College Performance of New Maryland High School Graduates

Student Outcome and Achievement Report

October 2006

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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 12th 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. This information was supplied annually through 2002 at which time the Commission adopted a biennial schedule. All public two- and four-year campuses in Maryland and 14 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 2003-2004 school year who enrolled at a Maryland college or university during the 2004-2005 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 2000 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.

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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 since 1997-1998. 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, 35 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. In the latest year, 46 percent of Maryland public high school graduates enrolled at a college or university in the State, and 29 percent had taken the SAT or ACT (Table 1). In fall 2004, 37 percent of Maryland high school graduates who enrolled in college attended 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 2 to 13).

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 2004-2005 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 English and (by a slender margin) math courses in college and had higher grade point averages after their first year. The grades of core students in their first math course was 2.52 compared to 2.46 for non core students. 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 earlier years.

These findings are strengthened by analyses of course-taking patterns of high school students in Maryland and nationwide conducted by The College Board and ACT. The test scores of students who have chosen a more rigorous academic program in high school have been consistently higher than those of their counterparts.

Remediation

Considerably more non core students (41 percent) than core students (30 percent) needed remedial assistance in math. More non core students (21 percent) than core students (12 percent) required remediation in English (writing), and more non core students (24 percent) than core students (15 percent) needed help in reading.

Of the core students at the community colleges, nearly half (46 percent) required remedial help in math and 21 percent in English and reading. Of the non core community college students, 58 percent were assessed for remediation in math, 32 percent in English, and 34 percent in reading. Baltimore City Community College led the two-year institutions in the proportion of core and non core students requiring remedial assistance in all three areas.

Seventeen percent of the core students at public four-year campuses were assessed as needing math remediation, as were 10 percent in reading and 5 percent in English. Of the non core students, 22 percent required help in math, 12 percent in reading and 7 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.

Non core students from Baltimore City, Prince George's County and the Susquehanna region (Cecil and Harford Counties) had the highest remediation rates in math of the "service delivery areas" (major jurisdictions) in the state. These areas also were among the greatest in terms of math remediation for core students. The largest remediation rates among core and non core students in English were in Baltimore City, Western Maryland, and Prince George's County. Baltimore City and Prince George's County led all jurisdictions in the proportion of core and non core students needing remedial help in reading.

A greater percentage of African Americans than other races needed remedial help. Of the African-American students who completed a college preparatory curriculum, half required remediation in math, 34 percent in reading and 25 percent in English. A majority of non core African American students (63 percent) were assessed as needing remediation in math, nearly half (47 percent) in reading, and 38 percent in English.

Grade in First Math Course

Both core and non core students statewide earned an average grade of 2.5 (on a 4.0 scale) in their first math course in college. A slightly greater percentage of core students (80 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). Core students on the Upper Eastern Shore had the highest (2.7).

Women tended to earn noticeably higher math grades than did men, both among core and non core students. The math grades of African Americans (2.1 for core students and 2.0 for non core students) lagged behind those of other ethnicities. Nonetheless, a solid majority of African American students (70 percent of the core and 66 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 (87 percent) and non core students (83 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 in Baltimore City and Prince George's County (2.5). The highest English grades for core students were attained by those in Western Maryland schools (3.0).

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 (2.2 for core and 2.0 for non core) lagged behind those of other racial groups. Nonetheless, 81 percent of the African Americans in the core category achieved a grade of "C" or better, as did 76 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 (2.4 for core and 2.1 for non core) and Prince George's County (2.4 for core and 2.2 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 64 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 14, 15 and 16.

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

This is the ninth consecutive report in which student high school grade average emerged as the best predictor of first college English grade and college grade point average. High school grade average was the best indicator of performance in the first math course in eight of the nine studies.

Other good predictors of the first college math grade were the SAT math score, the average grade in high school math and social science courses, and enrollment in an honors physics course. The SAT verbal score, the average grade in high school English courses, 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 math and verbal scores, the average grades

in high school English and social science courses, and enrollment in a high school honors social science course.

Race was a significant factor in determining college performance on all three of the variables and gender on two of them (first English course and grade point average)--even after controlling for all of the other high school experiences and demographic factors. This is the first study in which gender has not emerged as a relevant predictor for all three variables. This report represents the fourth straight time in which race impacted all three 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 those of other ethnicities.

TRENDS IN COLLEGE PERFORMANCE OF HIGH SCHOOL GRADUATES

Tables 17 to 34 present trends during the past six reports 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 13 years, analyses on the basis of students' high school curricula have been conducted for only nine. In general, the figures show relative continuity in the performance of students.

Remediation

In each of the past six reports, a greater percentage of students was assessed for remediation in math than in English or reading. The percentage of core students needing remediation has risen steadily in the past four studies from 26 percent to 30 percent, and it now stands at the highest level since this breakdown was initiated.

This result appears to be due in part to the standardization of placement tests and cut-off scores at the two year institutions. Many community colleges took this opportunity to toughen their remediation standards. However, there also has been a consistent rise in the past three years (from 12 percent to 17 percent) in the proportion of core students attending public four-year campuses who required remedial assistance in mathematics. Approximately 40 percent of the non core students at all institutions in five of the six years 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 49 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 59 percent in math, 31 to 41 percent in English, and 31 to 38 percent in reading. However, the proportion of core community college students who needed remedial assistance in English has dropped steadily in the past five reports from 29 percent to 21 percent.

