to assess it specific to the students' fields of study. The academic programs have refined their critical thinking and reasoning assessment instruments to better measure the competency. The school-wide effort to use more authentic assessments, which has been done in about 80% of courses, is also a way to better capture students' critical thinking. Authentic assessments, which require students to apply knowledge in real-world situations, are known to be learning tools for and better assessments of critical thinking and problem solving.

Technology Fluency

The 2007-2008 FIT exam had some items that needed revision based on an item analysis. The results from the exam led to faculty discussions in online meetings and within the regular course review cycle. Those discussions led to changes in the FIT exam. Changes included content revisions addressing the three primary areas where results demonstrated the most difficulty on the exam. Those were: (1) understanding the information system unit (i.e., the hardware), (2) understanding the information system development cycle, and (3) understanding programming languages and program development. Additionally, more formative self-assessments are now included in the course as a means to improve the scores on the summative FIT exam.

Appendix A
EPP Proficiency Level Definitions

Written Communication

Level I:
- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions)
- recognize appropriate transition words
- recognize incorrect word choice
- order sentences in a paragraph
- order elements in an outline

Level II:
- incorporate new material into a passage
- recognize agreement among basic grammatical elements (e.g., nouns, verbs, pronouns and conjunctions) when these elements are complicated by intervening words or phrases
- combine simple clauses into single, more complex combinations
- recast existing sentences into new syntactic combinations

Level III:
- discriminate between appropriate and inappropriate use of parallelism
- discriminate between appropriate and inappropriate use of idiomatic language
- recognize redundancy
- discriminate between correct and incorrect constructions
- recognize the most effective revision of a sentence

Quantitative Literacy

Level I
- solve word problems that would most likely be solved by arithmetic and do not involve conversion of units or proportionality. These problems can be multi-step if the steps are repeated rather than embedded.
- solve problems involving the informal properties of numbers and operations, often involving the Number Line, including positive and negative numbers, whole numbers and fractions (including conversions of common fractions to percent, such as converting "1/4" to 25%)
- solve problems requiring a general understanding of square roots and the squares of numbers
- solve a simple equation or substitute numbers into an algebraic expression
- find information from a graph. This task may involve finding a specified piece of information in a graph that also contains other information.

Level II
- solve arithmetic problems with some complications, such as complex wording, maximizing or minimizing, and embedded ratios. These problems include algebra problems that can be solved by arithmetic (the answer choices are numeric).
- simplify algebraic expressions, perform basic translations, and draw conclusions from algebraic equations and inequalities. These tasks are more complicated than solving a simple equation, though they may be approached arithmetically by substituting numbers.
- interpret a trend represented in a graph, or choose a graph that reflects a trend
- solve problems involving sets; problems have numeric answer choices

Level III

- solve word problems that would be unlikely to be solved by arithmetic; the answer choices are either algebraic expressions or numbers that do not lend themselves to back-solving
- solve problems involving difficult arithmetic concepts such as exponents and roots other than squares and square roots and percent of increase or decrease
- generalize about numbers, (e.g., identify the values of (x) for which an expression increases as (x) increases)
- solve problems requiring an understanding of the properties of integers, rational numbers, etc.
- interpret a graph in which the trends are to be expressed algebraically or one of the following is involved: exponents and roots other than squares and square roots, percent of increase or decrease; solve problems requiring insight or logical reasoning.

<u>Critical Thinking</u>

- evaluate competing causal explanations
- evaluate hypotheses for consistency with known facts
- determine the relevance of information for evaluating an argument or conclusion
- determine whether an artistic interpretation is supported by evidence contained in a work
- recognize the salient features or themes in a work of art
- evaluate the appropriateness of procedures for investigating a question of causation
- evaluate data for consistency with known facts, hypotheses or methods
- recognize flaws and inconsistencies in an argument

Appendix B
Program Outcome Guide (POG)

Program Name: English

Roles: Writer, Blogger, English Teacher (7-12), Marketing Specialist, Librarian, Elementary Teacher, Editor, Editorial Assistant, Publicist, Literary Specialist, Research Assistant, Grant Reviewer, Journalist, Proof Reader, Copy Editor, Reading Teacher, ESL Teacher, media Specialist – TV, Communications, Human Resources Assistant, Adjunct Professor, ENGL, Law School, MBA, School Administrator, Tutor, Policy Analyst, Technical Writer, Law Librarian, Novelist

Program Description: The English major provides students with broad cultural literacy, as well as the analytical, writing, and critical thinking skills for successful professional work and graduate study. Graduates with an English degree may pursue careers in business, education, law, the military, creative and professional writing, journalism, marketing, public relations, administration, and management, as well as advanced degrees in secondary teaching, literature, or related fields.

Expectations for Students Entering the Program:

Intended Program Outcomes	Hallmarks	Key Assessment Tasks		Core Concepts, Issues, and Skills		
What must the learner be able to do as a result of this program?	Which SUS Hallmarks are addressed by this program outcome? (H1=HIST H4=ETH H2=WRIT H6=TECH H3=INFO H4=ETH H5=CRIT H6=TECH H7=SCIE H8=QUAN)	What key assessment task(s) will provide evidence that the learner can demonstrate proficiency in this program outcome? In which course is the task embedded?		What core concepts, issues, and skills must the learner acquire to demonstrate proficiency in program outcomes?		
1. Interpret literature and apply language in order to reflect on the human condition in today's world.	H1=HIST H3=INFO H5=CRIT H6=TECH	(Assessment Task)	(Course)	(Concepts)	(Issues)	(Skills)
		Research Papers		▪ Research methodologies ▪ Historical methodologies ▪ Aesthetic concepts ▪ Style and voice	▪ Audience analysis ▪ Cultural bias ▪ Copyright issues ▪ Technological literacy ▪ Identify historical and	▪ Apply correct grammar and diction ▪ Identify rhetorical strategies ▪ Utilize editing techniques ▪ Write grants and proposals
2. Apply models from literature that reflect diversity and cultural	H1, H2	A final project that includes: A portfolio of work from 8	Capstone, ENGL 240,303	▪ Understand criteria of	chronological	▪ Write creative

|				literary genre ▪ Cultural literacy	position of literary works	fiction and non-fiction ▪ Analyze and persuade audiences ▪ Analyze literary works
competence to promote fair and inclusive interactions in the workplace and the larger society		courses, A reflective analysis of student's work, An original research project, prepared for publication in a student journal. Final Exam				
3. Apply models from literature to ethical leadership and strategic management in for=profit and not-for-profit organizations.	H2=WRIT H8=QUAN H4	Scanning, quantitative analysis of poetry	ENGL 240			
		A final project that includes: A portfolio of work from 8 courses, A reflective analysis of student's work, An original research project, prepared for publication in a student journal.	Capstone			
		Research papers	ENGL 310, 311,312			
4. Access, research, and analyze information using current technologies and library resources to accomplish professional objectives.	H1=HIST H3=INFO H5=CRIT H6=TECH	A final project that includes: A portfolio of work from 8 courses, A reflective analysis of student's work, An original research project, prepared for publication in a student journal.	Capstone			▪ Analyze ethical issues in literature research ▪ Validate cultural differences ▪ Apply lessons from literature to world/work situations
5. Create professional written and oral communications for specific purposes and provide feedback on grammatical and stylistic conventions.		Research Papers Creative Writing Assignments	ENGL 310, 311, 312, 294, 481, 485			▪ Analyze problem-solving strategies ▪ Utilize literary theory to analyze texts ▪ Write creatively
		Final Exam; A final project that includes: A portfolio of work from 8 courses, A reflective analysis of student's work, An original research project, prepared for publication in a student journal.	ENGL 240, Capstone			

Morgan State University

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011
Morgan State University
Prepared by Dr. Kathryn Doherty, Assistant Vice President for Assessment and Operations

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Part One: Summary of Assessment Activities

Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Assessment at Morgan State University supports the strategic mission of the institution by overseeing the *evaluation* of student learning on campus, facilitating the *interpretation* of data collected through these evaluations, and leading the *application* of assessment results to decision making, continuous quality improvement, and excellence in the student experience. This is accomplished through the Morgan State University Center for Performance Assessment, under the Office of the Provost, Division of Academic Affairs:
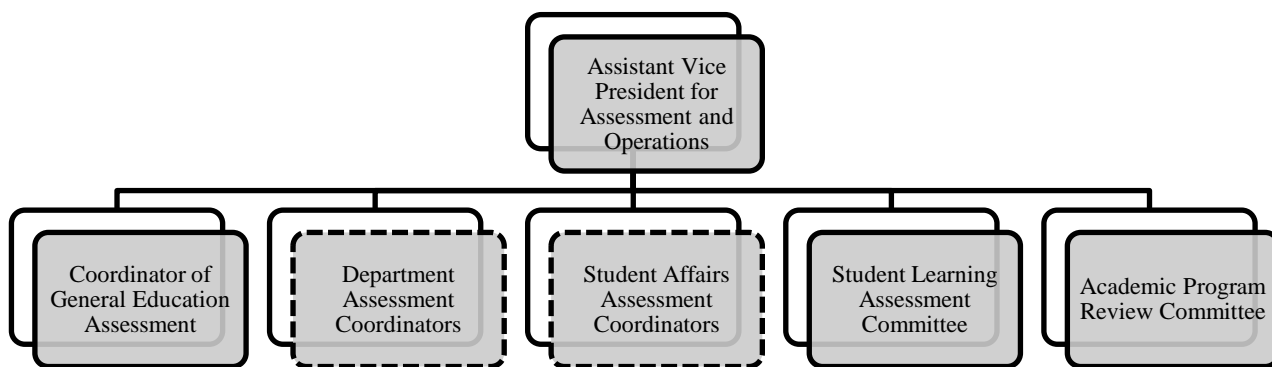
MISSION AND GOALS

The Assistant Vice President for Assessment and Operations directs assessment activities across campus, including the administration of Morgan's Comprehensive Assessment Plan, the work of the Student learning Assessment Committee, the direction of Student Affairs Assessment Coordinators and Department Assessment Coordinator, and the office of General Education Assessment. All work is focused on the **evaluation** of student learning, the **interpretation** of data collected through these evaluations, and the **application** of assessment results to improvement. These three components comprise the comprehensive assessment process at Morgan, as described below.

Evaluation

The Center for Performance Assessment works with the Student Learning Assessment Committee, the Vice Presidents, the Deans, Faculty, Students, and Staff to examine the student experience at Morgan University, to identify areas of excellence and to focus on opportunities for improvement. This work is accomplished through multiple assessment methods including standardized testing, an annual cycle of undergraduate and graduate program assessment, program review, surveys, course evaluations, accreditation requirements, and special assessment projects.

Interpretation

Morgan State University's focus on assessment centers on understanding and analyzing the results of our campus wide assessment. Working with members of the campus community, The Center for Performance Assessment facilitates analysis and interpretation of data and supports the work of the campus in understanding the student experience at Morgan. Assessment Office staff are available to provide guidance in developing, implementing,

collecting, and understanding the results from assessment projects. Serving as a clearinghouse for campus assessment tools and data, the Office incorporates external benchmarks and internal norms to ensure timely, accurate, and data supported interpretation of assessment results.

Application

Closing the loop on assessment means utilizing the results and findings to further improve the student experience at Morgan. Assessment results are only as good as the extent to which they are useful and utilized. The Center for Performance Assessment works with members of the campus community to maximize the utilization of assessment data within the context that the data were originally collected to address. The time and resources required to collect useful assessment information are justified by the application of these data to continually improve the student experience at Morgan. Assessment results are collected, analyzed and then utilized. The Center for Performance Assessment serves to guide and support the implementation of assessment plans and programs and to facilitate the application of data for improvement within these programs, driven by the objectives and outcomes for institution-wide assessment at Morgan.

