MHEC
MARYLAND HIGHER EDUCATION COMMISSION

COLLEGE PERFORMANCE OF NEW MARYLAND

HIGH SCHOOL GRADUATES

-STUDENT OUTCOME AND ACHIEVEMENT REPORT-

November 2002

INTRODUCTION

The General Assembly passed legislation in 1988 that required the Maryland Higher Education Commission "to improve information to high schools and local school systems concerning the performance of their graduates at the college level."

In 1990, the Commission established the Student Outcome and Achievement Report (SOAR) to fulfill this mandate. In addition to providing information that can be used for tracking student outcomes at the state level, SOAR was intended to be a tool to help local educators with the evaluation of high school preparatory programs, curriculum development, counseling, and the establishment of education policy. This is the 10th consecutive year in which county superintendents and high school principals have received annual reports of how well students from their particular schools performed at the college level. All public two- and four-year campuses in Maryland and 11 state-aided independent institutions currently participate in SOAR.

The high school graduate system of SOAR collects information about several aspects of the college performance of new high school graduates: remedial work needed in math, English and reading; grades in their first math and English courses; and cumulative grade point average. In order to provide a better understanding of the factors that influence collegiate academic performance, the Commission began in 1996 to include data about students' high school experiences. This information was supplied by The College Board, which administers the Scholastic Assessment Test (SAT) and the American College Testing Program (ACT).

Students who take the SAT or ACT complete a comprehensive questionnaire asking about their high school performance and experiences as well as family and background characteristics. Included are the courses they have taken in various subjects and their grades, the years studied in specific academic areas, whether they were enrolled in honors classes, and their grade point average and rank in class. This information has been matched to the SOAR data.

This report draws on the combined sets of data to examine the relationship between students' academic performance and experiences in high school and how well they did in their initial year in college. Specifically, it looks at students who graduated from a Maryland high school in the 1999-2000 school year who enrolled at a Maryland college or university during the 2000-2001 academic year. The Commission also examined the long-term graduation and transfer patterns of students who enrolled at public colleges and universities in fall 1994 through 1997 based on the SAT and ACT information. This analysis, which provided additional insight into the factors which impact college success, was performed by linking student records in the Commission's enrollment and degree systems with those from the expanded SOAR files in corresponding years.

The report contains four sections. The first examines the differences between the college performance of students who did or did not complete a college preparatory curriculum in high school. The second contains the results of a multiple regression analysis which seeks to identify the factors that best predict first-year college performance. The third examines trends in the data over the past six years. The fourth presents the four-year graduation and transfer rates of students from Maryland community colleges and the six-year graduation rates of students from public four-year institutions in the State on the basis of whether or not they took a college preparatory course of study in high school.

Limitations of the Data

These are the limitations inherent in the SOAR data:

1. No information could be collected about the high school experiences of students who did not take the SAT or ACT. Hence, 29 percent of the first-year college students were not included in this study. Most of these individuals attended community colleges, which have open-door admissions.

2. The information on high school experiences is collected through a questionnaire completed by students when they take the SAT or ACT. Hence, its accuracy depends on the veracity of those completing the questionnaire. An ACT study of the reliability of self-reported data compared to transcript information found that students were truthful in supplying information about their courses and, to a lesser extent, their grades.

3. The content of courses taken in specific subject areas may vary among schools and even within a school.

4. Information is reported only about high school graduates who enrolled at Maryland colleges and universities. More than one-third of Maryland high school graduates who enroll in college attend out-of-state. The percentage of graduates who choose an out-of-state institution varies among jurisdictions, and the absence of data about the performance of these individuals may impact the results.

5. Prior to 1997-1998, the definition of remediation was determined by each college and university. Campuses had different policies with regard to the identification and placement of remedial students, including the use of a wide assortment of tests and cut-off scores. Hence, remediation rates were not comparable across institutions. By fall 1997, all Maryland community colleges had agreed to adopt uniform standards for assessing students and placing them in college-level courses, based on recommendations from the faculty in reading, writing, and mathematics. This involved the standardization of tests and cut-off scores. This agreement was fully implemented by all community colleges by fall 1998. However, some two-year institutions put these policies into practice earlier than others. Consequently,

in 1997-1998, there were some remaining differences among institutions in testing and placement policies that could affect the comparability of remediation rates at the community colleges. Nonetheless, by 1998-1999, there was comparability of remediation across community colleges. This is important, since more than 90 percent of the remediation in higher education in the State takes place at two-year institutions. Public four-year institutions in the State that offer remedial courses continue to use an assortment of tests and cut-off scores.

6. Some students require additional assistance in mathematics before moving into a college credit-bearing course. There are at least two reasons why such placement may be necessary. First, students are required to earn three credits in high school mathematics. Two of those credits must include work in algebra I and geometry. Not all students take algebra II, yet that is the course that will likely prepare them for college mathematics. Some students may believe that they have taken algebra II when they have actually taken two years to complete algebra I. Second, some colleges and universities admit students who have not completed algebra II. When that occurs, those students may also require additional assistance in mathematics.

COLLEGE PERFORMANCE OF CORE AND NON CORE STUDENTS

The academic performance of students in their first year of study at a Maryland campus was examined in terms of whether they did or did not take a college-preparatory course of study in high school. Students who did complete a college-recommended curriculum were called "core" in this report; all others, "non core". Students were assessed on the basis of their need for remedial assistance in math, English and reading; grades in their first English and math courses, and cumulative grade point average. The information was presented by institution, jurisdiction, gender and race (Tables 1 to 12).

The categorization of students as "core" or "non core" depended on whether the student completed a course of study that closely fit the freshmen admissions requirements of the University System of Maryland (USM). To be included as "core", a student had to have taken all of the following in high school:

* 4 or more years of English
* 3 or more years of mathematics
* 3 or more years of social science or history
* 2 or more years of natural science
* 2 or more years of foreign languages

Students who did not fulfill this exact curriculum were deemed "non core." USM's requirements differ very slightly from those above: students must take two years of a laboratory science, have two or more years of the same foreign language, and complete

three specific math courses: two years of algebra and one of geometry. Integration of these additional requirements into the "core" definition was not possible because of the nature of the SAT/ACT data.

As in previous years, core students in 2000-2001 performed better than non core students on every measure of college academic achievement. Fewer core students required remedial assistance in math, English and reading. Core students also earned higher grades in their initial math and English courses in college and had higher grade point averages after their first year. With a few exceptions, core students outperformed non core students regardless of the county or region in which they attended high school, the specific college or university at which they were enrolled, or on the basis of race or gender. The results were very comparable to those of the last six years.

These findings are strengthened by an ACT analysis, which showed that core students in Maryland earned higher composite test scores than have their non core counterparts during the past five years. ACT used a somewhat different definition of "core" than the one adopted in this study.

Remediation

Considerably more non core students (38 percent) than core students (27 percent) needed remedial assistance in math. Substantially more non core students (25 percent) than core students (15 percent) required remediation in English, and more non core students (25 percent) than core students (16 percent) needed help in reading.

Of the core students at the community colleges, 46 percent required remedial help in math and 25 percent in English and reading. Of the non core community college students, 54 percent were assessed for remediation in math, 36 percent in English, and 34 percent in reading. Baltimore City Community College led the two-year institutions in the proportion of core and noncore students requiring remedial assistance in English and reading and was among the highest in the percentage of those needing help in math.

Twelve percent of the core students at public four-year campuses were assessed as needing math remediation, as were 9 percent in reading and 8 percent in English. Of the non core students, 17 percent required help in math, 11 percent in reading and 9 percent in English. Among the public four-year institutions, the four historically black colleges and universities and Towson University represented the largest share of the students needing remediation.