Moreover, the percentage of core community college students who required remedial help in reading has fallen in the past three studies from 25 percent to 21 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, those from Western Maryland schools have been consistently above other areas of the State in terms of being assessed for remedial help in English and math, and students from 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 all six years, a majority of non core African American students required assistance in math and more than 40 percent needed it in reading. More than 40 percent of the non core African American students needed remedial help in English in four of the six 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, although the gap in 2004-2005 was the narrowest on record. 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 other ethnic groups 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 reports. A greater percentage of core than non core students in each year achieved this grade. Core students who attended Western Maryland and Baltimore County high schools have consistently been above the statewide average in the proportion who earned a "C" or better in the first English class. In comparison, both core and non core students in Montgomery County have continually trailed the 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 reports. However, the proportion of both core and non core African Americans to earn a "C" or better noticeably trailed those of whites and Asians in each year.

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 and non core students from Western Maryland, Mid Maryland (Carroll and Howard Counties) 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 and Prince George's County have continually lagged behind their Maryland counterparts.

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 64 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. With just one exception, 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 nine years. No other item has come close to its predictive power, although several showed strength in eight 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 nine years. The SAT math score was an important predictor of students' first math grade in each of the nine years and of grade point average in eight years. In eight 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 eight 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. Three 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. A 2006 study confirmed that the "academic intensity" of a student's high school course of study had greater impact than any other pre-college factor in determining baccalaureate completion. Nearly all (95 percent) students who entered college with a particularly rigorous curriculum earned a bachelor's degree and 41 percent achieved a graduate or professional degree.

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 an additional limitation to those noted earlier in this report: 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.

Table 35 shows trends in the transfer and graduation rates of particular core and non core students at Maryland public two- and four-year campuses. The first set of statistics in this table displays the percentage of first-time, full-time freshmen at a Maryland community college who enrolled directly from high school in fall 1994 to 2000 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 second set of figures presents 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 to 1999 and who had earned a bachelor's degree from any public campus in the State within six years of matriculation. Data for the 1998, 1999 and 2000 cohorts include Maryland residents who enrolled originally at a public institution but subsequently transferred to a Maryland state-aided independent college or university. 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.

Tables 36 contains a breakdown of the graduation and transfer rates for the most recent cohorts of students from the public two- and four-year institutions on the basis of gender, race and major jurisdiction.

The results demonstrate that Maryland high school students who took a solid academic core of courses were consistently more likely to attain a community college degree or certificate or transfer to a four-year institution than were those who did not. 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 cohorts.

A less clear picture emerged with respect to the public four-year institutions. Between 1994 and 1997, almost two-thirds of the core students who attended a public four-year institution in each cohort had attained a bachelor's degree within six years, outpacing their non core counterparts. However, the difference between the two groups has steadily narrowed in the past three cohorts. This finding suggests that these colleges and universities are overcoming the high school preparation gap with programs and activities they have adopted to enhance student persistence. Many of these actions are described in the annual institutional performance accountability reports of the four-year campuses.

With a few exceptions in particular cohorts, 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. However, unlike the pattern for all students at the public four-year campuses, the six-year graduation rates of African Americans who completed a college preparatory curriculum in high school have consistently been higher than those of their non core counterparts in each of the cohorts.

Table 1

Number of 2003-2004 Maryland Public High School Graduates and the Number and Percentage of Those Who Enrolled at a Maryland College or University - in 2004-2005

	H. S. Grads	Enrolled in College		Enrolled in College and Took SAT or ACT	
	N	N	% H.S. Grads	N	% H.S. Grads
Anne Arundel	4,774	2,044	42.8%	1,173	24.6%
Baltimore City	3,779*	1,501	39.7%	1,080	28.6%
Baltimore	7,485	3,347	44.7%	2,194	29.3%
Frederick	2,610	1,161	44.5%	754	28.9%
Lower Shore	1,528	658	43.1%	474	31.0%
Somerset	163	65	39.9%	46	28.2%
Wicomico	887	371	41.8%	260	29.3%
Worcester	478	222	46.4%	168	35.1%
Mid Maryland	5,254	2,572	49.0%	1,804	34.3%
Carroll	2,070	883	42.7%	585	28.3%
Howard	3,184	1,692	53.1%	1,219	38.3%
Montgomery	9,108	4,842	53.2%	3,064	33.6%
Prince George's	7,663	3,012	39.3%	1,942	25.3%
Southern Maryland	3,747	1,701	45.4%	972	25.9%
Calvert	1,131	506	44.7%	316	27.9%
Charles	1,723	781	45.3%	421	24.4%
St. Mary's	893	414	46.4%	235	26.3%
Susquehanna	3,663	1,731	47.3%	1,047	28.6%
Cecil	956	331	34.6%	188	19.7%
Harford	2,707	1,400	51.7%	859	31.7%
Upper Shore	1,538	634	41.2%	445	28.9%
Caroline	325	126	38.8%	96	29.5%
Dorchester	304	124	40.8%	94	30.9%
Kent	166	55	33.1%	38	22.9%
Queen Anne's	458	207	45.2%	133	29.0%
Talbot	285	122	42.8%	84	29.5%
Western Maryland	2,387	1,065	44.6%	724	30.3%
Allegany	697	365	52.4%	228	32.7%
Garrett	281	100	35.6%	66	23.5%
Washington	1,409	600	42.6%	430	30.5%
ALL MARYLAND**	53,536	24,748	46.2%	15,725	29.4%