OBJECTIVES AND OUTCOMES

The Morgan State University Center for Performance Assessment promotes excellence of the student experience through a campus culture of self evaluation and improvement across the institution by

- Developing a systematic and sustainable process of institution-wide assessment
- Using national, state, and locally developed assessment measures and benchmarks
- Ensuring compliance with Middle States, MHEC and professional accreditation standards for excellence
- Implementing academic assessment, program review, and assessment of the student experience
- Supporting data-based decision making and improvement
- Modeling best practice research methods and analyses
- Conducting assessment training and workshops

The Center provides leadership in assessment to the campus community by:

- Working with faculty, academic affairs and support units to design, implement and maintain a systematic and sustainable program of assessment across the campus.
- Leading and promoting university-wide assessment and evaluation activities employing national, state, and locally developed assessment measures and benchmarks.
- Overseeing the MSU annual assessment of academic departments, program review, and student support services.
- Collecting, analyzing and making available for decision making and improvement of student success, satisfaction, and retention data.
- Utilizing the tenets of continuous improvement, best practice in research methods and statistical analyses, and expertise in assessment and evaluation to assist the campus community in measuring the effectiveness of programs, services and processes and applying the results from these measurements to enhance the undergraduate and graduate student experience..
- Serving as a general resource across campus for assessment activities and training and as an internal evaluator for sponsored and non-sponsored research.

MSU COMPREHENSIVE ASSESSMENT PLAN

The Morgan State University Comprehensive Assessment Plan provides a structure for and guidance of all assessment activities across campus. These activities include assessment of the student experience, assessment of institutional effectiveness, and assessment of programs, units and processes. Assessment of the student experience takes place within Academic and Student Affairs through annual department assessment plans and reports, through standardized and locally-developed testing, and through participation in nationally-normed and locally-developed satisfaction and engagement surveys. Assessment of Institutional Effectiveness occurs quarterly and annually within a balanced scorecard model, in response to state and federal reporting requirements, and as the core of Morgan's new strategic planning process. Assessment of programs, units and processes takes place within the Annual Program Review format, the Six Sigma guidelines, and the Baldrige criteria, and occurs on a cyclical basis according to a standardized scheduled and identified institutional needs. Data are collected, maintained, analyzed and disseminated for use in improvement and decision making by the MSU Center for Performance Assessment and affiliated offices and staff. This report focuses on the assessment of student learning outcomes, as directed by the

Comprehensive Assessment Plan, facilitated by the Center for Performance Assessment, and built from the following MSU student outcomes, wherein, upon graduation, students will be able:

- To read and listen with understanding and express themselves effectively in written and spoken standard English;
- To think critically and analytically;
- To gather information through research and use of the library and report that information responsibly;
- To solve mathematical and computational problems;
- To demonstrate knowledge of problem-solving methods and of the historical development, present-day applications and cross-disciplinary connections of mathematics and information structures;
- To demonstrate integrated knowledge of problem-solving techniques in the basic concepts and principles of the biological and physical sciences, of the history and philosophy of science, and of ecological, personal and social issues related to the sciences;
- To demonstrate integrated knowledge of the major contributors, masterpieces, history, criticism and theories of literature, philosophy (including religion), art and music from the ancient to the modern world, as they developed in western civilization;
- To demonstrate integrated knowledge of the heritage, culture, social structures and accomplishments of autochthonous African cultures and African-American civilization;
- To demonstrate a global perspective and integrated knowledge of the heritage, culture, social structures and accomplishments of one non-western civilization;
- To demonstrate integrated knowledge of the political, social and economic development of American society in relation to the world, of the history and geography of America and the world, of civic affairs and responsibilities, of personal, interpersonal, inter-group and intra-group relations, and of learning, work habits and career choices;
- To demonstrate integrated knowledge of health as a personal, group and social issue, of healthful living, of physical fitness and of optimal body functioning, general wellness, stress reduction and recreation;
- To demonstrate habits of courtesy, friendliness, honesty, integrity, civility and orderly conduct; and
- To demonstrate a sense of discipline that lends itself to good study habits and a sense of purpose that leads to beneficial and maximal use of university resources.

ACCREDITATION

Complementing Morgan's Comprehensive Assessment Plan and meshing with the mission and goals of the Center for Performance Assessment are the professional and discipline based accreditations held by the majority of Morgan schools and many individual departments. The School of Architecture and Planning, the School of Business, the School of Education and Urban Studies, the School of Engineering, and the School of Social Work all hold professional accreditation in their field, while departments within the College of Liberal Arts, the School of Computer, Mathematical, and Natural Sciences, and the School of Community Health and Policy hold individual, discipline-based accreditation that support and enhance the campus-wide assessment program at Morgan. Professional and discipline-based accrediting agencies provide standardized outcomes and measures that allow for local assessment and improvement as well as national benchmarks and comparisons. These accreditation-based standards augment and strengthen Morgan's campus-based assessment initiatives toward the improvement of student learning in key core competencies and within the major. A review of the assessment, analysis and development of interventions and improvements in four core competency areas demonstrates Morgan's ongoing and long term commitment to assessment of student learning and implementation of improvements based on that assessment.

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

I. Written and Oral Communication

A. Institution's definition of competency

As stated in the Morgan State University General Education Outcomes, students will demonstrate competency in Written and Oral Communication when they are able "to read and listen with understanding and express themselves effectively in written and spoken Standard English." The standardized syllabus for English 101, the foundation of Morgan's Written and Oral Communication sequence (English 101, English 102, Humanities 201, Humanities 202, and the Writing Proficiency Exam), states that upon completion of the sequence, students will be able:

- to discuss, write about and present on complex topics;
- to apply the writing process to general education and major courses;
- to develop and disseminate their ideas through Written and Oral Communication;
- to demonstrate proficiency in grammar, punctuation, mechanics, and sentence structure;
- to argue logically and with supporting evidence; and
- to maintain a unified focus throughout an essay, speech, or presentation.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Assessment of competency in Written and Oral Communication occurs at the institution level, by student cohort and year, and by department, program and course.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Morgan uses a variety of direct and indirect methods to assess student competency in Written and Oral Communication. These methods include national standardized tests and surveys, campus-based proficiency exams, and department level and course-based assessment. Each of these methods is detailed below:

Standardized Testing

Morgan collects direct evidence of student learning through national standardized exams in written communication. All first time, full time students, at entry to Morgan, must take the Accuplacer placement exam to determine appropriate placement in freshmen level English and Math courses. This is the first college-level assessment of student competency in written communication skills that Morgan administers and provides a snapshot of each student's entering skill levels on a variety of pre-identified and standardized written communication criteria. In addition, each year, for the past five years, Morgan has utilized a number of national standardized tests to assess student competency in written communication. These tests have included the Collegiate Learning Assessment and the ETS Measure of Academic Progress and Proficiency. Tests are administered to entering freshmen and graduating seniors to demonstrate entering proficiency in skill levels as well as the value added to student learning during their years at Morgan, and offers the opportunity to benchmark student scores against national comparisons.

National and Local Surveys

In addition to standardized testing, Morgan participates in an every-other-year administration of the National Survey of Student Engagement (NSSE) to collect indirect assessment data on student learning, particularly on the NSSE Benchmark areas of Academic Challenge and Enriching Educational Experience. Focusing on those items related to writing requirements and levels of course challenge, these indirect data provide evidence of student perception about their learning in core competency areas, which Morgan uses to inform understanding of the student experience and the ways in which learning may be improved.

Morgan also uses StudentVoice, the online survey and assessment system, to collect student, faculty and staff feedback on satisfaction, engagement, and perceptions. A recent English Department Faculty survey using StudentVoice, for instance, identified grammar as the primary area of challenge when teaching the general education core courses for written communication. StudentVoice allows the department conducting the survey to upload assessment goals and outcomes to match those to surveys and survey items to facilitate assessment tracking and reporting, and recently added a rubric development module that will support Morgan's expanding application of scoring and evaluation rubrics as a central component of its assessment toolbox.

Proficiency Testing

Along with standardized testing of core competencies and use of national and local survey data, all students prior to graduation from Morgan must take and pass the Writing Proficiency Exam. Administered as the fifth component in the Written Communication Sequence (following English 101 and 102 and Humanities 201 and 202), this exam is scored using a standardized rubric and provides direct evidence of student learning and information about student

proficiency in the written communication outcomes identified as part of the general education and English programs.

Course-based Assessment
Morgan's Annual Assessment Report, submitted by all academic departments in either June or January, requires departments to identify learning outcomes for their students, to develop and administer assessment methods to determine student learning on these outcomes, and to apply the findings to improving student learning within the program and department. Common methods utilized across campus to assess student competency in Written and Oral Communication skills include student papers scored with a rubric, student oral presentations scored with a rubric, and student performance on essay exams, scored using a test blueprint and/or a test rubric.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.
Results from Morgan's assessment of Written and Oral Communication show that students enter Morgan with some deficiency in written communication and that improvement occurs in some areas of Written and Oral Communication during the students' time at Morgan. Assessment results are largely consistent across all measures and are used to design, develop and implement interventions to improve student learning in this key core competency.

Standardized Testing
Data from our Accuplacer testing of entering freshmen over the past five years show that the majority of Morgan's first time full time student population enters Morgan with deficiencies in written communication skills. Data for the past four years show that most students place into the review courses for improving proficiency in communication skills:

	TOTAL # TESTED	DVRD 101 REQUIRED	DVRD 101 NOT REQUIRED	FRESHMAN STUDIES ENGLISH	ENGLISH 101/111
2007	1,254 (100%)	870 (69%)	384 (31%)	899 (72%)	355 (28%)
2008	1,307 (100%)	961 (74%)	346 (26%)	901 (69%)	406 (31%)
2009	1258 (100%)	943 (75%)	315 (25%)	893 (71%)	365 (29%)
2010	1067 (100%)	733 (69%)	334 (31%)	667 (63%)	400 (37%)

Placement test scores are not only used to place students in appropriate first year courses; the scores are also used to inform Morgan's understanding of student competency in core areas upon entry and to identify core areas for increased academic support. Data are utilized from the testing to show proficiency in key outcomes related to the competency (grammar, structure, format, argument, etc) and students are followed through their first year English and Math courses to determine success and progress in these courses.

In addition to placement testing, the Collegiate Learning Assessment (CLA) and the Measure of Academic Progress and Proficiency (MAPP) are used to assess student learning in this core competency. The following table shows the number of freshmen and seniors tested since 2008:

Assessment	Freshmen Fall 2008	Freshmen Fall 2009	Seniors Spring 2010	Freshmen Fall 2010	Seniors Spring 2011
CLA	--	200	110	100	75
MAPP	333	246	90	200	100

Results for Written Communication skills on the MAPP show the following levels of competency for entering freshmen:

Skill Dimension	Proficiency Classification		
	Proficient	Marginal	Not Proficient
Writing, Level 1	27%	54%	19%
Writing, Level 2	2%	15%	83%
Writing, Level 3	0%	2%	98%

These data demonstrate that entering freshmen during the 2008-2010 time frame are entering with some proficiency in basic writing skills but are largely not demonstrating proficiency at the higher skill level. Data for freshmen and seniors on the CLA Analytic Writing Task show similar gaps in skills when compared against national data:

Item	MSU Mean Freshman Score	National Mean Freshman Score	MSU Mean Senior Score	National Mean Senior Score
Analytic Writing	1043	1115	1043	1226

National Surveys
Morgan has participated in the NSSE since 2003. Results from the 2009 administration provided feedback from 447 freshmen and senior students across a number of student engagement and satisfaction items. Results showed overall satisfaction with Morgan and some opportunities for improvement, as follows.