Both core and non core students from Baltimore City had the highest remediation rates in English and reading of the "service delivery areas" (major jurisdictions) in the state, followed by students from Prince George's County. Remediation in math for both core and non core students in Baltimore City, Prince George's County, Susquehanna (Cecil

and Harford Counties), the Upper and Lower Eastern Shore, and Western Maryland was above the State average.

A greater percentage of African Americans than other races needed remedial help. Of the African-American students who completed a college preparatory curriculum, 43 percent required remediation in math, 34 percent in reading and 30 percent in English. A majority of non-core African American students (56 percent) were assessed for remediation in math, half were in reading, and 45 percent in English.

Grade in First Math Course

Core students statewide earned an average grade of 2.5 (on a 4.0 scale) in their first math course in college, compared to 2.4 for non core students. A slightly greater percentage of core students (81 percent) achieved a "C" or better than did non core students (78 percent). Core students who attended high school in Prince George's County had the lowest initial college math grade of any jurisdiction (2.3). Western Maryland core students had the highest (2.9).

Women tended to earn noticeably higher math grades than did men, both among core and non core students. The math grades of African Americans (2.2 for core students and 2.1 for non core students) lagged behind those of other ethnicities. Nonetheless, more than two-thirds of African American students (73 percent of the core and 68 percent of the non core) achieved at least a "C" in their first math course.

Grade in First English Course

Core students in Maryland attained an average grade of 2.7 in their initial English course in college, compared to 2.5 for non core students. A substantial majority of both core (88 percent) and non core students (85 percent) attained a "C" or better in the first college English course. The lowest English grades in any major jurisdiction for core students were received by those who attended high schools on the Upper and Lower Eastern Shore (2.5). The highest English grades for core students were attained by those in Western Maryland schools (2.9).

Both core and non core women earned sharply higher grades in their first English course than did their male counterparts. The grades of African Americans lagged behind those of other races among both core and non core students. Nonetheless, 85 percent of the African Americans in the core category achieved a grade of "C" or better, as did 80 percent of the non core students.

Grade Point Average

Statewide, core students earned a cumulative grade point average in college of 2.6, compared to 2.4 for non core students. The averages earned by students who attended high school in Baltimore City (2.3 for core and 2.0 for non core) were the lowest in the

State. The grade point averages of women, both core and non core, exceeded those of men. African-American students had lower grade point averages (2.2 for core and 2.0 for non core) than those of other races.

FACTORS AFFECTING COLLEGE PERFORMANCE

An examination was made of the relationship between the high school experiences and background characteristics of students and their performance in college. The intention was to identify factors that might help to predict college success, thus helping high school teachers and guidance counselors to advise students better on preparation for higher education.

Method

A multiple regression analysis was conducted, using the first math and English grades and cumulative grade point average as measures of collegiate performance and 66 items on the SAT questionnaire plus some SOAR demographic data as indicators of high school experiences or student background. The ACT information, which was used in differentiating between core and non core students, was not included in this particular part of the study because the comparatively small number of students who took this test could have distorted the results.

Four steps were employed in the analysis. The first was to build a model from the existing data that would contain only relevant variables--those that were good predictors of college performance. A stepwise selection approach was implemented. The only variables that were retained were those that met the standard .05 significance criterion for each of the college performance variables. This process eliminated the great majority of the variables representing high school experiences and background attributes. The second step was to calculate a correlation coefficient between each college performance variable and each high school experiences variable (and a coefficient among each of the high school experiences variables). The third step was to conduct a multiple regression analysis entering all of the high school experiences variables simultaneously and examining their relationship with each of the college performance variables separately. If a high school experiences variable did not achieve a t significance level of .05 on the multiple regression analysis and did not have a correlation coefficient of at least .1 in its relationship with the college performance variable, it was eliminated. The fourth step was to implement another series of multiple regression analyses, one for each of the college performance variables. The remaining high school experiences variables were entered individually in order of its strength. The results are displayed in Tables 13, 14 and 15.

The factors which, by themselves, emerged as the best predictors of college performance $(t < .05)$ are as follows in the order of their strength:

First Math Grade   High School Grade Point Average
                              SAT Math Score
                              Whether Student was Enrolled in Honors Math Course
                              Average Grade in High School Math Courses
                              Race
                              Gender

First English Grade   High School Grade Point Average
                              SAT Verbal Score
                              Average Grade in High School English Courses
                              Whether Student Was Enrolled in Honors English Course
                              Gender
                              Race

Grade Point Average   High School Grade Point Average
                              SAT Verbal Score
                              SAT Math Score
                              Average Grade in High School English Courses
                              Race
                              Whether Student was Enrolled in Honors Math Course
                              Gender
                              Whether Student Took British Literature Course

For the seventh consecutive year, the best predictor of college performance by far for all three variables was student high school grade average. The SAT math scores, the student's average grade in high school math courses, and whether the student was enrolled in an honors math course were among the good predictors of the first college math grade. The average grade in high school English courses, the SAT verbal score, and enrollment in a high school honors course in English provided an excellent indication of how students would perform in their initial college English course.

Strong predictors of college grade point average, beyond the student's high school grade point average, were the SAT verbal and math scores, the average grade in high school English courses, and enrollment in courses in high school honors math and in British literature.

Gender and race were significant factors in determining college performance on all three of the variables--even after controlling for all of the other high school experiences and demographic factors. This is the seventh consecutive year in which gender emerged as a relevant predictor for all three variables and the second in which race impacted the variables. The first math and English course grades and cumulative grade point averages of women easily outpaced those of men in this study, while those of African Americans trailed other ethnicities.

TRENDS IN COLLEGE PERFORMANCE OF HIGH SCHOOL GRADUATES

Tables 16 to 33 present trends during the past six years in the performance of core and non core students in their first year of college study on the basis of major jurisdiction, higher education segment, and race and gender. Although SOAR information has been collected for 10 years, analyses on the basis of students' high school curricula have been conducted for only seven. In general, the figures show relative continuity in the performance of students.

Remediation

In each of the past six years, a greater percentage of students was assessed for remediation in math than in English or reading. In five of the six years, about one-fourth of the core students and between 36 percent and 41 percent of the non core students required remedial help in math.

A consistently high percentage of core community college students needed remediation in each of the years: between 38 percent and 46 percent in math, 19 to 29 percent in English, and 21 to 27 percent in reading. An even greater proportion of non core community college students required remedial assistance: between 49 and 56 percent in math, 31 to 41 percent in English, and 34 to 38 percent in reading. The percentage of core community college students who required remediation in math in the past three years has been the highest since this breakdown was initiated. This result may be due to the standardization of placement tests and cut-off scores at the two-year institutions. However, the proportion of core community college students who needed remedial assistance in English dropped in each of the past three years from 29 percent to 25 percent.

Students from Baltimore City and Prince George's County have consistently had among the highest remediation rates in math, English and reading of the major jurisdictions in Maryland. In addition, students from Western Maryland and Susquehanna schools have regularly exceeded most other jurisdictions in terms of a need for math remediation.

In each of the six years, a greater percentage of African Americans than other races required math, English and reading remediation in college. A particularly large percentage of African American students who did not take a college preparatory curriculum in high school needed remedial help. In five of the last six years, a majority of these students required assistance in math and at least 40 percent needed it in English. Forty percent or more of the noncore African American students needed remedial help in reading in all of the years.

Performance in First Math Course

A somewhat greater percentage of core students achieved a "C" or better than did non core students in their first math course in college in each of the six years; however, the difference between the two groups in 2000-2001 narrowed sharply from that of the previous year and was the smallest since the analysis began. The percentage of Prince George's County high students, both core and non core, who earned a "C" or better in their initial college math course has consistently been among the lowest in the State.

In each year, a markedly higher percentage of women than men achieved a "C" or above in their first college math course, both among core and non core students. Although African Americans have consistently trailed whites and Asians in the proportion who earned a "C" or better in math, two-thirds or more of the core African American students and more than 60 percent of the non core students received at least a "C".