* Graduates from Edison schools are not available.
**Note: Total includes unknown county

Table 2

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	32%	39%	3%	6%	6%	11%
Baltimore City	37%	60%	19%	40%	25%	46%
Baltimore	18%	20%	12%	16%	14%	20%
Frederick	26%	38%	7%	13%	10%	16%
Lower Shore	39%	45%	16%	24%	10%	16%
Somerset	70%	64%	33%	21%	21%	7%
Wicomico	40%	41%	15%	23%	8%	18%
Worcester	28%	43%	10%	25%	10%	18%
Mid Maryland	25%	36%	5%	13%	9%	18%
Carroll	32%	44%	3%	12%	11%	20%
Howard	20%	32%	6%	14%	7%	17%
Montgomery	30%	41%	13%	20%	11%	17%
Prince George's	44%	54%	18%	26%	31%	43%
Southern Maryland	15%	18%	8%	12%	8%	11%
Calvert	12%	11%	7%	10%	7%	6%
Charles	22%	26%	11%	14%	11%	17%
St. Mary's	9%	16%	6%	12%	6%	7%
Susquehanna	40%	49%	14%	21%	16%	21%
Cecil	43%	44%	12%	14%	7%	17%
Harford	39%	50%	14%	22%	17%	22%
Upper Shore	27%	47%	16%	24%	14%	30%
Caroline	25%	46%	22%	29%	16%	32%
Dorchester	28%	50%	15%	31%	22%	33%
Kent	13%	39%	9%	17%	9%	17%
Queen Anne's	31%	43%	13%	15%	9%	23%
Talbot	28%	55%	17%	28%	13%	40%
Western Maryland	31%	46%	19%	33%	11%	20%
Allegany	35%	52%	7%	19%	1%	11%
Garrett	20%	38%	6%	19%	2%	0%
Washington	31%	45%	28%	39%	18%	26%
ALL MARYLAND	30%	41%	12%	21%	15%	24%

Table 3

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%	80%	2.6	2.6
Baltimore City	77%	71%	2.4	2.1
Baltimore	81%	84%	2.5	2.6
Frederick	83%	81%	2.6	2.6
Lower Shore	81%	74%	2.5	2.5
Somerset	63%	67%	1.8	2.3
Wicomico	85%	73%	2.7	2.5
Worcester	76%	81%	2.4	2.7
Mid Maryland	82%	78%	2.6	2.4
Carroll	85%	83%	2.7	2.5
Howard	81%	75%	2.5	2.4
Montgomery	80%	79%	2.6	2.5
Prince George's	76%	71%	2.3	2.2
Southern Maryland	78%	78%	2.4	2.4
Calvert	79%	86%	2.4	2.6
Charles	79%	73%	2.5	2.3
St. Mary's	76%	75%	2.4	2.3
Susquehanna	84%	85%	2.6	2.6
Cecil	86%	70%	2.7	2.0
Harford	84%	87%	2.6	2.7
Upper Shore	86%	73%	2.7	2.4
Caroline	91%	67%	2.9	2.2
Dorchester	92%	75%	3.1	2.8
Kent	92%	50%	2.8	1.4
Queen Anne's	73%	76%	2.3	2.4
Talbot	89%	82%	2.7	2.6
Western Maryland	82%	84%	2.5	2.5
Allegany	85%	87%	2.6	2.4
Garrett	86%	100%	2.8	3.0
Washington	79%	81%	2.4	2.5
ALL MARYLAND	80%	78%	2.5	2.5

Table 4

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	89%	85%	2.8	2.6
Baltimore City	85%	79%	2.5	2.3
Baltimore	89%	86%	2.8	2.7
Frederick	91%	83%	2.8	2.5
Lower Shore	85%	78%	2.6	2.3
Somerset	75%	72%	2.2	2.1
Wicomico	82%	76%	2.7	2.5
Worcester	94%	83%	2.8	2.4
Mid Maryland	90%	85%	2.8	2.6
Carroll	89%	85%	2.8	2.6
Howard	90%	85%	2.8	2.6
Montgomery	85%	82%	2.7	2.5
Prince George's	85%	80%	2.5	2.3
Southern Maryland	88%	84%	2.7	2.6
Calvert	89%	91%	2.8	2.8
Charles	84%	81%	2.6	2.5
St. Mary's	94%	81%	2.8	2.4
Susquehanna	86%	84%	2.6	2.5
Cecil	76%	72%	2.4	2.1
Harford	88%	87%	2.7	2.6
Upper Shore	87%	81%	2.7	2.5
Caroline	90%	88%	2.9	2.5
Dorchester	88%	87%	2.7	2.8
Kent	82%	64%	2.3	1.7
Queen Anne's	80%	75%	2.4	2.4
Talbot	92%	91%	2.9	2.9
Western Maryland	93%	85%	3.0	2.7
Allegany	94%	86%	3.1	2.6
Garrett	84%	89%	2.6	2.7
Washington	93%	85%	3.0	2.7
ALL MARYLAND	87%	83%	2.7	2.5