Benchmark	Item	Response	Planned Intervention
Active Learning	How often do you make oral presentations?	47% of MSU students reported "frequently"	Identify additional courses for oral presentations
Academic Challenge	How much writing is expected?	5% of students write more than 10 papers between 5 and 19 pages. 29% have written at least one paper more than 20 pages in length.	Identify opportunities for additional writing in courses. Identify writing intensive courses as Junior Year Writing requirement.
Academic Challenge	How much reading is expected?	31% of students read more than 10 assigned books and packs of course readings. 29% read fewer than 5.	Identify opportunities to increase reading in core courses.

Proficiency Testing
Turning to Morgan's Writing Proficiency Exam required of all students prior to graduation, the following table documents assessment results for the time period 2008-2010:

2008 Pass First Attempt	2008 Fail First Attempt	2009 Pass First Attempt	2009 Fail First Attempt	2010 Pass First Attempt	2010 Fail First Attempt
75%	25%	74%	26%	76%	24%

This exam is scored using a skills rubric that is based on the rubric used for assessing papers in the English 101-102 sequence, so students are evaluated on the same core skill areas (grammar, mechanics, structure, argument, etc) for both the courses and the exam. Students who do not pass the proficiency exam are required to enroll in a writing proficiency seminar and retake the test upon completing that course. Results are used to update curriculum and content in core courses.

Course Based Assessment
Data extracted from the departments' annual assessment reports and submitted to the Center for Performance Assessment show that 92% assess written communication skills and 80% assess oral communication skills as a core competency within the major. The following table summarizes results from the annual department assessment reports:

% Depts.	Outcomes	Assessment Methods	Results	Interventions
92%	Written Communication	Papers with rubrics, portfolio evaluation, embedded exam essay questions, capstone projects with rubric, reflection papers with rubrics	All departments report challenges with student writing varying from minor to extensive	SmarThinking Online Tutoring, peer-based tutoring, department tutoring, intervention workshops
80%	Oral Communication	Performance with rubric, presentation with rubric, speech with rubric	15% of departments report excellence in oral presentation skills, 26% report strong oral presentation skills, 37% report good oral presentation skills, 22% report weak skills	Tutoring on oral presentation skills, opportunity to re-do presentation, mentoring, increase in presentation requirements, formal oral/speech communication classes

II. Scientific and Quantitative Reasoning

A. Institution's definition of competency

A second core competency in Morgan's general education curriculum is Scientific and Quantitative Reasoning. As a doctoral research institution with an emphasis in the mission on the STEM disciplines, Scientific and Quantitative Reasoning is a core competency of particular focus and importance. Upon achieving proficiency on this competency, students will be able:

- To solve mathematical and computational problems;
- To demonstrate knowledge of problem-solving methods and of the historical development, present-day applications and cross-disciplinary connections of mathematics and information structures;
- To demonstrate integrated knowledge of problem-solving techniques in the basic concepts and principles of the biological and physical sciences, of the history and philosophy of science, and of ecological, personal and social issues related to the sciences

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Assessment of competency in Scientific and Quantitative Reasoning occurs at the institution level, by student cohort and year, and by department, program and course.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The assessment of Scientific and Quantitative Reasoning is conducted much in the same way as assessment of Written and Oral Communication skills, using standardized testing and course-based assessment to collect direct and indirect evidence of student learning.

Standardized Testing

As with placement testing for written communication proficiency, assessment of quantitative skills using standardized testing begins with the Accuplacer placement exam for all entering first year students. Based on placement test scores, students who demonstrate through lower test scores that they need additional preparation in arithmetic and/or algebra enroll in Math 106, while students who demonstrated through their Accuplacer score that they are proficient in arithmetic and algebra enroll in college level algebra or above. Students who place into Math 106 are also given access to a number of support services such as tutoring, peer mentoring, and structured study sessions to facilitate their learning in this critical core area.

A second standardized assessment used to measure student competency in Scientific and Quantitative Reasoning is the ETS MAPP. In addition to providing assessment data on Written and Oral Communication skills, the MAPP also measures student proficiency levels on Scientific and Quantitative Reasoning, and provides local and nationally benchmark comparative data. The MAPP is given to entering freshmen and graduating seniors. Number of students tested each semester is presented below. Results are compared within group, for value added from freshmen to senior year, and with comparable institutions and data are used to inform curriculum and content decisions as well as design academic interventions to most effectively support student learning.

Assessment	Freshmen Fall 2008	Freshmen Fall 2009	Seniors Spring 2010	Freshmen Fall 2010	Seniors Spring 2011
MAPP	333	246	90	200	100

A third standardized assessment used to measure student proficiency in Scientific and Quantitative Reasoning is the ETS Major Field Test. All of Morgan's academic departments require graduating seniors to pass a Competency exam in the discipline before graduation. These exams are largely locally developed instruments. Student performance on these exams is used to inform curriculum revision as well as to ensure that students are well-prepared for the workforce and/or graduate schools. Several departments within Morgan's School of Computer, Mathematics and Natural Sciences are piloting the subject-based ETS Major Field Test to assess senior proficiency in the major and in key core competency areas such as Scientific and Quantitative Reasoning to assess student learning within the major and to inform a realignment of core curriculum with national standards. The following table shows the number of students tested during this pilot stage within the School of Computer, Mathematical, and Natural Sciences:

Department	Number of Students Tested 2009	Number of Students Tested 2010
Biology	50	44
Chemistry (pilot)	0	16 (graduating seniors in the major)

Course- and Program-based Assessment
At the course and program level, Scientific and Quantitative Reasoning is assessed primarily within the School of Computer, Mathematical, and Natural Sciences and the School of Engineering. Assessment of this core competency is also conducted within the School of Business, the School of Architecture and Planning, and the School of Community Health and Policy on a program-by-program basis. Data are reported and interventions identified through the department or program Annual Assessment Report.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Standardized Testing
Results from Morgan's Accuplacer placement testing for quantitative skills show similar results to Written and Oral Communication skills, with a majority of students testing into Math 106, which is a review and refresher course for freshmen needing more preparation prior to beginning college level math. These data have remained consistent since 2007.

YEAR	TOTAL # TESTED	MATH 106	ABOVE MATH 106
2007	1,254 (100%)	798 (64%)	456 (36%)
2008	1,307 (100%)	840 (64%)	467 (36%)
2009	1258 (100%)	817 (65%)	441 (35%)
2010	1067 (100%)	678 (64%)	389 (36%)

In addition to Accuplacer testing, Morgan's Comprehensive Assessment Program also assesses students through use of the Collegiate Learning Assessment and the ETS MAPP. As with the Writing and Reading segments of the MAPP assessment, the majority of entering freshmen are testing in the "not proficient" range in quantitative skills, as presented in the following table.

Skill Dimension	Proficiency Classification		
	Proficient	Marginal	Not Proficient
Mathematics, Level 1	17%	31%	52%
Mathematics, Level 2	3%	12%	84%
Mathematics, Level 3	0%	3%	97%

Composite scores on the MAPP, overall and for Math and Natural Sciences, show students testing at the lower end of the total score range.

Skill Dimension	Possible Range	Mean Score
Total Score	400 to 500	423.13
Mathematics	100 to 130	108.24
Natural Sciences	100 to 130	108.77

Course-based Assessment
A summary of assessment results for Scientific and Quantitative Reasoning conducted in the academic departments and interventions based on those results at the course level are summarized in the following table:

Department	Outcome	Method/Tool	Result	Intervention
Business	Understand and demonstrate the principles of business and to apply these principles to real-world scenarios	Major Field Test	Students improving on core competency areas	Curriculum revision over the past four years to align with MFT items
Biology	Apply the computational principles of mathematics, physics, and chemistry to solving a variety of biological problems	Major Field Test	Mean score of 153.4 on a 120-200 score range; mean score of 40% correct, 5th percentile.	Curriculum revision and mapping started Spring 2011
Chemistry	Demonstrate integrative problem solving, computational, and analytical skills	Major Field Test	Pilot administration with 16 graduating majors.	Curriculum revision and mapping started Spring 2011
Electrical and Computer Engineering	Apply knowledge of mathematics, science and engineering to solve complex problems in the discipline	Capstone Project scored using a rubric with a 1 to 4 point scale	71% of students met or exceeded expectations on this standard; 17% need improvement; and 11% were unacceptable.	Developed quantitative assessment and review intervention to be piloted Fall 2011.

III. Critical Analysis and Reasoning
    A. Institution's definition of competency
A third core competency in Morgan's general education curriculum is Critical Analysis and Reasoning. Critical Analysis and Reasoning is an essential skill identified in Standard 12 of the Middle States' accreditation process and one of four core competencies related to general education outcomes for the Maryland Higher Education Commission. Although there are as many definitions of critical thinking as there are institutions of higher education, students demonstrating Critical Analysis and Reasoning at Morgan will be able:

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- To integrate and apply facts, understanding, and experience to unique situations and circumstances
- To apply knowledge and information to informed decision making
- To think critically and analytically;
- To gather information through research and use of the library and report that information responsibly;
- To demonstrate integrated knowledge of problem-solving techniques in the basic concepts and principles of the biological and physical sciences, of the history and philosophy of science, and of ecological, personal and social issues related to the sciences;

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Assessment of competency in Critical Analysis and Reasoning occurs at the institution level, by student cohort and year, and by department, program and course.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Morgan State University utilizes standardized tests, national surveys, and course-based assessment to collect and analyze direct and indirect evidence of student learning and to measure student competency in Critical Analysis and Reasoning.

Standardized Testing

The Collegiate Learning Assessment (CLA) and the Measure of Academic Proficiency Profile (MAPP) were used to assess the Critical Analysis and Reasoning skills of incoming freshmen. The CLA is designed specifically to assess critical thinking and the MAPP has several sections and subset scores that measure this core competency. Assessing students with these two standardized assessment tools allows Morgan to measure and monitor student progress in relation to national norms, and to design support systems and interventions to support student learning and success. The following table presents the number of students tested to date:

Assessment	Freshmen Fall 2008	Freshmen Fall 2009	Seniors Spring 2010	Freshmen Fall 2010	Seniors Spring 2011
CLA	--	200	110	100	75
MAPP	333	246	90	200	100

National Surveys

As with the Written Communication competency, the NSSE data provide indirect evidence of student learning (i.e. student perception of their learning) using several key items related to Critical Analysis and Reasoning, in areas of the student experience evident in the literature as increasing critical thinking skills. These areas include application of theory to practice, hands on research opportunities, integration of knowledge, and assignments that require higher order thinking skills.

Course-based Assessment

Course-based assessment of student learning is a primary vehicle to measure improvements and increases in learning in key core competency areas at Morgan State University. To assess Critical Analysis and Reasoning, a comprehensive pre and post test assessment project was designed and implemented within the Department of Philosophy and Religious Studies at Morgan for the 2010-2011 academic year. The Introduction to Logic course (a general education requirement) was selected to investigate students' critical thinking skills. The pre-and post-test study measured student learning using a 25-question assessment tool that was divided into three sections of critical thinking: square of opposition (5), conversion and obversion (5), and syllogisms (15). The test consisted of true/false and multiple choice questions. The following table outlines the breakdown of student participation in the pre-and post-test assessments for the spring semester.

Intro to Logic Course	Freshmen	Sophomores	Juniors	Seniors	Unreported	Total
PHIL 109 Pre-test	2	193	100	50	6	351
PHIL 109 Post test	2	171	95	39	6	313
Paired t-Tests	2	159	91	25	6	283

For the pretest, 351 students participated, 313 students participated in the post test, and 283 students took both the pretest and the post test. This is the largest course-based assessment project at Morgan to date. The interpretation of

results was completed using only the paired t-Tests with n=283. The majority of students enrolled in the PHIL 109 course were sophomores, 159, with juniors accounting for 91 of the students, seniors accounting for 25 of the students and freshmen accounting for only 2 of the 283 participants. The following table outlines the breakdown of students participating by college and/or school.