Performance in First English Course

A substantial majority of both core and non core students earned a "C" or better in their first English course in college in the past six years. A greater percentage of core than non core students in each year achieved this grade, but the difference between the two has narrowed steadily from five to three percentage points in the past five years. Core students who attended Western Maryland high schools have consistently led the State in the proportion who earned a "C" or better in the first English class. In comparison, both core and noncore students in Montgomery County have continually trailed the State average.

A larger proportion of women, both core and non core, in each of the years achieved a "C" or better in the first English course than did men. More than 80 percent of the core African American students and more than three-fourths of the non core students earned at least a "C" in their initial college course in English in the past six years. However, while there was only slight differences between the races prior to 1997-1998, the proportion of both core and non core African Americans to earn a "C" or better noticeably trailed those of whites and Asians in the past four years.

Grade Point Average

The cumulative grade point averages of core students have consistently exceeded those of non core students in each of the six years. Core students earned a 2.6 in the past two years and a 2.5 earlier, while the averages of non core students have steadily increased from 2.2 to 2.4. Core and non core students from Western Maryland and Frederick County have consistently had among the highest grade averages and have exceeded the State average in each year. In contrast, students from Baltimore City have continually lagged behind their Maryland counterparts, as have those in Prince George's County in most instances.

Women have consistently earned higher grade point averages than men during the six year period. The grade averages of African Americans have regularly trailed those of other races, both for core and non core students.

Factors Affecting College Performance

Of the 66 high school experience and background variables, the one that has been by far the best predictor of college performance is high school point grade average. This has been the strongest factor for all of the measures of college performance (first college math and English grade and college grade point average) in all of the seven years. No other item has come close to its predictive power, although several showed strength in six or more of the years. The SAT verbal score and average grade in high school English was effective in predicting students' first English grade and cumulative grade point average in all seven years. The SAT math score was an important predictor of students' first math grade in each of the seven years and of grade point average in six years. In six of the years, the average grade in high school math has provided a good forecast of students' performance in their initial math course in college. Gender has been a determinant on all three of the variables in all of the years.

GRADUATION RATES OF CORE AND NON CORE STUDENTS

The consistency with which Maryland students who took a college preparatory curriculum outperformed those who did not in their initial year of study raises the question of whether this pattern holds as well for longer term outcomes, such as graduation rates. Two recent studies by the U.S. Department of Education suggest that it does. A 1999 analysis of a national cohort of 10th grade students who were tracked for 13 years found that a solid academic background in high school, particularly in math, was the most important factor in the completion of a bachelor's degree. The study concluded that a core curriculum was most beneficial to African American and Hispanic students. A 2001 report concluded that students who completed a very rigorous course of study in high school and, to a smaller degree, those who completed a moderately rigorous curriculum were more likely to persist after three years than did those who had taken a minimal college preparatory curriculum or less.

To determine the extent to which Maryland students had the same experience, information from the Commission's enrollment and degree systems were matched with records from the expanded SOAR files, including the data supplied by the SAT and ACT. This type of analysis involved two additional limitations to those noted earlier in this report:

1. While SOAR collects annualized information (students who enrolled in the summer, fall and spring), the enrollment systems consist of a snapshot of those in attendance

at a point of time each fall. Hence, only students who entered college in the fall are included.

2. Statistics about the background and academic experiences of high school students have been part of the SOAR collection for just the past seven years. Therefore, it is possible to examine long-term students outcomes for only a few classes. These may not be representative. Additional and more extensive studies will be possible in future years as more information is collected.

Table 34 shows the percentage of new full-time freshmen at a Maryland public four-year college or university who enrolled directly from high school in fall 1994 and 1995 and who had earned a bachelor's degree from any public campus in the State within six years of matriculation. Tables 35 displays the percentage of first-time, full-time freshmen at a Maryland community college who enrolled directly from high school in fall 1994 to 1997 and who had either earned an associate degree or certificate from any two-year institution and/or transferred to any public four-year institution in the State within four years of entry. The graduation and graduation/transfer figures are presented on the basis of whether or not students had taken a college preparatory curriculum in high school. Breakdowns are provided by gender, race and major jurisdiction.

The results demonstrate that Maryland high school students who took a solid academic core of courses were more likely to earn a baccalaureate or to attain a community college degree or certificate or transfer to a four-year institution than were those who did not. In both the 1994 and 1995 cohorts, the six-year graduation rate for core students enrolled at public four-year institutions was 64 percent, compared to 57 percent for non core students. Likewise, nearly half of the full-time freshmen at Maryland community colleges who took a college preparatory curriculum in high school had earned a community college credential or had transferred within four years; this was the case for between 34 and 39 percent of the non core students in these years. However, the difference between the graduation/transfer rates of two-year students who took a college preparatory curriculum in high school and those who did not has steadily narrowed during the past four cohorts.

With few exceptions, the performance of core and non core students was consistent across gender, race, and major jurisdiction for students at both public four-year institutions and community colleges.

TABLES

Table 1
Percent of Core and Non Core Curriculum Students Needing Remediation in College
(By Jurisdiction)

	Math		English		Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	24%	31%	11%	16%	8%	11%
Baltimore City	31%	54%	25%	50%	30%	55%
Baltimore	19%	22%	17%	23%	18%	23%
Frederick	26%	43%	11%	17%	11%	18%
Lower Shore	29%	41%	13%	21%	13%	16%
Somerset	46%	60%	12%	20%	15%	33%
Wicomico	24%	32%	15%	21%	16%	13%
Worcester	34%	49%	8%	23%	5%	16%
Mid Maryland	26%	34%	8%	15%	15%	21%
Carroll	39%	44%	10%	13%	26%	30%
Howard	22%	32%	8%	·17%	11%	18%
Montgomery	25%	35%	12%	18%	10%	16%
Prince George's	38%	47%	22%	30%	27%	36%
Southern Maryland	10%	17%	10%	20%	11%	22%
Calvert	11%	7%	6%	13%	6%	17%
Charles	10%	26%	15%	28%	18%	28%
St. Mary's	10%	17%	9%	16%	8%	20%
Susquehanna	34%	45%	11%	22%	6%	12%
Cecil	19%	39%	6%	9%	4%	6%
Harford	39%	46%	13%	25%	6%	13%
Upper Shore	38%	45%	14%	27%	15%	26%
Caroline	39%	65%	12%	18%	18%	29%
Dorchester	42%	51%	14%	46%	14%	35%
Kent	42%	20%	25%	7%	17%	7%
Queen Anne'	38%	35%	16%	22%	18%	22%
Talbot	38%	54%	11%	28%	13%	30%
Western Maryland	37%	47%	19%	26%	10%	14%
Allegany	35%	47%	7%	11%	5%	3%
Garrett	26%	46%	13%	36%	3%	18%
Washington	43%	49%	31%	38%	16%	24%
ALL MARYLAND	**27%**	**38%**	**15%**	**25%**	**16%**	**25%**

Table 2
Performance in First College Math Course of
Core and Non Core Curriculum Students
(By Jurisdiction)

	% With 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Anne Arundel	82%	78%	2.6	2.4
Baltimore City	77%	73%	2.4	2.3
Baltimore	79%	81%	2.5	2.5
Frederick	83%	78%	2.7	2.6
Lower Shore	82%	89%	2.6	2.8
Somerset	75%	100%	2.5	4.0
Wicomico	81%	85%	2.5	2.7
Worcester	88%	92%	2.7	2.9
Mid Maryland	83%	79%	2.6	2.5
Carroll	85%	85%	2.6	2.5
Howard	81%	77%	2.6	2.4
Montgomery	82%	78%	2.6	2.4
Prince George's	78%	74%	2.3	2.2
Southern Maryland	78%	74%	2.5	2.2
Calvert	78%	75%	2.5	2.1
Charles	75%	66%	2.4	2.1
St. Mary's	82%	84%	2.6	2.6
Susquehanna	82%	77%	2.6	2.3
Cecil	86%	86%	2.7	2.4
Harford	81%	75%	2.6	2.3
Upper Shore	82%	84%	2.5	2.5
Caroline	77%	83%	2.5	2.4
Dorchester	89%	89%	2.7	2.4
Kent	78%	60%	2.1	2.0
Queen Anne's	90%	90%	2.6	2.8
Talbot	65%	80%	2.3	2.4
Western Maryland	89%	87%	2.9	2.6
Allegany	86%	79%	2.6	2.2
Garrett	95%	100%	3.0	2.9
Washington	91%	90%	3.0	3.0
ALL MARYLAND	81%	78%	2.5	2.4

Table 3
Performance in First College English Course of Core and Non Core Curriculum Students
(By Jurisdiction).