Table 5

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

Table 6

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	55%	77%	14%	31%	4%	18%
Anne Arundel	55%	59%	3%	7%	6%	12%
Baltimore City	85%	96%	48%	76%	62%	83%
Baltimore County	22%	30%	26%	36%	25%	39%
Carroll	68%	81%	5%	17%	22%	36%
Cecil	66%	62%	20%	23%	12%	23%
Chesapeake	43%	64%	38%	40%	29%	52%
Frederick	44%	54%	11%	19%	19%	24%
Garrett	49%	73%	18%	55%	3%	18%
Hagerstown	41%	54%	42%	53%	26%	32%
Harford	67%	75%	23%	36%	29%	33%
Howard	51%	62%	17%	28%	17%	28%
Montgomery	51%	65%	24%	34%	18%	28%
Prince George's	49%	59%	21%	28%	47%	56%
Southern Maryland	18%	20%	15%	19%	9%	12%
Wor-Wic	79%	74%	32%	37%	11%	21%
All Community Colleges	46%	58%	21%	32%	21%	34%
University System of Maryland						
Bowie	88%	91%	35%	44%	100%	99%
Coppin	76%	85%	-	-	-	-
Frostburg	12%	13%	0%	0%	0%	0%
Towson	23%	20%	*	*	10%	9%
UMBC	2%	1%	*	0%	5%	7%
UMCP	4%	4%	-	-	-	-
UMES	49%	52%	18%	21%	19%	16%
All University System of MD	16%	20%	3%	4%	8%	10%
Morgan	**38%**	45%	36%	43%	36%	44%
All Public Four-Year	17%	22%	5%	7%	10%	12%
Independents						
Capitol College	17%	14%	0%	0%	-	-
Columbia Union	53%	71%	21%	7%	-	-
Hood	37%	28%	10%	11%	-	-
Loyola	0%	0%	-	-	-	-
MD Institute College of Art	-	-	9%	15%	-	-
McDaniel	10%	25%	10%	20%	-	-
Mount St. Mary's	30%	32%	-	-	-	-
Sojourner Douglass	100%	40%	100%	40%	100%	40%
Villa Julie	0%	0%	0%	1%	13%	24%
All Independents	10%	11%	3%	5%	4%	7%
All Campuses	30%	41%	12%	21%	15%	24%

*Less than 0.5 percent

Notes: Salisbury,St. Mary's, College of Notre Dame, Goucher, Johns Hopkins, St. John's, and Washington College do not have remedial programs. UMCP, Coppin, Loyola, and Mount St. Mary's do not offer remediation in English and reading; Maryland Institute College of Art does not offer these programs in math and reading; Capitol, Columbia Union, and Hood do not offer these in reading.

Table 7
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	76%	84%	2.3	2.6
Anne Arundel	76%	82%	2.3	2.6
Baltimore City	72%	81%	2.5	2.2
Baltimore County	79%	75%	2.4	2.3
Carroll	77%	74%	2.2	2.1
Cecil	80%	36%	2.4	1.0
Chesapeake	86%	68%	2.5	2.1
Frederick	81%	82%	2.6	2.7
Garrett	92%	100%	2.9	3.3
Hagerstown	74%	75%	2.3	2.5
Harford	85%	89%	2.6	2.7
Howard	66%	57%	2.0	1.7
Montgomery	75%	71%	2.4	2.3
Prince George's	74%	76%	2.3	2.2
Southern Maryland	74%	80%	2.3	2.4
Wor-Wic	92%	82%	3.4	2.5
All Community Colleges	**77%**	**76%**	**2.4**	**2.3**
University of Maryland				
Bowie	81%	42%	2.6	1.5
Coppin	75%	50%	2.2	1.8
Frostburg	78%	67%	2.3	1.9
Salisbury	75%	80%	2.4	2.5
Towson	84%	89%	2.6	2.9
UMBC	81%	83%	2.6	2.7
UMCP	85%	80%	2.7	2.6
UMES	60%	66%	1.8	1.9
All University of Maryland	**82%**	**80%**	**2.6**	**2.6**
Morgan	69%	66%	2.1	1.9
St. Mary's	96%	95%	3.2	2.9
All Public Four-Year	**81%**	**79%**	**2.6**	**2.5**
Independents				
Capitol College	90%	67%	2.8	2.0
Columbia Union	91%	50%	2.7	2.0
Goucher	87%	100%	2.4	2.9
Hood	85%	100%	3.1	2.6
Loyola	98%	86%	3.2	2.9
McDaniel	97%	86%	3.1	2.5
Mount St. Mary's	90%	86%	2.9	2.8
Notre Dame	96%	86%	2.7	2.7
St. John's	100%	80%	2.7	3.0
Villa Julie	85%	84%	2.8	2.7
Washington College	90%	83%	3.0	2.8
All Independents	**89%**	**86%**	**2.8**	**2.7**
All Campuses	**80%**	**78%**	**2.5**	**2.5**

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.
Soujourner-Douglass provided grades for only one student.