College/School	Number of Students
College of Liberal Arts (includes undecided majors)	107
School of Computer, Mathematics, and Natural Sciences	18
School of Education and Urban Studies	30
School of Engineering	28
School of Business Management	42
School of Community Health and Policy	26
School of Social Work	21
School of Architecture	8
Unreported	3
Total	283

The majority of students enrolled in PHIL 109 reported academic majors within the College of Liberal Arts, which includes undecided majors. The School of Business Management and School of Education and Urban Studies had 42 and 30 students enrolled respectively.

Other course-based assessments of this core competency occurred in a number of other departments and the results from those assessments are summarized under section D, below.

> **D. Describe the results of the assessment work related to this competency.**
> *Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.*

Standardized Testing

Results from the Collegiate Learning Assessment show some increase in critical thinking skills from freshmen to senior year in all available CLA data in the Make-an-Arugment and Critique-an-Argument tasks. However, Morgan Students still score lower than the national mean, as shown in the following table.:

Item	MSU Mean Freshman Score	National Mean Freshman Score	MSU Mean Senior Score	National Mean Senior Score
Make-an-Argument	1035	1118	1054	1215
Critique-an-Argument	1041	1111	1042	1235

Results on the MAPP also show low levels of proficiency among entering freshmen on this core competency. The following two tables illustrate the level of proficiency for 2008 and 2009:

MAPP TESTING 2008 (N=333)

Skill Dimension	Proficiency Classification		
	Proficient	Marginal	Not Proficient
Critical Thinking	0%	1%	99%

MAPP TESTING 2009 (N=246)

Skill Dimension	Proficiency Classification		
	Proficient	Marginal	Not Proficient
Critical Thinking	0%	2%	98%

National Surveys
Direct evidence of lower student proficiency in the area of Critical Analysis and Reasoning is somewhat mitigated by the indirect evidence demonstrated through student response on the NSSE (combined response (2007-2011) to items related to critical thinking and application. Although proficiency scores are lower than average in this competency area, students report ample opportunities to think critically and apply new knowledge to current situations, as follows; however the quality and the impact on learning that these opportunities represent is not addressed in the results. Interventions are under design to collect additional data on these critical thinking opportunities across campus and may be drawn out through other measures of assessment, including course-based projects.

NSSE Item: What types of thinking do assignments require?
- Memorizing facts, ideas, or methods: 74%
- Analyzing basic elements of an idea or theory: 79%
- Synthesizing and organizing ideas: 74%
- Making judgments about value of information: 77
- Applying theories or concepts: 78%

NSSE Item: How many students work on research projects with faculty?
- By their senior year, 28% of students have done research with a faculty member.

NSSE Item: How many students apply their classroom learning to real life through internships or off-campus field experiences?
- By their senior year, 54% of students have participated in some form of practicum, internship, field experience, co-op, or clinical assignment.

Course-based Assessment
Course-based assessment is at the core of Morgan's assessment initiatives and the Philosophy project described earlier in this section offers an essential comparison between the pre-and post-tests The results indicate that factors such as academic year and academic major had no significant impact on students' critical thinking skills or performance. Pre and post mean by questions are shown in the following table:

Question #	Pretest Mean	Post Test Mean	Sig. (2-tailed)
Two	1.99	2.13	000
Three	1.18	1.29	.001
Four	1.84	1.94	.001
Five	1.64	1.76	.108
Seven	2.32	2.54	.001
Nine	2.23	2.34	.213
Ten	2.05	3.29	.000
Eleven	2.42	2.78	.000
Twelve	1.46	1.87	.000
Thirteen	2.03	2.17	.000
Fifteen	1.76	2.55	.000
Sixteen	2.14	2.27	.006
Eighteen	1.22	1.48	.000
Nineteen	2.09	2.19	.037
Twenty	1.72	2.07	.000.

Twenty-one	2.07	2.49	.000
Twenty-two	2.26	2.53	.000
Twenty-three	2.02	2.59	.000
Twenty-four	1.62	1.62	1.0
Twenty-five	1.42	2.74	.000

The assessment tool used for the pretest and post test consisted of 25 questions, and the mean score was calculated on each question for both tests. The results from the pilot study support the findings from the national standardized test results on critical thinking. Morgan State University students are not proficient in the critical thinking core competency; however, these course-bases results demonstrate that students are capable of learning how to critically think at least at the beginning level over the course of one semester. The Philosophy study was short-term and in order to determine how students' critical thinking skills can be sustained and improved over a longer period of time, a longitudinal study will be conducted beginning with the academic year 2011-2012, supported by additional resources and interventions to promote critical thinking skills across the curriculum.

In comparing student performance in the Philosophy pilot, from the pretest to the post test, the mean score on the pretest was 12.88 (grade of F) and the post test was 16.89 (grade of C). A comparison between the pre- and post-test scores of 283 students was conducted. Due to the cross-campus representation of students from a variety of difference perspectives, it is clear that these results may be generalized beyond the outcomes contained herein. Additional course-based assessments are conducted within the departments and programs according to their annual assessment plans and as reported on in their Annual Assessment Reports support this premise, as outlined in the tables below.

% Depts.	Outcomes	Assessment Methods	Results	Interventions
73%	Critical Thinking	Clinical, internship and practica scored using a rubric Integrated analytic projects scored using a rubric	All departments report challenges with critical thinking from minor to extensive	Faculty mentoring, additional integrated projects broken up into smaller parts Increased opportunities to apply knowledge within the discipline

Department	Critical Thinking Outcomes	Assessment Methods	Results	Interventions
Architecture	Students will apply and integrate knowledge, information, and theory to the successful completion of a comprehensive design project.	Scored using multiple evaluators and a scoring rubric with a 0 to 2 (not met, adequate, well met) scale.	19% of students received a "high pass" 33% of students received a "pass" 19% of students received a "marginal" score 29% of students did not pass the evaluation.	Students who did not pass were required to take an additional studio course, with emphasis on the project evaluation criteria, prior to moving on to the final design course in the major. Curriculum within the assessed course is currently undergoing mapping and revision.
Social Work	Integrate course content across the curriculum	Senior Comprehensive paper scored using a scoring rubric	41% of students received a "high" score on the outcome	Content areas where students received the lowest score were identified and curriculum

	48% received an "average" score on the outcome	for those courses where this content is taught is currently undergoing revision for Fall 2011 implementation.
	11% received a "low" score on the outcome	

IV. Technological Competency

A. Institution's definition of competency

A fourth core competency at Morgan is Technology Skills and Information Literacy. After completing the general education requirement in Computer Literacy, students will be able to describe the organization and characteristics of a computer and to explain the existence and use of computers in every day life experiences, while applying this knowledge to utilize computers in their professional and personal lives. Students will also be able to gather information using a computer and the library for research and to report that information responsibly.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Assessment of student proficiency in Technological Competency occurs at the institution level, by student cohort and year, and by department, program and course.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Morgan State University utilizes standardized testing, national surveys, and course-based assessments to measure student proficiency on Technological Competency through direct and indirect assessment of student learning.

Standardized Testing

Morgan State University uses the ETS iSkills standardized test to evaluate student competency in use and application of technology. To succeed in today's digital world, students and workers need to think critically and solve problems using a full range of information and communication technology (ICT) literacy skills. The iSkills assessment measures students' computer and information literacy skills in a technology environment. The following table presents the number of students tested using this assessment since 2008:

| Assessment	Fall 2008	Fall 2009
iSKILLS	100	100

An outcomes-based assessment, the iSkills test measures applied ICT literacy skills through a range of real-world tasks. This one-hour exam:

- features real-time, scenario-based tasks that measure an individual's ability to navigate, critically evaluate and understand the wealth of information available through digital technology
- helps you identify when further curriculum development is needed so students have the ICT literacy skills they need to succeed
- delivers individual and group data for use in student evaluation and placement, student ICT literacy assessment, curriculum development and deployment decisions and for accreditation and accountability initiatives
- tests the range of ICT literacy skills aligned with nationally recognized Association of Colleges & Research Libraries (ACRL) standards

National Surveys (NSSE, LibQual)

Morgan uses results from several national surveys to collect indirect data on student proficiency in technology and critical analysis. These surveys include the NSEE and the LibQual Survey. The LibQual survey is a national standardized instrument aligned to the ACRL standards for technology and information literacy and was designed to collect feedback form Library users on the impact of resources and services on their research, and that asks students to respond to items across a wide variety of knowledge and experience. Results from the LibQual survey on items related to Technological Competence show comparison between students' minimum level of acceptable

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performance, perceived levels of acceptable performance, and desired levels of acceptable performance. The following chart illustrates the number and percentage of respondents at Morgan:

LibQual Respondents (N=406)
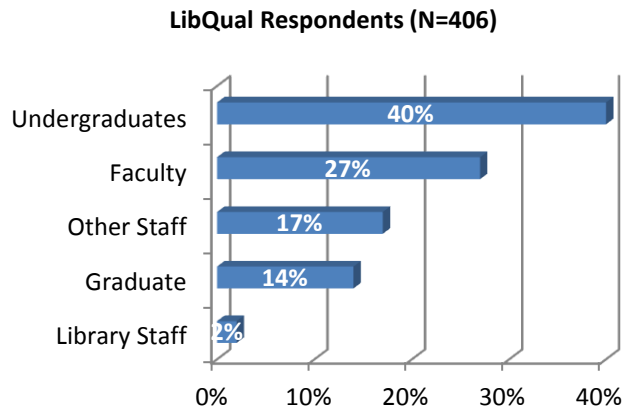
Course-based Assessments

Course-based assessment of competency in technology is primarily conducted through Morgan's Computer Literacy courses/requirement. This general education requirement is designed to introduce students to technology and the use of technology to acquire and apply knowledge. There is discussion ongoing currently at Morgan to review the relevance of this core requirement to student knowledge of and proficiency with technology. Morgan's General Education Review Committee, charged with revising and updating Morgan's General Education requirements, made in its final report to the Provost the following official recommendation:

> *Review the relevancy of the current computer literacy requirement/course to determine if it continues to provide students with the technology skills they need, whether there are other courses that would more effectively meet this requirement, or if a revised/new course should be developed.*

This review will be undertaken during the 2011-2012 academic year and matched against student proficiency on the standardized assessments and in the course.

D. Describe the results of the assessment work related to this competency.
Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Standardized Testing

Assessment of the Technological Competency using the iSkills standardized test showed that all but 2% of students tests were at least marginally proficient in the competency criteria assessed on the exam, as illustrated in the following chart.