	% With 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Anne Arundel	90%	90%	2.8	2.7
Baltimore City	87%	79%	2.6	2.3
Baltimore	89%	87%	2.7	2.7
Frederick	90%	90%	2.7	2.6
Lower Shore	87%	80%	2.5	2.3
Somerset	86%	75%	2.8	2.3
Wicomico	87%	77%	2.5	2.3
Worcester	85%	86%	2.4	2.3
Mid Maryland	89%	84%	2.7	2.6
Carroll	90%	90%	2.7	2.6
Howard	88%	80%	2.8	2.5
Montgomery	87%	84%	2.6	2.5
Prince George's	89%	86%	2.7	2.5
Southern Maryland	89%	79%	2.8	2.3
Calvert	89%	75%	2.7	2.2
Charles	87%	78%	2.7	2.4
St. Mary's	93%	84%	2.9	2.4
Susquehanna	89%	86%	2.8	2.6
Cecil	90%	88%	2.7	2.7
Harford	89%	85%	2.8	2.6
Upper Shore	85%	80%	2.5	2.3
Caroline	94%	82%	2.5	2.5
Dorchester	87%	85%	2.6	2.2
Kent	58%	88%	1.7	2.5
Queen Anne's	91%	86%	2.8	2.6
Talbot	81%	68%	2.4	1.9
Western Maryland	93%	84%	2.9	2.6
Allegany	88%	85%	2.7	2.6
Garrett	92%	70%	3.0	2.1
Washington	96%	89%	3.1	2.7
ALL MARYLAND	**88%**	**85%**	**2.7**	**2.5**

Table 4
Cumulative Grade Point Average After First Year of Core and Non Core Curriculum Students
(By Jurisdiction)

	Core	Non-Core
Anne Arundel	2.7	2.6
Baltimore City	2.3	2.0
Baltimore	2.6	2.4
Frederick	2.7	2.5
Lower Shore	2.5	2.3
Somerset	2.2	2.5
Wicomico	2.5	2.3
Worcester	2.5	2.3
Mid Maryland	2.7	2.5
Carroll	2.8	2.6
Howard	2.7	2.4
Montgomery	2.6	2.4
Prince George's	2.4	2.1
Southern Maryland	2.7	2.4
Calvert	2.6	2.3
Charles	2.7	2.3
St. Mary's	2.9	2.6
Susquehanna	2.7	2.4
Cecil	2.6	2.6
Harford	2.7	2.4
Upper Shore	2.4	2.3
Caroline	2.3	2.2
Dorchester	2.6	2.4
Kent	2.2	2.0
Queen Anne's	2.6	2.7
Talbot	2.3	2.1
Western Maryland	2.8	2.5
Allegany	2.7	2.6
Garrett	2.9	2.3
Washington	2.9	2.6
ALL MARYLAND	**2.6**	**2.4**

Table 5
Percent of Core and Non Core Curriculum Students Needing Remediation in College
(By Institution)

	Math		English		Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges						
Allegany	70%	79%	11%	23%	10%	7%
Anne Arundel	45%	47%	17%	21%	12%	14%
Baltimore City	68%	74%	68%	83%	68%	84%
Baltimore County	31%	38%	34%	47%	32%	43%
Carroll	77%	68%	16%	18%	50%	44%
Cecil	32%	63%	9%	15%	6%	12%
Chesapeake	68%	77%	27%	43%	31%	41%
Frederick	49%	61%	20%	27%	21%	30%
Garrett	46%	55%	26%	39%	3%	10%
Hagerstown	59%	66%	49%	55%	25%	32%
Harford	64%	66%	18%	31%	8%	12%
Howard	50%	60%	17%	30%	23%	33%
Montgomery	47%	56%	21%	31%	17%	25%
Prince George's	54%	56%	25%	33%	42%	50%
Southern Maryland	12%	20%	18%	27%	20%	30%
Wor-Wic	63%	69%	22%	38%	16%	30%
All Community Colleges	**46%**	**54%**	**25%**	**36%**	**25%**	**34%**
University System of Maryland						
Bowie	71%	70%	77%	74%	17%	21%
Coppin	54%	68%	10%	15%	55%	69%
Frostburg	16%	20%	-	-	-	-
Towson	17%	19%	10%	10%	4%	5%
UMBC	3%	2%	*	*	11%	12%
UMCP	1%	3%	-	--	-	-
UMES	38%	49%	34%	40%	43%	45%
All University System of MD	**11%**	**16%**	**6%**	**7%**	**7%**	**10%**
Morgan	**36%**	37%	34%	36%	35%	36%
All Public Four-Year	**12%**	**17%**	**8%**	**9%**	**9%**	**11%**
Independents						
Capitol College	10%	36%	13%	0%	-	-
Hood	8%	10%	0%	0%	6%	10%
Loyola	0%	0%	-	-	-	-
Mount St. Mary's	23%	22%	-	-	-	-
Villia Julie	0%	0%	5%	10%	17%	27%
All Independents	**3%**	**4%**	**2%**	**3%**	**4%**	**7%**
All Campuses	**27%**	**38%**	**15%**	**25%**	**16%**	**25%**

*Less than 0.5 percent

Notes: Salisbury, St. Mary's, College of Notre Dame, Johns Hopkins, Maryland Institute College of Art, St. John's and Washington College do not have remedial programs. UMCP, Frostburg, Loyola, McDaniel and Mount St. Mary's do not offer remediation in English and reading, and Capitol does not offer these programs in reading. McDaniel provided inaccurate data for math remediation.

Table 6

Performance in First College Math Course of
Core and Non Core Curriculum Students
(By Institution)

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Community Colleges				
Allegany	88%	76%	2.9	2.1
Anne Arundel	75%	75%	2.4	2.2
Baltimore City	86%	78%	2.6	2.4
Baltimore County	69%	66%	2.1	2.1
Carroll	70%	74%	2.1	2.3
Cecil	82%	90%	2.4	2.3
Chesapeake	83%	80%	2.6	2.3
Frederick	74%	84%	2.4	2.7
Garrett	100%	100%	3.4	2.9
Hagerstown	90%	93%	3.0	3.2
Harford	77%	72%	2.3	2.2
Howard	71%	53%	2.1	1.6
Montgomery	76%	79%	2.4	2.4
Prince George's	80%	73%	2.4	2.2
Southern Maryland	70%	71%	2.2	2.1
Wor-Wic	82%	90%	2.9	3.0
All Community Colleges	**75%**	**74%**	**2.3**	**2.3**
University of Maryland				
Bowie	66%	56%	2.1	1.6
Coppin	74%	67%	2.5	2.2
Frostburg	80%	75%	2.2	2.1
Salisbury	82%	86%	2.5	2.6
Towson	86%	87%	2.8	2.7
UMBC	83%	78%	2.7	2.5
UMCP	85%	81%	2.7	2.6
UMES	66%	58%	2.0	1.7
All University of Maryland	**83%**	**80%**	**2.6**	**2.5**
Morgan	74%	75%	2.2	2.2
St. Mary's	95%	92%	3.2	2.7
All Public Four-Year	**83%**	**80%**	**2.6**	**2.5**
Independents				
Capitol College	62%	60%	2.0	1.5
Hood	90%	86%	3.3	2.4
Loyola	95%	96%	3.2	3.0
McDaniel	87%	90%	2.8	2.4
Mount St. Mary's	87%	83%	2.8	2.7
Notre Dame	84%	91%	2.5	2.7
St. John's	100%	100%	2.9	4.0
Villa Julie	81%	83%	2.6	2.6
Washington College	89%	93%	2.9	2.8
All Independents	**85%**	**86%**	**2.8**	**2.6**
All Campuses	**81%**	**78%**	**2.5**	**2.4**

Notes: Johns Hopkins does not provide students with letter grades in their
first semester, so average grades are not available for first math course.
Maryland Institute College of Art does not have math courses.