Table 8
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	94%	87%	3.0	2.7
Anne Arundel	83%	77%	2.5	2.4
Baltimore City	73%	75%	2.2	2.2
Baltimore County	85%	77%	2.7	2.3
Carroll	80%	76%	2.4	2.3
Cecil	62%	67%	1.9	1.9
Chesapeake	83%	79%	2.6	2.5
Frederick	83%	77%	2.5	2.3
Garrett	76%	100%	2.1	2.7
Hagerstown	92%	86%	3.1	2.8
Harford	81%	83%	2.4	2.4
Howard	75%	75%	2.3	2.3
Montgomery	81%	73%	2.5	2.2
Prince George's	79%	74%	2.5	2.3
Southern Maryland	85%	81%	2.6	2.5
Wor-Wic	78%	70%	2.2	1.9
All Community Colleges	**82%**	**77%**	**2.5**	**2.3**
University System of Maryland				
Bowie	85%	82%	2.4	2.2
Coppin	84%	81%	2.4	2.1
Frostburg	93%	87%	2.7	2.4
Salisbury	92%	89%	2.8	2.5
Towson	96%	97%	3.3	3.2
UMBC	93%	95%	3.0	3.0
UMCP	91%	89%	2.7	2.7
UMES	81%	83%	2.4	2.3
All USM	**92%**	**90%**	**2.8**	**2.7**
Morgan	80%	76%	2.4	2.3
St. Mary's	99%	96%	3.6	3.4
All Public Four-Year	**91%**	**88%**	**2.8**	**2.7**
Independents				
Capitol College	58%	14%	1.8	0.7
Columbia Union	90%	90%	2.9	2.8
Goucher	98%	100%	3.0	3.3
Hood	92%	87%	2.7	2.7
Loyola	100%	96%	3.3	3.2
Maryland Institute College of Art	100%	90%	3.5	3.1
McDaniel	90%	93%	2.8	2.8
Mount St. Mary's	98%	91%	3.1	2.8
Notre Dame	84%	100%	2.6	3.2
Sojourner-Douglass	100%	100%	4.0	3.5
Villa Julie	94%	90%	2.6	2.6
Washington College	100%	89%	3.4	2.8
All Independents	**94%**	**91%**	**2.9**	**2.8**
All Campuses	**87%**	**83%**	**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.

Table 9
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	2.6	2.5
Baltimore City	2.2	2.0
Baltimore County	2.4	2.1
Carroll	2.5	2.3
Cecil	2.3	2.3
Chesapeake	2.3	2.1
Frederick	2.4	2.3
Garrett	2.5	2.9
Hagerstown	2.7	2.6
Harford	2.4	2.2
Howard	2.3	2.1
Montgomery	2.5	2.3
Prince George's	2.3	2.0
Southern Maryland	2.5	2.3
Wor-Wic	2.4	2.1
All Community Colleges	**2.4**	**2.2**
University of Maryland		
Bowie	2.7	2.4
Coppin	2.1	1.9
Frostburg	2.6	2.3
Salisbury	2.7	2.6
Towson	2.9	2.9
UMBC	2.7	2.7
UMCP	3.0	2.9
UMES	2.1	2.1
All University of Maryland	**2.8**	**2.7**
Morgan	2.1	2.0
St. Mary's	3.2	3.0
All Public Four-Year	**2.7**	**2.6**
Independents		
Capitol College	2.2	1.7
Columbia Union	2.6	2.7
Goucher	3.4	3.1
Hood	2.8	2.8
Johns Hopkins	3.0	3.0
Loyola	3.2	3.0
Maryland Institute College of Art	3.4	3.2
McDaniel	3.0	2.8
Mount St. Mary's	2.9	2.6
Notre Dame	2.9	3.1
Sojourner-Douglass	2.5	2.0
Villa Julie	2.8	2.6
Washington College	3.1	2.7
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 10

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%	11%	21%	12%	20%
Women	34%	47%	13%	22%	16%	27%
Race						
African-American	50%	63%	25%	38%	34%	47%
Asian	17%	23%	9%	15%	10%	19%
White	23%	32%	7%	12%	8%	13%
Other	38%	52%	19%	27%	18%	26%

Table 11

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	77%	76%	2.4	2.4
Women	84%	81%	2.7	2.6
Race				
African-American	70%	66%	2.1	2.0
Asian	84%	84%	2.7	2.7
White	83%	80%	2.6	2.5
Other	76%	79%	2.4	2.5

Table 12
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	84%	79%	2.5	2.3
Women	90%	87%	2.8	2.7
Race				
African-American	81%	76%	2.4	2.2
Asian	88%	86%	2.8	2.6
White	90%	86%	2.8	2.6
Other	82%	78%	2.5	2.3

Table 13
Cumulative Grade Point Average After First Year of
Core and Non-Core Curriculum Students
(By Gender and Race)

	Core	Non-Core
Gender		
Men	2.5	2.3
Women	2.7	2.5
Race		
African-American	2.2	2.0
Asian	2.8	2.6
White	2.8	2.6
Other	2.5	2.4

Table 14

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

Step	Independent Variable	R	R^2	R^2 Change	T	Sig T	Correlation
1	High School GPA	.2795	.0781	.0781	14.406	.0000	.2795
2	SAT Math Score	.3460	.1197	.0416	9.660	.0000	.2668
3	Avg.Grade-Math	.3575	.1278	.0081	2.539	.0111	.1807
4	Avg.Grade-Soc Science	.3604	.1299	.0020	3.170	.0015	.1630
5	Race	.3639	.1324	.0026	3.930	.0001	.1537
6	Honors-Physics	.3678	.1353	.0028	3.904	.0001	.1379