**iSkills F Testing
2007-2009 (N=200)**
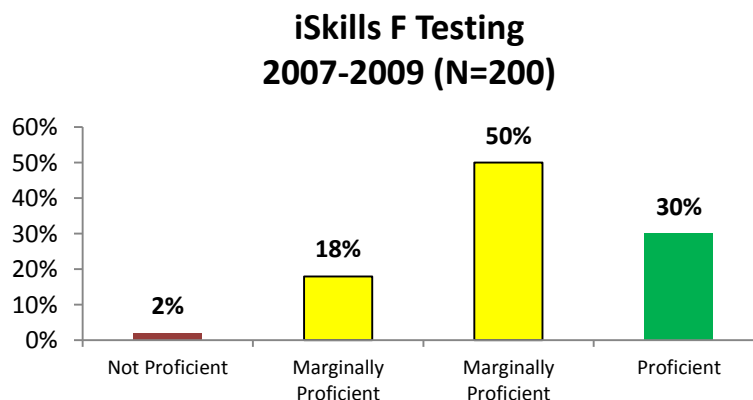
National Surveys

These direct results from the iSkills testing support the anecdotal data and feedback from faculty that reflect average to high levels of technological competency as illustrated through student work in their courses. NSSE results also

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support, indirectly, the iSKills data, showing that the majority of students use computers and information technology "often" or "very often" and use computers in their academic work at least "often." These results are shown in the following table:

Item	% Students Responding Often or Very Often	
	Freshmen	Seniors
Used computers in academic work	82%	84%
Used computers and information technology	75%	4%

Additional indirect evidence of student proficiency in technology is illustrated by student response to the technology and information items on the LibQual survey. As show in the following chart, students understand what technology is required to complete their work, are able to evaluate the extent and effectiveness of that technology, and demonstrate an awareness of what should be available and what is missing:

LibQual Results: Technology Competency Support in Library
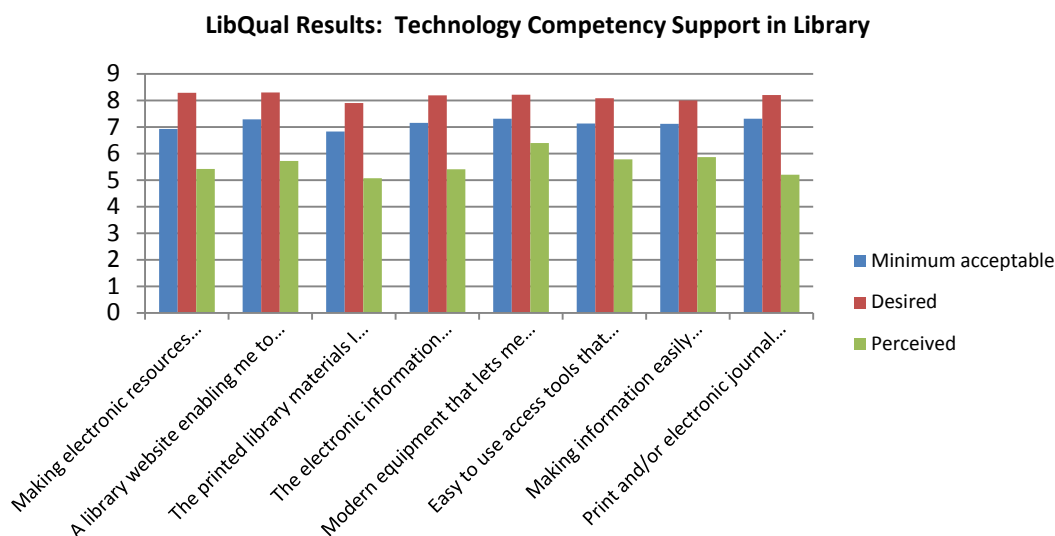
Course-based Assessment
Moving from standardized testing and survey data, course-based assessment also supports evidence of student proficiency in the Technological Competency. A review of the grade distribution for the general education requirement in technology and information literacy illustrate the premise that the course/requirement may no longer be useful or relevant for students due to existing student proficiency and that student time and effort might be directed toward other core requirements. Although grades are never an assessment method or measure unless connected to a rubric or some type of criteria guide, a review of the distribution for the Computer Literacy course does suggest strong levels of proficiency on this competency that is also demonstrated through direct and indirect measures of assessment.

Grade	Spring 2008 (N= 110)	Fall 2008 (N=107)	Spring 2009 (N=115)	Fall 2009 N=112)
A	14.5%	13.5%	15.5%	14.5%
B	43.6%	44.6%	42.6%	44.6%
C	26.4%	25.4%	27.4%	25.4%
D	6.4%	7.4%	5.4%	9.4%
F	9.1%	9.1%	10.1%	6.1%

A review of the efficacy of the Computer Literacy requirement in Morgan's General Education Program, as stated earlier in this report, will be conducted during Summer-Fall 2011.

Part Three: Evolution of Assessment Activities

Provide concrete examples of how your institution's assessment activities have impacted and/or improved teaching and learning. Also, describe how the assessment of the major competency areas has been integrated into the structure of the institution.

Evolution of Assessment

Assessment of the student experience is embedded in the culture and structure of Morgan, growing out of the Comprehensive Assessment Plan, which itself built on a long-term model for assessing and understanding student learning in place many years before the Plan made this model the official policy and practice of the institution. The Comprehensive Assessment Plan established the Office of Assessment, which in turn established the Center for Performance Assessment. As the organizational chart on page one of this document illustrates, the Center coordinates a wide range and reach of assessment professionals and activities throughout the institution. In the Division of Academic Affairs, the third round of annual, required assessment reporting is starting up and data collected through the first two annual rounds is informing the university's work to improve student learning and graduation. Department assessment coordinators and a campus wide Student Learning Assessment committee facilitate and drive the work in assessment that allows the institution to support and analyze data for the common good. Student Affairs has joined the process and the newly implemented Academic Program Review process contributes to the assessment of institutional effectiveness along with student learning.

Assessment at Morgan has grown from an informal system of grading and evaluating, to a comprehensive, systematic and sustainable process to ask and answer intentional, probing and painstakingly honest questions about student learning on campus. Integrated fully into the culture and structure of the campus, the impact of assessment on teaching and learning in all areas of campus continues to grow at exponential levels.

Impact on Teaching and Learning

Assessment of student learning outcomes at Morgan has had a significant aspect on teaching and learning. Assessment is conducted in all academic departments on an annual and ongoing basis, and Student Affairs is this summer implementing a similar timeline. This systematic and sustained assessment has created within the departments a culture of assessment and of using assessment results for improvement. Faculty are asking questions about the ways in which their students learn best, the strengths and opportunities for improvement that students bring with them to class, and how assessment results can help inform their teaching and student learning. The Center for Performance Assessment offers three workshops on assessment topics each semester and since 2008, the second day of the twice-yearly Faculty Institute has been dedicated to assessment topics and presentations, as the campus acknowledges that professional development is a critical component of assessment success. As a campus, Morgan is collecting, analyzing and using data to inform and improve student learning.

At the core of this work is assessment of core competencies, and assessment runs throughout the general education curriculum, from standardized testing, to survey and anecdotal feedback, to classroom based assessment. Although grade distributions are never measures of assessment, grades do inform an institution's understanding of student learning, identifying areas of strengths, and highlight opportunities. Each year, Morgan conducts a comprehensive analysis of grades in all general education courses focusing on core competencies as identified in this report and uses these data to open the conversation about the ways in which faculty teach and students learn. Results from the most recent analysis show the following:

1. The College of Liberal Arts offered approximately 68% of all general education courses in 2008. Overall, the most commonly reported grades in the CLA were Bs. The CLA's grades were primarily As, Bs and Cs (approximately 75% each semester); Ds were issued less than 9% of the time; Fs were approximately 15% of all grades assigned during both semesters.
2. Performance in DVRD 101 appears to have improved based on a preliminary review of 2006 and 2007 grade distributions. For the year, 80.5% of students earned an A, B, or C in the course. However, it is important to note that during the spring semester, 18.5% of students failed DVRD 101 and 71.3% earned an A, B, or C in the course. Student performance decreased in the spring semester.
3. Performance in MATH 106 is disturbing. Over 40% of students failed the course in 2008 with the spring semester failure rate at almost 42%. Only 10.7% of students earned an A for the year. The highest passing

percentage is a C with approximately 32%. The results seem to suggest the need for a two-semester developmental sequence or additional math tutoring and student support.

4. During the spring semester, student performance in ENGL 101 also saw a decline with 27% of students earning a C and 33% failing the course, as compared to the fall semester, where only 14% failed the course and 26% earned Cs and 29.8% earned Bs.

5. Grade distributions for courses offered in the School of Computer, Mathematics, and Natural Sciences were broader and closer to bell curves. In the SCMNS, Cs were the most commonly reported grades, particularly in biology classes; however, the 2008 spring BIOL 101 course had more students earning Bs (29%) and less earning Cs (25.7%). The average grade in Chemistry 101 for both semesters was a C, with 32.3% in the spring and 34.9% in the fall. Student performance in PHYS 101 courses is very similar to student performance in CLA courses with Bs ranking as the highest percentage of grades.

6. SEUS continues to award the highest percentage of As (37.4%) with the HEED and PHEC general education courses.

Combining our understanding of data collected through Morgan's Comprehensive Assessment Plan, as outlined in Part II of this report, with an understanding and analysis of grade distributions for key core courses, a series of pilot projects have been developed and are in the early stages of implemented to address identified opportunities for improvement in 1) Written and Oral Communication, 2) Scientific and Quantitative Reasoning, and 3) Critical Analysis and Reasoning. The three projects outlined below address freshman writing proficiency, freshman math proficiency, and student athlete academic success, areas assessment results and anecdotal evidence highlight as roadblock to student success, retention, and graduation. These projects will touch a total of more than 1000 students between Summer 2011 and Spring 2012 and are designed to produce substantive improvement in core competency among our freshmen and sophomore students.

Project 1: Math 106 Revision Project (working with Department Chair and Math Faculty)
This project addresses the basic math needs of students, the majority of whom are not testing proficient in college level math at graduation. Over 800 students will be touched by this intervention during the Fall 2011 semester. The project involves the transformation of one class period per week of Math 106 into a mandatory Plato lab. Plato is an integrated online learning system that will provide a self-paced math applications lab to offer students the much needed practice in application of key Math 106 concepts.

Project 2: English 101 Writing Improvement Project (working with English Department Chair and faculty,)
This project addresses the low writing proficiency skills of students as they enter and exit Morgan, as demonstrated by placement and standardized testing over the past 5 years. Although this project will begin as a pilot, it should by Spring 2012 touch all sections of English 101. Initially, 4 sections of English 101 have been identified for participation. Enrollment in these sections will be limited to 25. As in the Math 106 pilot, the fourth day of class will be a mandatory Plato lab. As survey results from English department faculty listed grammar as the number one impediment to student writing success, this Plato lab has been designed to provide a comprehensive and extensive review of basic applied grammar. This will free up classroom time for instruction on the writing process, allowing time in class for students to write. Students will be placed into one of these four pilot sections based on their Accuplacer test score.

Project 3: Support for Student Athlete Success (working with Athletics Department and Office of Residence Life
Beginning in the Summer 2011 and continuing through the Spring 2012, this project will work with student athletes from Morgan's most high-academic-risk teams: Men's Basketball and Football. The project opens with a five week intensive summer program structured around traditional Morgan courses and a mandatory Student Athlete Plato Review Course. In the fall, 20 athletes from these two teams will be assign portable tablet computers to facilitate the continuation of their academic work while on the road. These tables will provide access to required Plato modules as well as to SmarThinking Online Tutoring and access to the Student Athlete Blackboard Academic Support Course, which hosts a variety of resources and reminders to support student athlete academic success.

Each of these three projects has a comprehensive assessment plan associated with it and built around testing, course-based assessments, and student/faculty feedback and reflection. Should the pilot projects be a success, each will be fully integrated into Morgan's general education program beginning in Fall 2012. In addition, a series of other academic interventions to support improvement in key core competencies are also under consideration and development, as outlined in the next section.

Other Interventions Required to Improve Written Competency at Morgan State University
- A Writing Center.
- A Junior Year Writing Requirement.
- A Writing Across the Curriculum Program.
- A Review of the validity and reliability of the Writing Proficiency Exam

Integrated into the Structure of the Institution

Morgan's mission is to provide access and opportunity for higher education to a population of students who might otherwise not be able to earn a college degree. Because of this mission, many of our students come to Morgan underprepared for success in college level work.

Ongoing and long term assessments, and analysis of assessment data, have confirmed this, while simultaneously providing Morgan with the evidence and leverage to fund, develop and grow a variety of academic support information across many areas of the campus. At the same time, student learning outside the classroom is receiving increased focus as the Division of Student Affairs, using the CAS standards for excellence in student service areas to inform their own discussions about and work in assessment, moved this year to formalize its assessment structure and process, appoint assessment coordinators within each office/unit, establish a Division Assessment Committee, a develop a set of overarching goals for student learning, and design and implement assessment methods and tools to collect and understand this critical component of the student experience and student learning.