Table 7
Performance in First College English Course of
Core and Non Core Curriculum Students
(By Institution)

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Community Colleges				
Allegany	86%	84%	2.7	2.6
Anne Arundel	84%	86%	2.6	2.6
Baltimore City	65%	68%	2.1	1.9
Baltimore County	82%	77%	2.5	2.2
Carroll	84%	80%	2.3	2.2
Cecil	85%	81%	2.4	2.6
Chesapeake	77%	70%	2.3	1.9
Frederick	85%	87%	2.4	2.4
Garrett	85%	61%	2.5	1.8
Hagerstown	95%	87%	3.1	2.7
Harford	82%	79%	2.6	2.4
Howard	78%	68%	2.5	2.1
Montgomery	76%	76%	2.3	2.2
Prince George's	89%	90%	2.7	2.6
Southern Maryland	84%	73%	2.6	2.2
Wor-Wic	71%	74%	2.0	2.0
All Community Colleges	**82%**	**79%**	**2.5**	**2.3**
University System of Maryland				
Bowie	84%	93%	2.3	2.3
Coppin	92%	91%	2.8	2.5
Frostburg	91%	91%	2.5	2.4
Salisbury	95%	96%	2.8	2.6
Towson	94%	93%	3.0	3.0
UMBC	94%	86%	3.0	2.8
UMCP	93%	93%	2.9	2.9
UMES	86%	77%	2.5	2.3
All USM	**92%**	**91%**	**2.8**	**2.7**
Morgan	87%	79%	2.5	2.3
St. Mary's	99%	94%	3.4	3.0
All Public Four-Year	**92%**	**90%**	**2.8**	**2.7**
Independents				
Capitol College	83%	70%	2.2	2.2
Hood	100%	89%	3.1	2.7
Loyola	98%	94%	3.2	3.2
Maryland Institute College of Art	100%	95%	3.5	3.4
McDaniel	91%	96%	2.8	2.6
Mount St. Mary's	100%	96%	3.1	2.9
Notre Dame	96%	97%	3.1	3.1
Villa Julie	93%	90%	2.8	2.6
Washington College	98%	97%	3.1	3.1
All Independents	**95%**	**.93%**	**2.9**	**2.9**
All Campuses	**88%**	**85%**	**2.7**	**2.5**

Notes: Johns Hopkins does not provide students with letter grades in their
first semester, so average grades are not available for first English course.
St. John's does not have a comparable first college English course.

Table 8
Cumulative Grade Point Average After First Year of
Core and Non Core Curriculum Students
(By Institution)

	Core	Non-Core
Community Colleges		
Allegany	2.7	2.4
Anne Arundel	2.5	2.4
Baltimore City	2.1	1.8
Baltimore County	2.3	2.0
Carroll	2.5	2.5
Cecil	2.4	2.7
Chesapeake	2.1	2.0
Frederick	2.5	2.4
Garrett	2.8	2.3
Hagerstown	2.8	2.6
Harford	2.5.	2.2
Howard	2.4	2.0
Montgomery	2.4	2.2
Prince George's	2.1	2.0
Southern Maryland	2.5	2.2
Wor-Wic	2.1	2.0
All Community Colleges	**2.4**	**2.2**
University of Maryland		
Bowie	2.6	2.4
Coppin	2.2	2.1
Frostburg	2.5	2.4
Salisbury	2.8	2.7
Towson	2.8	2.6
UMBC	2.7	2.5
UMCP	3.0	2.9
UMES	2.4	2.2
All University of Maryland	**2.8**	**2.6**
Morgan	2.1	2.1
St. Mary's	3.0	2.7
All Public Four-Year	**2.7**	**2.6**
Independents		
Capitol College	2.3	2.2
Hood	3.2·	2.8
Johns Hopkins	3.0	3.0
Loyola	3.1	3.0
Maryland Institute College of Art	3.4	3.1
McDaniel	2.9	2.7
Mount St. Mary's	2.7	2.6
Notre Dame	2.9	3.0
St. John's	2.9	3.3
Villa Julie	2.8	2.7
Washington College	3.1	3.0
All Independents	**2.9**	**2.8**
All Campuses	**2.6**	**2.4**

Note: Grade point averages for Johns Hopkins represent just the
second semester. McDaniel uses a grading scale of 4.3 rather
then the traditional 4.0.

Table 9

Percent of Core and Non Core Curriculum Students Needing Remediation in College
(By Gender and Race)

	Math		English		Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender						
Men	24%	34%	15%	25%	14%	21%
Women	29%	41%	15%	24%	17%	27%
Race						
African-American	43%	56%	30%	45%	34%	50%
Asian	14%	20%	10%	18%	14%	21%
White	23%	31%	10%	15%	9%	13%
Other	32%	38%	16%	27%	15%	25%

Table 10

Performance in First Math Course of
Core and Non Core Curriculum Students
(By Gender and Race)

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Gender				
Men	76%	74%	2.4	2.2
Women	85%	83%	2.7	2.6
Race				
African-American	73%	68%	2.2	2.1
Asian	85%	81%	2.7	2.5
White	83%	81%	2.6	2.5
Other	79%	75%	2.4	2.2

Table 11
Performance in First English Course of
Core and Non Core Curriculum Students
(By Gender and Race)

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Gender				
Men	85%	81%	2.5	2.3
Women	91%	88%	2.8	2.7
Race				
African-American	85%	80%	2.4	2.3
Asian	88%	87%	2.8	2.7
White	90%	86%	2.8	2.6
Other	83%	79%	2.5	2.4

Table 12
Cumulative Grade Point Average After First Year of
Core and Non Core Curriculum Students
(By Gender and Race)

	Core	Non-Core
Gender		
Men	2.4	2.2
Women	2.7	2.5
Race		
African-American	2.2	2.0
Asian	2.7	2.6
White	2.7	2.5
Other	2.5	2.3

Table 13

Results of Multiple Regression Analysis Using Grade
in First Math Course as Dependent Variable

Step	Independent Variable	R	R²	R² Change	T	Sig T	Correlation
1	High School GPA	.2179	.0473	.0475	12.189	.0000	.2179
2	SAT Math Score	.2895	.0838	.0363	8.533	.0000	.2300
3	Honors-Math	.2974	.0885	.0047	4.862	.0000	.1972
4	Average Grade-Math	.3312	.1097	.0212	10.272	.0000	.1581
5	Race	.3366	.1133	.0036	4.468	.0000	.1413
6	Gender	.3743	.1391	.0268	12.704	.0000	.1359

Table 14

Results of Multiple Regression Analysis Using Grade
in First English Course as Dependent Variable

Step	Independent Variable	R	R²	R² Change	T	Sig T	Correlation
1	High School GPA	.2114	.0447	.0447	13.874	.0000	.2179
2	SAT Verbal Score	.2698	.0728	.0281	8.058	.0000	.2021
3	Average Grade-English	.3196	.1021	.0294	11.370	.0000	.1557
4	Honors-English	.3219	.1036	.0015	2.012	.0443	.1500
5	Gender	.3459	.1196	.0160	9.958	.0000	.1503
6	Race	.3496	.1222	.0026	3.914	.0001	.1243