Table 15

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

Step	Independent Variable	R	R^2	R^2 Change	T	Sig T	Correlation
1	High School GPA	.2182	.0476	.0476	9.507	.0000	.2182
2	SAT Verbal Score	.2593	.0672	.0196	7.161	.0000	.1855
3	Gender	.3029	.0917	.0245	10.730	.0000	.1581
4	Avg. Grade-English	.3151	.0993	.0076	6.548	.0000	.1484
5	Race	.3259	.1062	.0069	6.115	.0000	.1474
6	Honors-English	.3296	.1086	.0024	3.557	.0004	.1152

Table 16

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

Step	Independent Variable	R	R^2	R^2 Change	T	Sig T	Correlation
1	High School GPA	.3461	.1198	.1198	15.945	.0000	.3461
2	SAT Verbal Score	.4212	.1774	.0577	7.363	.0000	.3118
3	SAT Math Score	.4286	.1837	.0063	7.163	.0000	.2867
4	Race	.4420	.1954	.0117	7.744	.0000	.2277
5	Avg.Grade-English	.4561	.2080	.0126	3.725	.0002	.2102
6	Avg. Grade-Soc. Science	.4563	.2082	.0002	2.406	.0162	.1925
7	Honors-Soc. Science	.4635	.2149	.0067	5.351	.0000	.1892
8	Gender	.4900	.2401	.0252	12.421	.0000	.1429

Table 17

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	22%	33%	22%	31%	19%	28%	24%	31%	31%	41%	32%	39%
Baltimore City	27%	54%	39%	63%	37%	53%	31%	54%	35%	59%	37%	60%
Baltimore	21%	26%	22%	35%	18%	22%	19%	22%	18%	21%	18%	20%
Frederick	30%	42%	32%	47%	24%	42%	26%	43%	26%	38%	26%	38%
Lower Shore	22%	30%	26%	40%	26%	41%	29%	41%	37%	55%	39%	45%
Mid Maryland	20%	31%	24%	34%	25%	34%	26%	34%	23%	35%	25%	36%
Montgomery	16%	31%	25%	39%	27%	41%	25%	35%	26%	38%	30%	41%
Prince George's	30%	40%	31%	41%	34%	45%	38%	47%	43%	51%	44%	54%
Southern Maryland	11%	16%	14%	21%	6%	14%	10%	17%	13%	20%	15%	18%
Susquehanna	28%	39%	28%	38%	33%	48%	34%	45%	31%	42%	40%	49%
Upper Shore	24%	37%	19%	43%	32%	45%	38%	45%	35%	47%	27%	47%
Western Maryland	30%	48%	41%	60%	34%	45%	37%	47%	27%	37%	31%	46%
ALL MARYLAND	23%	36%	27%	41%	26%	38%	27%	38%	28%	40%	30%	41%

Table 18

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	10%	16%	9%	15%	7%	15%	11%	16%	5%	5%	3%	6%
Baltimore City	18%	41%	28%	50%	29%	53%	25%	50%	20%	44%	19%	40%
Baltimore	12%	22%	19%	32%	17%	24%	17%	23%	12%	18%	12%	16%
Frederick	17%	21%	13%	20%	11%	24%	11%	17%	9%	15%	7%	13%
Lower Shore	16%	25%	19%	27%	10%	21%	13%	21%	14%	28%	16%	24%
Mid Maryland	9%	21%	13%	22%	11%	18%	8%	15%	8%	14%	5%	13%
Montgomery	5%	12%	14%	22%	15%	25%	12%	18%	19%	27%	13%	20%
Prince George's	19%	28%	20%	32%	17%	27%	22%	30%	21%	25%	18%	26%
Southern Maryland	9%	17%	8%	16%	10%	14%	10%	20%	10%	17%	8%	12%
Susquehanna	9%	17%	11%	21%	14%	20%	11%	22%	13%	20%	14%	21%
Upper Shore	7%	15%	11%	21%	11%	18%	14%	27%	11%	24%	16%	24%
Western Maryland	16%	28%	20%	41%	18%	20%	19%	26%	21%	32%	19%	33%
ALL MARYLAND	12%	22%	16%	28%	15%	25%	15%	25%	14%	22%	12%	21%

Table 19

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	15%	21%	15%	18%	9%	15%	8%	11%	6%	5%	6%	11%
Baltimore City	20%	44%	28%	53%	26%	53%	30%	55%	28%	48%	25%	46%
Baltimore	14%	23%	19%	29%	15%	21%	18%	23%	13%	19%	14%	20%
Frederick	10%	9%	14%	18%	9%	22%	11%	18%	10%	13%	10%	16%
Lower Shore	9%	20%	17%	28%	11%	20%	13%	16%	14%	19%	10%	16%
Mid Maryland	10%	16%	11%	18%	9%	15%	15%	21%	10%	16%	9%	18%
Montgomery	12%	20%	12%	20%	11%	21%	10%	16%	13%	19%	11%	17%
Prince George's	18%	29%	19%	32%	19%	33%	27%	36%	31%	37%	31%	43%
Southern Maryland	25%	39%	22%	37%	7%	10%	11%	22%	9%	13%	8%	11%
Susquehanna	6%	7%	6%	10%	7%	13%	6%	12%	5%	11%	16%	21%
Upper Shore	7%	13%	16%	25%	11%	17%	15%	26%	13%	26%	14%	30%
Western Maryland	11%	18%	15%	25%	11%	16%	10%	14%	9%	14%	11%	20%
ALL MARYLAND	14%	24%	16%	28%	13%	24%	16%	25%	15%	21%	15%	24%