As assessment in Academic Affairs grew and evolved, and as assessment in Student Affairs established its first formal foothold within the Comprehensive Assessment Plan, Morgan's President led the development of a new ten year Strategic Plan to guide the focus and work of the institution over the next decade. Embedded within this plan is an extensive assessment process designed to measure and evaluate the impact and success of the Plan at each step and the extent to which the plan's strategic goals are accomplished , thereby firmly and officially establish assessment within the culture and structure of the institution.
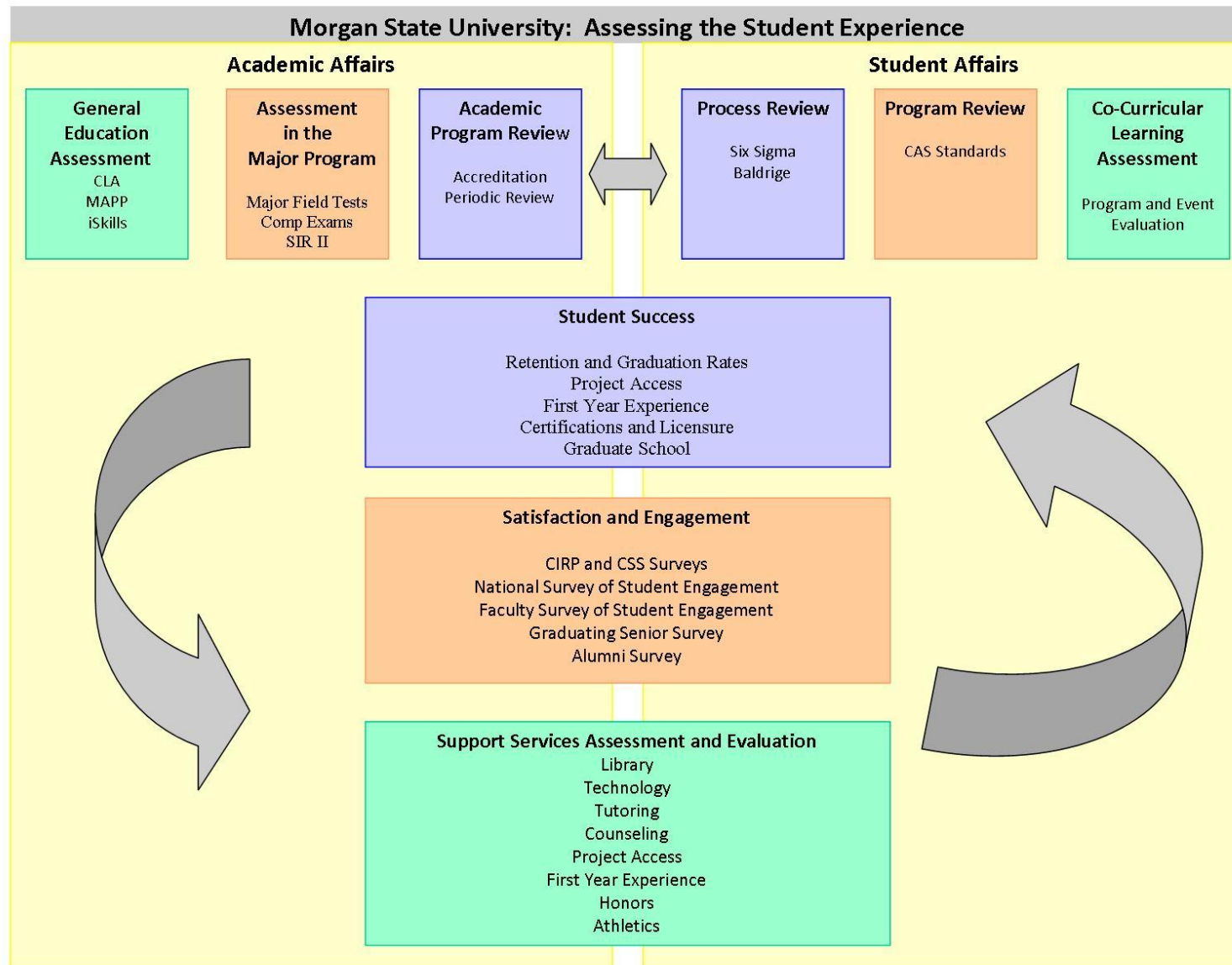
Within the extensive work of Academic Affairs and Student Affairs, facilitated by the Center for Performance Assessment, a number of campus based programs have been developed and operationalized to support student success and improvements in student learning across core competencies and major programs. These support services include:
- Access Orientation – a comprehensive summer orientation program to introduce admitted students to Morgan
- Center for Academic Success and Achievement (CASA) – six week intensive summer preparation program and school year tutoring and support program
- Academic Enrichment Program – residence hall based academic support program offering tutoring, peer mentoring, computer labs, and individual student support workshops and courses
- Freshman Orientation Revision – currently underway to review and revise the curriculum of the Freshman Orientation course to most effectively prepare students for Morgan
- General Education Revision – currently underway to look at the number and type of general education requirements and to revise those requirements to support improved time to degree. Also includes a revision of the general education outcomes to begin Fall 2011.
- Curriculum Revision – following on the trail of the new strategic plan, Morgan will begin a comprehensive curriculum review; kick off will be at the Faculty Institute in August 2011.
- SmarThinking Online Tutoring – currently in its second full year as a complement to Morgan's academic support services, SmarThinking offers 24-7 live tutoring for students in core competency and major discipline areas. Trend over time shows increased use and satisfaction with the program.
- Plato Learning Systems – currently in its second full year at Morgan and initially used as a Praxis preparation system, Plato is now an integral part of several key academic improvement initiatives moving forward.

In sum, assessment of student learning outcomes at Morgan State University is systematic, comprehensive and sustained, meeting Middle States, MHEC, and accrediting agency requirements for assessment and improvement of student learning. Driven by the Comprehensive Assessment Plan, directed by the Center for Performance Assessment, and comprised of multiple methods of direct and indirect assessment measures and data, assessment at

Morgan is embedded in the culture, is an integral component of the new strategic plan for the coming decade, and is a key structure within the university mission to support excellence and achievement of Morgan students and graduates.

Appendix

Morgan State University: Assessing the Student Experience

Academic Affairs

General Education Assessment
CLA
MAPP
iSkills

Assessment in the Major Program
Major Field Tests
Comp Exams
SIR II

Academic Program Review
Accreditation
Periodic Review

Student Affairs

Process Review
Six Sigma
Baldrige

Program Review
CAS Standards

Co-Curricular Learning Assessment
Program and Event Evaluation

Student Success

Retention and Graduation Rates
Project Access
First Year Experience
Certifications and Licensure
Graduate School

Satisfaction and Engagement

CIRP and CSS Surveys
National Survey of Student Engagement
Faculty Survey of Student Engagement
Graduating Senior Survey
Alumni Survey

Support Services Assessment and Evaluation
Library
Technology
Tutoring
Counseling
Project Access
First Year Experience
Honors
Athletics

Office of Assessment - Office of the Assistant Vice President for Academic Affairs

MORGAN STATE UNIVERSITY
DEPARTMENT ASSESSMENT REPORT

PROGRAM/DEPARTMENT: _____REPORT SEMESTER/YEAR: _____

COLLEGE: _____ ASSESSMENT COORDINATOR: _____

SPECIALIZED ACCREDITATION: ☐ NO   ☐ YES   PLEASE SPECIFY AGENCY/ORGANIZATION AND DATE

DEPARTMENT STUDENT LEARNING OUTCOMES:
1.

2.

3.

4.

5.

WHAT OPPORTUNITIES DID STUDENTS HAVE THIS YEAR TO ACHIEVE THESE OUTCOMES? *(PLEASE ATTACH COPIES OF INSTRUMENTS, ASSIGNMENTS, ETC)*

COURSE, INTERNSHIP, COMP, THESIS, PROJECT, SURVEY, ETC.	OUTCOME 1	OUTCOME 2	OUTCOME 3	OUTCOME 4	OUTCOME 5

WHICH ASSESSMENT TOOLS DID YOU USE TO MEASURE THESE OUTCOMES? *PLEASE ATTACH COPIES OF INSTRUMENTS, QUESTIONS, RUBRICS, ETC.*

ASSESSMENT TOOL	OUTCOME 1	OUTCOME 2	OUTCOME 3	OUTCOME 4	OUTCOME 5

WHEN DID YOU CONDUCT THESE ASSESSMENTS? (PLEASE CHECK ALL THAT APPLY)
❒ **DURING THE SEMESTER**   ❒ **AT THE BEGINNING AND END OF THE COURSE**   ❒ **AT THE END OF EACH ACADEMIC YEAR**
❒ **AT THE BEGINNING AND END OF THE MAJOR PROGRAM**   ❒ **IN THE CAPSTONE COURSE**   ❒ **DURING SENIOR YEAR**
❒ **POST-GRADUATION**   ❒ **OTHER (PLEASE SPECIFY)**
_____

WITH WHOM WILL YOU SHARE YOUR ASSESSMENT INFORMATION? (PLEASE CHECK ALL THAT APPLY)
❒ **FACULTY IN THE DEPARTMENT**   ❒ **STUDENTS IN THE PROGRAM**   ❒ **CAMPUS ADMINISTRATORS**
❒ **DEPARTMENT ALUMNI**   ❒ **EMPLOYERS**   ❒ **EXTERNAL COMMUNITY MEMBERS**
❒ **OTHER (PLEASE SPECIFY)** _____

WHAT WERE YOUR PRIMARY FINDINGS FROM YOUR ASSESSMENTS? *PLEASE ATTACH COPIES OF DATA ANALYSES, SUMMARIES, REPORTS, ETC.*

HOW DO YOU PLAN TO USE THE ASSESSMENT RESULTS FOR IMPROVEMENT WITHIN YOUR DEPARTMENT? *PLEASE ATTACH AN ACTION PLAN OR TIMELINE FOR IMPLEMENTING IMPROVEMENTS BASED ON ASSESSMENT RESULTS.*

PLEASE DESCRIBE ANY ADDITIONAL RESOURCES THAT WILL BE REQUIRED TO FULLY IMPLEMENT THESE IMPROVEMENTS? *PLEASE ATTACH ANY ADDITIONAL INFORMATION AS NEEDED.*

REQUIRED SIGNATURES	**DATE**
ASSESSMENT COORDINATOR:_____ _____	
DEPARTMENT CHAIR: _____ _____	
DEAN: _____ _____	
AVP ACADEMIC AFFAIRS: _____ _____	

CHAIRPERSON, SLA COMMITTEE: _____

_____

Program/Department: Assessment Coordinator:
Reviewed by: Date of Review:

DEPARTMENT MISSION: *THE MISSION STATEMENT PROVIDES A CLEAR AND UNDERSTANDABLE OVERVIEW OF THE FOCUS OF THE PROGRAM AND INSIGHT INTO THE GOALS AND LEARNING OUTCOMES FOR STUDENTS IN THE PROGRAM.*

❑ Best Practice: In addition to meeting the standard, as described below, the department mission is clearly and visibly shared with students and faculty in the program, and reflects the mission of the University.

❑ Meets Standard: **THE MISSION PROVIDES A CLEAR AND UNDERSTANDABLE OVERVIEW OF THE FOCUS OF THE PROGRAM AND INSIGHT INTO THE GOALS AND LEARNING OUTCOMES FOR STUDENTS IN THE PROGRAM.**

❑ Needs Attention: Does not meet the standard described above or insufficient information is provided.