Table 15

Results of Multiple Regression Analysis Using Grade Point Average
as Dependent Variable

Step	Independent Variable	R	R²	R² Change	T	Sig T	Correlation
1	High School GPA	.2907	.0845	.0845	18.713	.0000	.2907
2	SAT Verbal Score	.3628	.1316	.0471	4.718	.0000	.2647
3	SAT Math Score	.3713	.1378	.0062	5.291	.0000	.2487
4	Average Grade-English	.4396	.1932	.0554	16.566	.0000	.2158
5	Race	.4483	.2010	.0077	7.149	.0000	.2061
6	Honors-Math	.4507	.2031	.0022	2.886	.0039	.2006
7	Gender	.4729	.2237	.0206	11.670	.0000	.1524
8	Father's Educational Level	.4731	.2239	.0002	1.052	.2928	.1161
9	Took British Literature	.4738	.2245	.0006	1.992	.0465	.1136

Table 16

Trends in Core and Non Core Curriculum Students Needing Math Remediation in College (By Major Jurisdiction)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	20%	36%	23%	38%	22%	33%	22%	31%	19%	28%	24%	31%
Baltimore City	27%	44%	34%	56%	27%	54%	39%	63%	37%	53%	31%	54%
Baltimore	17%	26%	21%	31%	21%	26%	22%	35%	18%	22%	19%	22%
Frederick	30%	36%	38%	58%	30%	42%	32%	47%	24%	42%	26%	43%
Lower Shore	10%	15%	6%	21%	22%	30%	26%	40%	26%	41%	29%	41%
Mid Maryland	14%	26%	15%	29%	20%	31%	24%	34%	25%	34%	26%	34%
Montgomery	12%	26%	**	**	16%	31%	25%	39%	27%	41%	25%	35%
Prince George's	24%	38%	28%	43%	30%	40%	31%	41%	34%	45%	38%	47%
Southern Maryland	7%	19%	10%	17%	11%	16%	14%	21%	6%	14%	10%	17%
Susquehanna	26%	44%	30%	45%	28%	39%	28%	38%	33%	48%	34%	45%
Upper Shore	20%	32%	23%	39%	24%	37%	19%	43%	32%	45%	38%	45%
Western Maryland	*	*	33%	53%	30%	48%	41%	60%	34%	45%	37%	47%
ALL MARYLAND	19%	32%	25%	40%	23%	36%	27%	41%	26%	38%	27%	38%

*Figures from Western Maryland are not meaningful because of incomplete data supplied by Hagerstown Community College.

**Figures from Montgomery County are not meaningful because of incorrect data supplied by Montgomery College.

Table 17

Trends in Core and Non Core Curriculum Students Needing English Remediation in College (By Major Jurisdiction)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	8%	18%	9%	17%	10%	16%	9%	15%	7%	15%	11%	16%
Baltimore City	25%	47%	22%	45%	18%	41%	28%	50%	29%	53%	25%	50%
Baltimore	14%	23%	14%	27%	12%	22%	19%	32%	17%	24%	17%	23%
Frederick	19%	35%	22%	33%	17%	21%	13%	20%	11%	24%	11%	17%
Lower Shore	10%	35%	10%	25%	16%	25%	19%	27%	10%	21%	13%	21%
Mid Maryland	11%	19%	7%	17%	9%	21%	13%	22%	11%	18%	8%	15%
Montgomery	4%	14%	5%	13%	5%	12%	14%	22%	15%	25%	12%	18%
Prince George's	15%	27%	16%	27%	19%	28%	20%	32%	17%	27%	22%	30%
Southern Maryland	7%	18%	10%	16%	9%	17%	8%	16%	10%	14%	10%	20%
Susquehanna	10%	23%	9%	13%	9%	17%	11%	21%	14%	20%	11%	22%
Upper Shore	11%	22%	9%	18%	7%	15%	11%	21%	11%	18%	14%	27%
Western Maryland	*	*	14%	28%	16%	28%	20%	41%	18%	20%	19%	26%
ALL MARYLAND	11%	24%	12%	24%	12%	22%	16%	28%	15%	25%	15%	25%

*Figures from Western Maryland are not meaningful because of incomplete data supplied by
Hagerstown Community College.

Table 18
Trend in Core and Non Core Curriculum Students Needing Reading Remediation in College (By Major Jurisdiction)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	13%	23%	15%	23%	15%	21%	15%	18%	9%	15%	8%	11%
Baltimore City	23%	46%	20%	42%	20%	44%	28%	53%	26%	53%	30%	55%
Baltimore	13%	24%	14%	25%	14%	23%	19%	29%	15%	21%	18%	23%
Frederick	9%	14%	11%	18%	10%	9%	14%	18%	9%	22%	11%	18%
Lower Shore	12%	37%	13%	23%	9%	20%	17%	28%	11%	20%	13%	16%
Mid Maryland	9%	17%	6%	15%	10%	16%	11%	18%	9%	15%	15%	21%
Montgomery	11%	21%	11%	21%	12%	20%	12%	20%	11%	21%	10%	16%
Prince George's	17%	25%	16%	27%	18%	29%	19%	32%	19%	33%	27%	36%
Southern Maryland	25%	37%	25%	38%	25%	39%	22%	37%	7%	10%	11%	22%
Susquehanna	5%	9%	5%	10%	6%	7%	6%	10%	7%	13%	6%	12%
Upper Shore	8%	15%	9%	18%	7%	13%	16%	25%	11%	17%	15%	26%
Western Maryland	*	*	14%	21%	11%	18%	15%	25%	11%	16%	10%	14%
ALL MARYLAND	13%	25%	14%	25%	14%	24%	16%	28%	13%	24%	16%	25%

*Figures from Western Maryland are not meaningful because of incomplete data supplied
by Hagerstown Community College.

Table 19
Trends in Percentage Who Earned "C" or Better in First College Math Course Among Core and Non Core Curriculum Students (By Major Jurisdiction)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	79%	75%	75%	74%	81%	74%	78%	75%	80%	71%	82%	78%
Baltimore City	79%	72%	77%	73%	79%	73%	77%	75%	77%	75%	77%	73%
Baltimore	78%	76%	78%	78%	80%	72%	80%	80%	80%	78%	79%	81%
Frederick	82%	76%	80%	76%	80%	84%	82%	78%	84%	84%	83%	78%
Lower Shore	87%	85%	80%	72%	79%	91%	78%	73%	77%	77%	82%	89%
Mid Maryland	77%	79%	80%	79%	81%	74%	83%	80%	83%	77%	83%	79%
Montgomery	77%	69%	78%	70%	78%	70%	78%	72%	76%	67%	82%	78%
Prince George's	73%	67%	75%	72%	73%	68%	76%	70%	70%	62%	78%	74%
Southern Maryland	80%	80%	78%	72%	77%	74%	80%	75%	79%	72%	78%	74%
Susquehanna	75%	72%	79%	79%	82%	84%	82%	77%	83%	77%	82%	77%
Upper Shore	83%	71%	83%	81%	86%	80%	86%	77%	72%	69%	82%	84%
Western Maryland	82%	80%	82%	78%	84%	82%	83%	79%	87%	87%	89%	87%
ALL MARYLAND	78%	73%	78%	74%	79%	74%	79%	75%	78%	71%	81%	78%