Table 20

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	81%	74%	78%	75%	80%	71%	82%	78%	85%	79%	82%	80%
Baltimore City	79%	73%	77%	75%	77%	75%	77%	73%	80%	65%	77%	71%
Baltimore	80%	72%	80%	80%	80%	78%	79%	81%	84%	78%	81%	84%
Frederick	80%	84%	82%	78%	84%	84%	83%	78%	88%	83%	83%	81%
Lower Shore	79%	91%	78%	73%	77%	77%	82%	89%	84%	77%	81%	74%
Mid Maryland	81%	74%	83%	80%	83%	77%	83%	79%	82%	81%	82%	78%
Montgomery	78%	70%	78%	72%	76%	67%	82%	78%	81%	78%	80%	79%
Prince George's	73%	68%	76%	70%	70%	62%	78%	74%	75%	72%	76%	71%
Southern Maryland	77%	74%	80%	75%	79%	72%	78%	74%	84%	80%	78%	78%
Susquehanna	82%	84%	82%	77%	83%	77%	82%	77%	84%	76%	84%	85%
Upper Shore	86%	80%	86%	77%	72%	69%	82%	84%	80%	80%	86%	73%
Western Maryland	84%	82%	83%	79%	87%	87%	89%	87%	89%	87%	82%	84%
ALL MARYLAND	79%	74%	79%	75%	78%	71%	81%	78%	82%	78%	80%	76%

Table 21

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	87%	87%	88%	88%	90%	91%	90%	90%	88%	87%	89%	85%
Baltimore City	86%	77%	85%	84%	84%	78%	87%	79%	87%	80%	85%	79%
Baltimore	88%	86%	90%	86%	90%	89%	89%	87%	90%	87%	89%	86%
Frederick	91%	85%	86%	87%	89%	91%	90%	90%	91%	85%	91%	83%
Lower Shore	88%	83%	85%	70%	92%	84%	87%	80%	89%	82%	85%	78%
Mid Maryland	89%	85%	89%	81%	90%	89%	89%	84%	91%	87%	90%	85%
Montgomery	84%	77%	83%	77%	86%	82%	87%	84%	88%	84%	85%	82%
Prince George's	85%	80%	85%	81%	85%	81%	89%	86%	87%	86%	85%	80%
Southern Maryland	85%	86%	89%	87%	89%	89%	89%	79%	91%	82%	88%	84%
Susquehanna	89%	87%	90%	86%	91%	82%	89%	86%	91%	87%	86%	84%
Upper Shore	90%	81%	91%	78%	88%	84%	85%	80%	95%	88%	87%	81%
Western Maryland	92%	90%	93%	86%	90%	87%	93%	84%	93%	90%	93%	85%
ALL MARYLAND	87%	83%	87%	83%	88%	85%	88%	85%	89%	85%	87%	83%

Table 22

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	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	2.4	2.6	2.4	2.7	2.6	2.8	2.6	2.7	2.6
Baltimore City	2.4	2.1	2.4	2.1	2.3	2.1	2.3	2.0	2.4	2.1	2.4	2.1
Baltimore	2.5	2.4	2.5	2.4	2.5	2.4	2.6	2.4	2.6	2.5	2.6	2.5
Frederick	2.7	2.7	2.7	2.4	2.8	2.4	2.7	2.5	2.8	2.5	2.7	2.5
Lower Shore	2.6	2.3	2.4	2.2	2.5	2.3	2.5	2.3	2.6	2.3	2.5	2.4
Mid Maryland	2.6	2.4	2.6	2.4	2.7	2.5	2.7	2.5	2.8	2.5	2.8	2.5
Montgomery	2.6	2.2	2.6	2.3	2.6	2.3	2.6	2.4	2.7	2.5	2.7	2.5
Prince George's	2.3	2.2	2.4	2.2	2.3	2.2	2.4	2.1	2.4	2.2	2.4	2.2
Southern Maryland	2.6	2.3	2.6	2.4	2.7	2.4	2.7	2.4	2.7	2.5	2.7	2.4
Susquehanna	2.5	2.4	2.6	2.4	2.6	2.3	2.7	2.4	2.7	2.4	2.6	2.4
Upper Shore	2.6	2.3	2.5	2.2	2.5	2.3	2.4	2.3	2.6	2.4	2.6	2.3
Western Maryland	2.6	2.4	2.8	2.4	2.7	2.5	2.8	2.5	2.8	2.6	2.8	2.6
ALL MARYLAND	2.5	2.3	2.5	2.3	2.6	2.3	2.6	2.4	2.7	2.4	2.6	2.4

Table 23

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	38%	49%	43%	55%	46%	56%	46%	54%	49%	59%	46%	58%
Public Four-Year	11%	18%	13%	21%	13%	17%	12%	17%	14%	16%	17%	22%
Independent	5%	8%	8%	10%	7%	8%	3%	4%	4%	7%	10%	11%
ALL CAMPUSES	23%	36%	27%	41%	26%	38%	27%	38%	28%	40%	30%	41%