Comments:

STUDENT LEARNING OUTCOMES: *STUDENT LEARNING OUTCOMES ARE CLEAR, MEASURABLE, AND ADDRESS CONTENT KNOWLEDGE AND CRITICAL APPLICATION OF THAT KNOWLEDGE*

❑ Best Practice: In addition to meeting the standard, as described below, student learning outcomes are clearly and visibly shared with students and faculty in the program, and reflect the mission of the college or school of which the program is a part.

❑ Meet Standard: Student learning outcomes are clear, measurable, and address content knowledge and critical application of that knowledge.

❑ Needs Attention: Does not meet the standards described above or insufficient information is provided.

Comments:

OPPORTUNITIES TO ACHIEVE STUDENT LEARNING OUTCOMES: *STUDENTS ARE PROVIDED WITH THE OPPORTUNITY TO ACHIEVE IDENTIFIED LEARNING OUTCOMES AND EVERY STUDENT HAS THE OPPORTUNITY TO MASTER EACH LEARNING OUTCOME.*

❑ Best Practice: In addition to meeting the standard, as described below, every student in the program has multiple opportunities to master the learning outcome, and these opportunities include multiple options for learning (internships, courses, final projects, etc.)

❑ Meets Standard: Students are provided with the opportunity to achieve identified learning outcomes, and every student has the opportunity to master each learning outcomes.

❑ Needs Attention: Does not meet the standard described above or insufficient information is provided.

Comments:

ASSESSMENT TOOLS/METHODS: *ASSESSMENT TOOLS AND METHODS MATCH THE LEARNING OUTCOME BEING ASSESSED, CONSIST OF MULTIPLE MEASURES, ARE VARIED TO ACCOMMODATE STUDENT LEARNING STYLES, ARE USED SYSTEMATICALLY OVER TIME, AND YIELD USEFUL INFORMATION THAT CAN BE USED FOR IMPROVEMENT.*

❑ Best Practice: In addition to meeting the standard, as described below, evidence is provided that assessment methods are varied to provide opportunities for students with different learning styles to demonstrate what they have learned.

❑ Meets Standard: Assessment tools and methods match the learning outcome being assessed, consist of multiple measures, are varied, are used systematically over time, and yield useful information.

❑ Needs Attention: Does not meet the standard described above or insufficient information is provided.

Comments:

USE OF RESULTS: *ASSESSMENT RESULTS LEAD TO APPROPRIATE MODIFICATIONS IN LEARNING OUTCOMES, TEACHING METHODS, CURRICULUM, AND OR ASSESSMENT STRATEGIES, AND ARE USED TO DEMONSTRATE PROGRAM QUALITY AND STUDENT LEARNING.*

❑ Best Practice: In addition to meeting the standard described below, results clearly describe assessment performance levels considered minimally adequate for students completing the program and standards for these performance levels are disseminated to students and faculty.

❑ Meets Standard: Assessment results lead to appropriate modifications in learning outcomes, teaching methods, curriculum, and or assessment strategies, and are used to demonstrate program quality and student learning.

❑ Needs attention: Does not meet the standard described above or insufficient information is provided.

Comments:

Recommended Next Steps:

Signature of
Reviewer_____

St. Mary's College of Maryland

Maryland Higher Education Commission
Student Learning Outcomes Assessment Report (SLOAR) 2011

Instructions: Each institution should use this template to report on its key student learning assessment activities. Part One should provide a summary of all institutional assessment activities in which your institution is currently engaged. Part Two should describe key student learning outcomes assessment activities for each of the four major competency areas. Part Two also provides space in which to highlight up to three additional institution-specific competency areas. Part Three should summarize modifications and adjustments to your institutional assessment activities since 2007. The template can be expanded, if necessary. The body of this report should not exceed 20 pages. Up to 5 pages of appendices may also be included.

Part One: Summary of Assessment Activities
Provide a summary of all institutional assessment activities and guidelines used. Part I should highlight your institution's activities that align with Middle States standard 7, 12 and 14. Include the organizational structure and institutional leadership for assessment activities. Limit to two pages.

Assessment occurs with guidance and support from the President, the President's Council, and the Strategic Planning Committee (SPC). The Dean of Faculty/Vice President for Academic Affairs leads the assessment effort at the College utilizing various campus entities such as the SPC, academic departments, and administrative units. This drives the Colleges efforts to continue previous processes or the development of new assessment activities to monitor and guide its programs and operations. These assessment activities range from department and unit assessment reports to entering first-year student placement exams in foreign language and writing. Guided by the Mission Statement and the five-year Strategic Plan, St. Mary's College has been implementing assessment activities that not only provide descriptive data but also act as guides for implementing changes needed to ensure St. Mary's College is fulfilling its mission.

On May 14, 2010, St. Mary's College completed and submitted to the Middle States Council on Higher Education the Periodic Review Report (PRR) in which the College describes its assessment activities since the last Self-Study in 2005. The PRR focused on three key efforts: strategic planning and the mission statement, the Core Curriculum, and the assessment of student learning and institutional effectiveness. The PRR provided examples of ongoing St. Mary's College assessment activities and highlighted assessment processes for evaluating and revising institutional practices. The following gives a summary of the PRR focus as it is relevant to this Student Learning Outcomes Assessment Report (SLOAR).

Strategic Planning and the Mission Statement

Assessments of 2004-2009 Strategic Plan Implementation. Using a system of publicly available documents and through presentations to various groups within the campus community the Dean of Faculty chronicled the progress made in the metrics associated with the 2004-2009 Strategic Plan. The SPC used this analysis to begin its work on formulating the next strategic plan.

2007-08 Mission-based Assessment Instrument. During the 2008-09 academic year, academic departments and administrative units completed an assessment instrument designed to evaluate contributions toward the accomplishment of Mission objectives. After submissions were evaluated, a summary of progress proved daunting. The consistency of the data and the narrative submitted by each department varied widely and the College has since decided to explore alternatives to document our progress toward accomplishing the mission. The College will use what was learned from this process to design a more straightforward instrument in the future.

Feedback on 2010-2015 Strategic Plan. The SPC, comprised of faculty, staff, and students, drafted the priorities of the 2010-2015 Strategic Plan. All faculty, staff, and students had an opportunity to read and comment on the priorities. The SPC revised the priorities based on feedback received. Tactical teams were created which consisted of representatives of the SPC and additional students, faculty, and staff. These teams utilized the revision to draft tactics to help St. Mary's College achieve the priorities. These revisions were then shared with the campus for feedback. The draft was revised again and has been shared with the new President.

Core Curriculum
A new Core Curriculum was implemented in fall 2008 in which four fundamental skills (critical thinking, information literacy, written expression, and oral expression) are emphasized. St. Mary's College believes these four skills are the cornerstones of a liberal arts education and are essential to an integrative curriculum. Assessment activities of the Core Curriculum have initially focused on the First-Year Seminars and the issues have ranged from training faculty to student learning and satisfaction. The results of these assessments include the following: identifying best practices by using student assessments to identify sections where students report skill development; changing training extensively in response to individual feedback and surveys distributed to faculty; and changing the ePortfolio component of the First-Year Seminars in response to a pilot program. In addition, the Core Curriculum Committee has identified two additional directions for continual assessment of the Core Curriculum. The first will be a coordinated effort to identify student-learning outcomes for the Core requirement of "Experiencing the Liberal Arts in the World". The second will be in assisting academic departments to assess current and future approaches to teaching the four fundamental skills within departmental course offerings.

Assessment of Student Learning and Institutional Effectiveness
St. Mary's College continues to progress in using the College's Mission Statement to link assessment and decision making. In addition there is an increased expectation about assessment in academic departments and administrative units throughout the College. St. Mary's College continues its development of a comprehensive, institution-wide assessment plan that focuses efforts to improve sharing applicable information widely, increase awareness of the types of assessment being done among interested constituencies, and the promotion of the communication of how assessment guides decision making. The College must increase support of assessment-related activities, both financially and administratively. Below are examples of activities employed by St. Mary's College to assess student learning and measure institutional effectiveness:

- Implementation of academic department student-learning assessment plans
- Implementation and analysis of course evaluations
- Assessment of learning objectives of the four skills in First-Year Seminars and within

departmental course surveys
- Academic department distributed student, senior exit, and alumni surveys
- The review of output from coursework (assignments, artistic products, papers, journals, oral presentations, lab reports, student portfolios, exams, etc.) in academic departments
- Judicial sanction papers
- Assessing skills and knowledge in the Core Curriculum and majors through the use of pre- and post-tests
- Analysis of program and workshop evaluations (e.g., DeSousa-Brent Scholars, Career Development workshops, New Student Days and Orientation, Teaching Excellence Workshops, programs in the residence halls)
- Residence Life survey "Bridging Academic and Social Experiences"
- The review of the capstone senior research of the St. Mary's Projects (at the departmental and College-wide levels)
- The review of the evaluations from the student leader training sessions (e.g., Resident Assistant, Orientation Leader, Student Government Association, First Responder, Multicultural Achievement Peer Programs, Judicial Board)
- Alumni surveys (1-, 5-, and 10-year administrations)
- Client satisfaction surveys in the Counseling Center
- Judicial statistics (including recidivism rates for alcohol and other drugs)
- Participation levels (e.g., program attendance, community service completed by students, library journal usage, appointments at Counseling and Health Services, New Student Days and Orientation events)
- Senior exit survey
- The evaluation of efforts of professional development for faculty and staff (e.g., Teaching and Learning workshops, Student Affairs retreats)
- The analysis of the Faculty Climate Survey
- Implementation and analysis of national benchmarking instruments (NSSE, BCSSE, NCHA, EBI, etc)

Part Two: Four Major Competency Areas

For each of the four competency areas listed below, discuss the institution's current activities. Space is provided for three additional competencies, if applicable. Part Two, including additional competencies, should not exceed 12 pages.

Effective Fall 2008, St. Mary's College directed its academic focus on a set of learning objectives that the College perceives as the core competency areas through the teaching of the four liberal arts skills. The four liberal arts skills taught at St. Mary's College are; critical thinking; information literacy; written expression; and oral expression. These liberal arts skills are broad and deep enough to allow for all state-determined major competency areas to be met. Recognizing that the template for competencies has been set for a wide array of Maryland institutions, St. Mary's College will provide information from its assessment activities to demonstrate its alignment with the four major competency areas within Maryland. Since St. Mary's College has just finished its first two years of this major shift in its core curriculum, the results of the assessment of the four skills are still in progress. The following is a snapshot of the progress made in this new paradigm as it relates to the competencies determined by the State of Maryland.

I. Written and Oral Communication

A. Institution's definition of competency

St. Mary's College defines written expression *and* oral expression as the capacity to clearly articulate a coherent, creative, and compelling line of thought in writing and speech, respectively, with attention to the power of both language and images.

B. Level(s) at which the competency is assessed (e.g., department, program, course)

Written and oral expression is assessed at all levels. Departments, programs, and courses are reviewed with learning outcomes in mind.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Indirect evidence is provided by survey results. The College participates in the National Survey of Student Engagement (NSSE), the Beginning College Survey of Student Engagement (BCSSE), conducts various senior exit surveys, and 1-, 5-, and 10-year-out Alumni Surveys. The College uses this data whenever applicable.

The Dean of the Core Curriculum conducts an annual survey of all students completing the first-year seminar in which students are asked to self-report improvement in their development of written communication as well as formal and informal oral communication.

The English Department conducts annual reviews of the senior English capstone experience (St. Mary's Project) to determine the student progress in acquiring the desired level of rhetorical awareness, organization, reasoning and content, and style.

Many departments use the St. Mary's Project (SMP) or similar senior capstone experience to evaluate the desired learning outcomes within the major relative to written and oral communication. These departments work within the department and with external readers to

create consensus about the expectations of the students as they communicate through their writing and orally as the students complete the capstone.