Table 20
Trends in Percentage Who Earned "C" or Better in First College English Course Among Core and Non Core Curriculum Students (By Major Jurisdiction)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	89%	84%	87%	85%	87%	87%	88%	88%	90%	91%	90%	90%
Baltimore City	89%	84%	87%	85%	86%	77%	85%	84%	84%	78%	87%	79%
Baltimore	89%	84%	87%	83%	88%	86%	90%	86%	90%	89%	89%	87%
Frederick	89%	74%	91%	81%	91%	85%	86%	87%	89%	91%	90%	90%
Lower Shore	92%	91%	93%	89%	88%	83%	85%	70%	92%	84%	87%	80%
Mid Maryland	89%	79%	89%	85%	89%	85%	89%	81%	90%	89%	89%	84%
Montgomery	85%	76%	84%	78%	84%	77%	83%	77%	86%	82%	87%	84%
Prince George's	84%	83%	88%	81%	85%	80%	85%	81%	85%	81%	89%	86%
Southern Maryland	90%	88%	90%	84%	85%	86%	89%	87%	89%	89%	89%	79%
Susquehanna	90%	78%	88%	85%	89%	87%	90%	86%	91%	82%	89%	86%
Upper Shore	85%	85%	90%	87%	90%	81%	91%	78%	88%	84%	85%	80%
Western Maryland	93%	90%	90%	90%	92%	90%	93%	86%	90%	87%	93%	84%
ALL MARYLAND	88%	86%	88%	83%	87%	83%	87%	83%	88%	85%	88%	85%

Table 21
Trends in Cumulative Grade Point Average of Core and Non Core Curriculum Students
After First Year (By Major Jurisdiction)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	2.6	2.3	2.5	2.3	2.6	2.3	2.5	2.4	2.6	2.4	2.7	2.6
Baltimore City	2.3	2.0	2.3	2.0	2.4	2.1	2.4	2.1	2.3	2.1	2.3	2.0
Baltimore	2.5	2.3	2.4	2.3	2.5	2.4	2.5	2.4	2.5	2.4	2.6	2.4
Frederick	2.6	2.3	2.6	2.3	2.7	2.7	2.7	2.4	2.8	2.4	2.7	2.5
Lower Shore	2.5	2.1	2.4	2.3	2.6	2.3	2.4	2.2	2.5	2.3	2.5	2.3
Mid Maryland	2.5	2.3	2.6	2.3	2.6	2.4	2.6	2.4	2.7	2.5	2.7	2.5
Montgomery	2.5	2.1	2.5	2.2	2.6	2.2	2.6	2.3	2.6	2.3	2.6	2.4
Prince George's	2.3	2.2	2.4	2.2	2.3	2.2	2.4	2.2	2.3	2.2	2.4	2.1
Southern Maryland	2.7	2.6	2.6	2.3	2.6	2.3	2.6	2.4	2.7	2.4	2.7	2.4
Susquehanna	2.5	2.2	2.5	2.3	2.5	2.4	2.6	2.4	2.6	2.3	2.7	2.4
Upper Shore	2.4	2.1	2.5	2.3	2.6	2.3	2.5	2.2	2.5	2.3	2.4	2.3
Western Maryland	2.7	2.5	2.7	2.3	2.6	2.4	2.8	2.4	2.7	2.5	2.8	2.5
ALL MARYLAND	2.5	2.2	2.5	2.2	2.5	2.3	2.5	2.3	2.6	2.3	2.6	2.4

Table 22

Trends in Core and Non Core Curriculum Students Needing Math Remediation in College (By Higher Education Segment)

	1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	40%	54%	38%	49%	43%	55%	46%	56%	46%	54%
Public Four-Year	14%	21%	11%	18%	13%	21%	13%	17%	12%	17%
Independent	7%	7%	5%	8%	8%	10%	7%	8%	3%	4%
ALL CAMPUSES	25%	40%	23%	36%	27%	41%	26%	38%	27%	38%

Table 23

Trends in Core and Non Core Curriculum Students Needing English Remediation in College (By Higher Education Segment)

	1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	19%	31%	21%	32%	29%	41%	27%	38%	25%	36%
Public Four-Year	7%	13%	5%	9%	7%	11%	7%	10%	8%	9%
Independent	2%	4%	1%	1%	1%	3%	1%	2%	2%	3%
ALL CAMPUSES	12%	24%	12%	22%	16%	28%	15%	25%	15%	25%

Table 24

Trends in Core and Non Core Curriculum Students Needing Reading Remediation in College (By Higher Education Segment)

	1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	24%	35%	25%	35%	27%	38%	21%	35%	25%	34%
Public Four-Year	6%	9%	6%	9%	8%	13%	7%	11%	9%	11%
Independent	2%	4%	1%	2%	6%	9%	6%	5%	4%	7%
ALL CAMPUSES	14%	25%	14%	24%	16%	28%	13%	24%	16%	25%

Table 25

Trends in Percentage Who Earned "C" or Better in First College Math Course Among
Core and Non Core Curriculum Students (By Higher Education Segment)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	73%	67%	71%	67%	72%	68%	72%	70%	72%	64%	75%	74%
Public Four-Year	80%	79%	81%	80%	81%	77%	83%	77%	80%	75%	83%	80%
Independent	89%	86%	87%	83%	91%	87%	90%	88%	90%	85%	85%	86%
ALL CAMPUSES	78%	73%	78%	74%	79%	74%	79%	75%	78%	71%	81%	78%

Table 26

Trends in Percentage Who Earned "C" or Better in First College English Course Among
Core and Non Core Curriculum Students (By Higher Education Segment)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	81%	74%	81%	76%	80%	76%	79%	75%	81%	79%	82%	79%
Public Four-Year	92%	92%	92%	90%	91%	89%	92%	90%	91%	90%	82%	79%
Independent	95%	91%	93%	94%	95%	91%	95%	95%	91%	90%	92%	90%
ALL CAMPUSES	88%	82%	88%	83%	87%	83%	87%	83%	88%	85%	88%	85%

Table 27

Trends in Cumulative Grade Point Average of Core and Non Core Curriculum Students
After First Year (By Higher Education Segment)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	2.3	2.1	2.3	2.1	2.3	2.1	2.3	2.1	2.3	2.1	2.4	2.2
Public Four-Year	2.6	2.5	2.6	2.4	2.7	2.5	2.7	2.5	2.7	2.6	2.7	2.6
Independent	2.8	2.6	2.8	2.6	2.9	2.7	2.9	2.8	2.9	2.8	2.7	2.6
ALL CAMPUSES	2.5	2.2	2.5	2.2	2.5	2.3	2.5	2.3	2.6	2.3	2.6	2.4

Table 28

Trends in Core and Non Core Curriculum Students Needing Math Remediation in College (By Gender and Race)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	17%	29%	21%	37%	20%	31%	23%	36%	23%	33%	24%	34%
Women	20%	35%	28%	44%	25%	40%	29%	46%	29%	43%	29%	41%
Race												
African American	32%	47%	39%	56%	38%	53%	44%	61%	41%	55%	43%	56%
Asian	8%	13%	13%	19%	10%	18%	14%	24%	16%	21%	14%	20%
White	16%	27%	21%	35%	19%	30%	22%	33%	22%	31%	23%	31%
Other	20%	25%	31%	42%	25%	40%	30%	42%	33%	48%	32%	38%

Table 29

Trends in Core and Non Core Curriculum Students Needing English Remediation in College (By Gender and Race)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	13%	24%	12%	23%	13%	21%	17%	27%	15%	25%	15%	25%
Women	11%	24%	12%	24%	11%	23%	15%	30%	15%	26%	15%	24%
Race												
African American	24%	42%	25%	40%	24%	38%	32%	48%	28%	44%	30%	45%
Asian	7%	11%	7%	14%	7%	16%	10%	18%	10%	18%	10%	18%
White	8%	17%	8%	17%	8%	15%	11%	19%	11%	16%	10%	15%
Other	11%	17%	11%	20%	11%	24%	19%	25%	21%	30%	16%	27%

Table 30

Trends in Core and Non Core Curriculum Students Needing Reading Remediation in
College (By Gender and Race)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	13%	23%	12%	22%	14%	22%	15%	24%	12%	21%	14%	21%
Women	14%	27%	15%	27%	14%	26%	17%	31%	14%	27%	17%	27%
Race												
African American	26%	42%	25%	40%	25%	42%	32%	48%	27%	44%	34%	50%
Asian	11%	16%	13%	18%	14%	19%	16%	24%	14%	23%	14%	21%
White	9%	18%	10%	18%	10%	15%	11%	18%	8%	13%	9%	13%
Other	17%	20%	14%	26%	15%	29%	18%	24%	15%	29%	15%	25%

Table 31

Trends in Percentage Who Earned "C" or Better in First College Math Course Among
Core and Non Core Curriculum Students (By Gender and Race)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	72%	70%	74%	71%	75%	70%	75%	72%	73%	68%	76%	74%
Women	73%	77%	81%	77%	82%	78%	83%	79%	83%	75%	85%	83%
Race												
African American	73%	70%	75%	71%	71%	67%	73%	71%	67%	61%	73%	68%
Asian	83%	78%	83%	81%	81%	76%	85%	79%	81%	79%	85%	81%
White	79%	74%	78%	75%	81%	76%	81%	76%	82%	75%	83%	81%
Other	72%	72%	75%	65%	77%	67%	75%	72%	73%	63%	79%	75%

Table 32

Trends in Core and Non Core Curriculum Students Needing Reading Remediation in College (By Gender and Race)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	84%	77%	83%	80%	83%	79%	84%	79%	84%	82%	85%	81%
Women	90%	87%	91%	86%	90%	86%	90%	86%	91%	88%	91%	88%
Race												
African American	85%	82%	87%	80%	82%	76%	83%	79%	83%	80%	85%	80%
Asian	86%	84%	85%	84%	88%	83%	86%	81%	87%	87%	88%	87%
White	89%	82%	88%	85%	89%	86%	89%	85%	90%	87%	90%	86%
Other	86%	81%	84%	72%	85%	74%	84%	73%	83%	83%	83%	79%

Table 33

Trends in Percentage Who Earned "C" or Better in First College Math Course Among Core and Non Core Curriculum Students (By Gender and Race)

	1995-1996		1996-1997		1997-1998		1998-1999		1999-2000		2000-2001	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	2.3	2.1	2.4	2.1	2.4	2.2	2.4	2.2	2.4	2.2	2.4	2.2
Women	2.6	2.4	2.6	2.3	2.6	2.4	2.6	2.4	2.7	2.4	2.7	2.5
Race												
African American	2.2	2.0	2.2	2.0	2.2	2.0	2.2	2.0	2.2	2.1	2.2	2.0
Asian	2.6	2.4	2.7	2.6	2.6	2.4	2.6	2.5	2.7	2.5	2.7	2.6
White	2.6	2.3	2.6	2.3	2.6	2.4	2.6	2.4	2.7	2.5	2.7	2.5
Other	2.4	2.2	2.4	2.1	2.5	2.2	2.5	2.2	2.4	2.2	2.5	2.3

Table 34

Six-Year Graduation Rate of Core and Non Core Curriculum Students Who Enrolled as New Full-Time Freshmen at Maryland Public Four-Year Campuses in Fall 1994 and 1995 (By Gender, Race and Major Jurisdiction).

	1994				1995		
	N	CORE	NON CORE		N	CORE	NON CORE
All Students	5,580	64.0%	57.1%		6,229	64.4%	57.1%
Gender							
Men	2,577	59.2%	52.3%		2,775	58.7%	52.7%
Women	3,003	67.8%	62.7%		3,454	68.6%	61.5%
Race							
African American	1,685	50.0%	46.1%		1,842	50.1%	43.0%
Asian	542	68.0%	56.8%		550	73.0%	63.6%
White	3,123	69.7%	66.0%		3,536	70.1%	67.0%
Other	230	66.2%	60.9%		301	59.2%	53.4%
Major Jurisdiction							
Anne Arundel	411	71.1%	67.0%		510	66.0%	66.3%
Baltimore City	608	50.4%	44.9%		639	46.9%	40.5%
Baltimore	739	63.0%	55.1%		919	68.7%	59.7%
Frederick	160	72.8%	65.8%		168	66.0%	81.5%
Lower Shore	207	55.0%	53.5%		204	59.5%	50.0%
Mid Maryland	487	69.0%	70.3%		571	69.3%	62.1%
Montgomery	1,092	70.4%	66.5%		1,089	68.4%	58.8%
Prince George's	1,092	56.1%	47.7%		1,152	58.0%	56.0%
Southern Maryland	238	70.8%	50.0%		257	66.2%	72.0%
Susquehanna	229	73.4%	66.7%		315	72.4%	58.0%
Upper Shore	100	68.0%	59.0%		131	66.7%	51.5%
Western Maryland	211	62.3%	60.9%		270	72.5%	57.6%

Table 35

Four-Year Graduation and Transfer Rate of Core and Non Core Curriculum Students who Enrolled as New Full-Time Freshmen at Maryland Community Colleges in Fall 1994 through 1997 (By Gender, Race and Major Jurisdiction).

	1994			1995			1996			1997		
	N	CORE	NONCORE	N	CORE	NONCORE	N	CORE	NONCORE	N	CORE	NONCORE
All Students	4,264	46.0%	33.7%	4,810	47.2%	36.0%	4,474	47.0%	36.9%	4,605	45.1%	39.9%
Gender												
Men	2,044	43.5%	30.5%	2,222	44.0%	32.9%	2,015	41.9%	36.7%	2,161	43.5%	37.5%
Women	2,220	47.8%	37.2%	2,588	49.9%	39.2%	2,459	50.6%	37.2%	2,442	46.4%	42.5%
Race												
African American	783	26.1%	17.7%	956	27.5%	19.9%	918	32.1%	19.8%	939	24.2%	21.4%
Asian	199	56.0%	44.5%	281	67.4%	55.6%	261	58.0%	59.9%	310	58.5%	49.9%
White	3,068	48.4%	39.2%	3,317	50.7%	41.5%	3,024	50.0%	42.8%	3,072	49.2%	46.9%
Other	214	51.0%	29.6%	256	39.5%	27.2%	271	41.7%	32.5%	284	44.2%	35.0%
Major Jurisdiction												
Anne Arundel	486	50.1%	42.6%	643	52.8%	44.9%	564	46.2%	39.4%	550	49.9%	41.6%
Baltimore City	365	33.5%	21.1%	400	33.0%	18.5%	354	38.4%	23.3%	329	32.7%	25.2%
Baltimore	627	41.0%	25.3%	594	42.6%	41.7%	507	38.7%	35.1%	595	37.8%	36.9%
Frederick	236	47.4%	42.6%	234	50.0%	31.7%	247	48.8%	49.4%	228	49.3%	48.6%
Lower Shore	46	42.0%	40.0%	71	46.9%	31.8%	65	34.9%	50.0%	68	47.8%	40.9%
Mid Maryland	365	50.4%	35.7%	361	45.7%	41.2%	335	51.4%	34.8%	351	49.2%	55.8%
Montgomery	574	43.0%	35.9%	712	47.3%	36.8%	684	51.7%	38.6%	730	45.3%	41.0%
Prince George's	574	40.4%	29.2%	642	42.0%	22.5%	626	43.4%	29.0%	640	34.4%	29.9%
Southern Maryland	268	51.3%	42.7%	303	58.1%	57.0%	260	52.6%	50.4%	284	60.3%	56.4%
Susquehanna	309	47.6%	33.9%	360	47.3%	31.4%	339	50.6%	42.4%	364	45.6%	43.8%
Upper Shore	108	48.6%	46.9%	101	57.2%	42.3%	110	50.8%	32.6%	100	60.7%	46.9%
Western Maryland	244	62.7%	41.4%	311	55.0%	52.6%	307	53.6%	49.0%	290	52.8%	42.0%