Along with writing, oral expression is a key component in the senior capstone and students participate in formal presentations that range from the traditional research presentation to poster sessions. Departments and project mentors use this as a resource to evaluate student-learning goals.

At the close of the first-year seminar, 400 to 450 first- year students per year answered questions about their skill improvement and their satisfaction with their academic experience in the course.

    D. Describe the results of the assessment work related to this competency.
       Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The English Department was concerned about inconsistencies in the written and oral components of the SMP. After reviewing previous output, the department has standardized its approach to working with students who are in need of improvement in attaining the educational goals of the project. They have seen an improvement in the overall quality of the end product and the mentors of students have a clearer sense of their focus in mentoring students.

Many departments adjusted teaching approaches to enhance the quality of the expression of an argument within coursework and presentations, as this is a familiar theme in the annual assessment reviews

The research from the survey of the first-year seminars shows progress being made in the areas of oral expression and written expression.

II. Scientific and Quantitative Reasoning

    A. Institution's definition of competency

Scientific and Quantitative Reasoning is embedded within the goals of the distribution requirements that all students must fulfill as part of their Core Curriculum. St. Mary's College requires all students to complete two courses; one from natural sciences with a laboratory experience and one from mathematics. Most majors have quantitative gateway courses that extend the level of understanding from a Core Curriculum experience to a more discipline-specific focus.

Scientific Reasoning through coursework in the natural sciences: The natural sciences are academic disciplines that study the natural world, including biological, chemical and physical structures and phenomena. Courses in the natural sciences present major scientific concepts and theories and teach students to apply investigative methodologies to explore scientific questions. Students will learn to analyze scientific literature and to write and speak using the languages of these disciplines.

Quantitative reasoning through coursework in mathematics: Students are expected to learn methods and techniques of problem solving and to develop facility in the mathematical mode of thinking. They will become acquainted with the major areas of current interest in mathematics, with the primary achievements of the past, and with the fundamental problems of number, space, and infinity.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Scientific and quantitative reasoning is assessed at all levels. Departments, programs, and courses are reviewed with learning outcomes in mind.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

The Biology Department conducts pre- and post-tests of the student's quantitative and scientific reasoning skills throughout the coursework of the major and minor.

The Mathematics Department uses the Calculus Concept Inventory to assess student learning in Calculus I and uses the results to improve instruction from year to year.

The Computer Science Department uses a pre- and post-survey combining the Computer Science Attitude Survey and Fennema-Sherman Attitude Scales.

Indirect evidence is provided by survey results. The College participates in the National Survey of Student Engagement (NSSE), the Beginning College Survey of Student Engagement (BCSSE), conducts various senior exit surveys, and 1-, 5-, and 10-year-out Alumni Surveys. The College uses this data whenever applicable.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Based on the experience of working with incoming students to the computer science courses, the computer science faculty developed an Emerging Scholars Program, designed to align the preparation for the "Introduction to Computer Science" course. To monitor the effects of the course, the computer science faculty are administering a pre- and post-survey which is a combination of the Computer Science Attitude Survey and Fennema-Sherman Attitude Scales used in mathematics to assess the change in students' attitudes about the following: beliefs about computer science, success in computer science, confidence in abilities in computer science, confidence in using the technology, perception of the usefulness of computer science beyond the course, student effectance, and the experience of learning with others in a computer science environment.

Both first-year students and seniors report that the St. Mary's College experience has had a positive impact on their scientific and quantitative reasoning. These self-reports are consistent with obtained-direct measures. For example, the Biology Department conducts pre- and post-measures of student skills, documenting that the level of competence in scientific reasoning and the ability to use technology improves dramatically as students move through the major. Such

levels of satisfaction and measures of achievement are not surprising, given that this component of the biology curriculum has been monitored and adjusted for years.

III. Critical Analysis and Reasoning

A. Institution's definition of competency

Critical thinking describes the capacity to recognize and appreciate the context of a line of thought (e.g., a rhetorical argument; a mathematical proof; a musical composition, etc.); the capacity to evaluate its consistency, coherence, importance, and originality; and the capacity to create an independent line of thought.

Critical thinking is about understanding a line of thought; evaluating it for coherence, consistency, and importance; and contributing to ongoing intellectual discussions. Underlying the skill set within critical thinking is a recognition of the importance of thinking analytically, abstractly, and theoretically, making connections among phenomena, generating hypotheses, predicting causality, and constantly re-evaluating and re-formulating those hypotheses based on new evidence. It implies both creativity and intellectual flexibility, a willingness to make good guesses, as well as a willingness to admit we were wrong as we piece together the theories to make sense of the universe around us, physical, social, psychological, spiritual, and otherwise.

B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Critical analysis and reasoning is assessed at all levels. Departments, programs, and courses are reviewed with learning outcomes in mind.

C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the close of the first-year seminar, 400 to 450 first- year students per year answered questions about their skill improvement and their satisfaction with their academic experience in the course.

Indirect evidence is provided by survey results. The College participates in the National Survey of Student Engagement (NSSE), the Beginning College Survey of Student Engagement (BCSSE), conducts various senior exit surveys, and 1-, 5-, and 10-year-out Alumni Surveys. The College uses this data whenever applicable.

D. Describe the results of the assessment work related to this competency.
   Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

Based on course and program level assessments the History Department has determined that it will need to develop a new research methods class in order to address perceived weaknesses in students' ability to analyze primary sources and conceptualize and carry out major research projects.

Based on the Senior Exit and Alumni Survey, graduating seniors and alumni are nearly unanimous in claiming that a St. Mary's College education had a positive impact on their critical analysis and reasoning abilities. The Art, Economics, and Philosophy and Religious Studies departments have developed surveys tied to their curricular goals and have engaged in curricular revision as a result of the analysis of their students' performance on senior projects.

IV. Technological Competency

    A. Institution's definition of competency

Although technological competency is not a targeted goal articulated in the Core Curriculum at St. Mary's College, students become well acquainted with the uses of technology as they pursue their studies. Furthermore, technological competency is a core student-learning outcome for some majors, and students are expected to demonstrate their skills in order to be successful in the culminating senior project.

    B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Assessment of technological competency takes place at the institutional, program, and course level.

    C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

Computer Science uses a pre- and post-survey combining the Computer Science Attitude Survey and Fennema-Sherman Attitude Scales.

Indirect evidence is provided by survey results. The College participates in the National Survey of Student Engagement (NSSE), the Beginning College Survey of Student Engagement (BCSSE), conducts various senior exit surveys, and 1-, 5-, and 10-year-out Alumni Surveys. The College uses this data whenever applicable.

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Additional Competencies

Because institutional mission and goals differ, institutions may wish to report on assessment activities beyond the four major competency areas. However, this is not mandatory; institutions may report on up to three additional competencies.

V. *Information Literacy*

    A. Institution's definition of competency

Information literacy describes the capacity to identify the need for information and to locate, analyze, evaluate, and effectively use all forms of information (e.g., written, oral, visual, quantitative, etc.). Students are expected to use information literacy to complete course assignments and activities, identify the need for diverse kinds of information, access information effectively and efficiently, evaluate sources critically, and incorporate new material into their existing knowledge base.

    B. Indicate level(s) at which the competency is assessed (e.g., institutional, program, course)

Information literacy is assessed at all levels. Departments, programs, and courses are reviewed with learning outcomes in mind.

    C. Process(es) used to evaluate competency (i.e., methods, measures, instruments)

At the close of the first-year seminar, 400 to 450 first- year students per year answered questions about their skill improvement and their satisfaction with their academic experience in the course.

Indirect evidence is provided by survey results. The College participates in the National Survey of Student Engagement (NSSE), the Beginning College Survey of Student Engagement (BCSSE), conducts various senior exit surveys, and 1-,5-, and 10-year-out Alumni Surveys. The College uses this data whenever applicable.

    D. Describe the results of the assessment work related to this competency.
        Detail results of assessment efforts, and where possible, provide data which demonstrate the assessment outcomes.

The library has dedicated librarians assigned to each academic discipline and they work closely with the instructors of the First-Year Seminars to develop an instruction method that is specific to the topic of the seminar and the learning goals of information literacy.

The research from the survey of the first-year seminars shows progress being made in the area of information literacy.

Assessment processes begin with developing methods and gathering data with the ultimate goal of using the results to guide what the College continues doing and what the College must change. While St. Mary's College is challenged by its systematic use of data to guide change, the College has made significant progress in its approach to continual assessment. This section highlights some of the evidence-based decision-making that has occurred across the institution.

The Psychology Department, using feedback from faculty and students, implemented new resources (e.g., statistical and presentation workshops to improve the quality of St. Mary's Projects). After several years of evaluation and discussion, the department decided to offer an alternative capstone experience and remove the mandatory St. Mary's Project requirement for the major.

The History Department employed an external review of St. Mary's Projects conducted during the 2006-07 academic year. The review found that the senior theses evidenced strong skills in research and writing and suggested students be encouraged to be creative in project development. The review guided the History Department in conceptualizing improvements in managing the assignment and developing the projects.

The Educational Studies Department used data from a "new teacher forum" sponsored with the local schools to revise what students in the elementary cohort are asked to do with lesson planning.

The Educational Studies Department used assessment of graduating senior exit portfolios and MAT alumni surveys to revise the "Teacher as Researcher" course.

The Educational Studies Department used feedback from students, alumni, and educational partners, in conjunction with the changing national demographics, to guide replacement of the "Reflective Practices" course with a course on teaching English language learners across the curriculum.

Music faculty refine their work with individual students based on feedback from the jury process every semester, as well as collaborating with each other to develop strategies.

Concurrent with the implementation of the new Core Curriculum, the Philosophy and Religious Studies Department created a common grading scale and a common understanding of expectations for the development of the four critical liberal arts. The Philosophy and Religious Studies Department will track whether or not the scores increase with the level of the classes (100 – 400 level), even though not everyone in a 400-level class has been in all lower-level classes. They do not intend to make judgments about the increasing skills of individual students,

but they can conclude whether or not the more courses students take in the Philosophy and Religious Studies Department, the greater their skills on these four important measures.

The Physics Department administered the Force Concept Inventory to 100-level physics classes prior to beginning iClicker use in the classroom. They are using the pre-,concurrent-, and post-information to revise the introductory physics courses.

The Writing Center surveys tutors and tutees to improve instructional techniques of tutoring sessions.

The Office of Academic Services assessed students and faculty to gather data to improve academic advising in anticipation of the transition to a new Core Curriculum.

In the Office of Residence Life, "Bridging Academic and Social Experiences" survey data resulted in creating more informal, exterior spaces in which students can congregate on campus. It also led to a concerted effort to form study groups in the traditional residence halls.

St. Mary's College continues to deepen its ability to use the assessment process to ensure that the College is fulfilling its mission and achieving its goals. The College is attuned to the need to maintain the assessment activities and is continuously evaluating its expectations of all areas of the College. The Dean of Faculty requires academic departments to articulate goals, enact an assessment plan, and then use the results for planning. The Dean of the Core Curriculum and First-Year Experience is undertaking a comprehensive assessment and evaluation of the new Core Curriculum. The Dean of Students extends this effort to the Office of Student Affairs, and provides ongoing training and professional development both on and off campus related to all aspects of assessment. Other departments and offices in the College are assessing goals and assessment plans with particular focus as the College anticipates its decennial review in five years.

As St. Mary's College continues its work with the assessment of the four liberal arts skills, the analysis of the results will be funneled through the Dean of the Core Curriculum, to the Assessment Council, to the Dean of Faculty, and on to the President's Council. If findings indicate the need for change, the Dean of Faculty will play a critical role in working with department chairs and the Dean of the Core Curriculum to implement an adjustment to current practices. At this point the results of the four skills assessment is pending review so this structure stands ready to provide the structure for change, if needed.