Table 24

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	21%	32%	29%	41%	27%	38%	25%	36%	25%	34%	21%	32%
Public Four-Year	5%	9%	7%	11%	7%	10%	8%	9%	7%	8%	5%	7%
Independent	1%	1%	1%	3%	1%	2%	2%	3%	3%	4%	3%	5%
ALL CAMPUSES	12%	22%	16%	28%	15%	25%	15%	25%	14%	22%	12%	21%

Table 25

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	25%	35%	27%	38%	21%	35%	25%	34%	23%	31%	21%	34%
Public Four-Year	6%	9%	8%	13%	7%	11%	9%	11%	9%	11%	10%	12%
Independent	1%	2%	6%	9%	6%	5%	4%	7%	*	*	4%	7%
ALL CAMPUSES	14%	24%	16%	28%	13%	24%	16%	25%	15%	21%	15%	24%

* Less than 0.5 percent

Table 26

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	72%	68%	72%	70%	72%	64%	75%	74%	79%	74%	77%	76%
Public Four-Year	81%	77%	83%	77%	80%	75%	83%	80%	83%	79%	81%	79%
Independent	91%	87%	90%	88%	90%	85%	85%	86%	91%	88%	89%	86%
ALL CAMPUSES	79%	74%	79%	75%	78%	71%	81%	78%	82%	78%	80%	78%

Table 27

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	80%	76%	79%	75%	81%	79%	82%	79%	84%	79%	82%	77%
Public Four-Year	91%	89%	92%	90%	91%	90%	92%	90%	92%	90%	91%	88%
Independent	95%	91%	95%	95%	96%	95%	95%	93%	95%	93%	94%	91%
ALL CAMPUSES	87%	83%	87%	83%	88%	85%	88%	85%	89%	85%	87%	83%

Table 28

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	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	2.4	2.2	2.5	2.2	2.4	2.2
Public Four-Year	2.7	2.5	2.7	2.5	2.7	2.6	2.7	2.6	2.8	2.6	2.7	2.6
Independent	2.9	2.7	2.9	2.8	2.9	2.8	2.9	2.8	3.0	2.8	2.9	2.8
ALL CAMPUSES	2.5	2.3	2.5	2.3	2.6	2.3	2.6	2.4	2.7	2.4	2.5	2.4

Table 29

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	20%	31%	23%	36%	23%	33%	24%	34%	24%	37%	24%	34%
Women	25%	40%	29%	46%	29%	43%	29%	41%	31%	43%	34%	47%
Race												
African-American	38%	53%	44%	61%	41%	55%	43%	56%	48%	62%	50%	63%
Asian	10%	18%	14%	24%	16%	21%	14%	20%	17%	18%	17%	23%
White	19%	30%	22%	33%	22%	31%	23%	31%	22%	32%	23%	32%
Other	25%	40%	30%	42%	33%	48%	32%	38%	40%	50%	38%	52%

Table 30

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	13%	21%	17%	27%	15%	25%	15%	25%	14%	23%	11%	21%
Women	11%	23%	15%	30%	15%	26%	15%	24%	14%	22%	13%	22%
Race												
African-American	24%	38%	32%	48%	28%	44%	30%	45%	27%	41%	25%	38%
Asian	7%	16%	10%	18%	10%	18%	10%	18%	14%	19%	9%	15%
White	8%	15%	11%	19%	11%	16%	10%	15%	9%	15%	7%	12%
Other	11%	24%	19%	25%	21%	30%	16%	27%	23%	30%	19%	27%

Table 31

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	14%	22%	15%	24%	12%	21%	14%	21%	13%	20%	12%	20%
Women	14%	26%	17%	31%	14%	27%	17%	27%	16%	23%	16%	27%
Race												
African-American	25%	42%	32%	48%	27%	44%	34%	50%	35%	48%	34%	47%
Asian	14%	19%	16%	24%	14%	23%	14%	21%	14%	18%	10%	19%
White	10%	15%	11%	18%	8%	13%	9%	13%	7%	10%	8%	13%
Other	15%	29%	18%	24%	15%	29%	15%	25%	18%	27%	18%	26%

Table 32

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	75%	70%	75%	72%	73%	68%	76%	74%	78%	73%	77%	76%
Women	82%	78%	83%	79%	83%	75%	85%	83%	85%	83%	84%	81%
Race												
African-American	71%	67%	73%	71%	67%	61%	73%	68%	72%	66%	70%	66%
Asian	81%	76%	85%	79%	81%	79%	85%	81%	81%	79%	84%	84%
White	81%	76%	81%	76%	82%	75%	83%	81%	86%	81%	83%	80%
Other	77%	67%	75%	72%	73%	63%	79%	75%	79%	84%	76%	79%

Table 33

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

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	83%	79%	84%	79%	84%	82%	85%	81%	86%	82%	84%	79%
Women	90%	86%	90%	86%	91%	88%	91%	88%	92%	88%	90%	87%
Race												
African-American	82%	76%	83%	79%	83%	80%	85%	80%	85%	81%	81%	76%
Asian	88%	83%	86%	81%	87%	87%	88%	87%	89%	84%	88%	86%
White	89%	86%	89%	85%	90%	87%	90%	86%	92%	87%	90%	86%
Other	85%	74%	84%	73%	83%	83%	83%	79%	83%	85%	82%	78%

Table 34

Trends in Cumulative Grade Point Average After First Year Among Core and Non-Core Curriculum Students (By Gender and Race)

	1997-1998		1998-1999		1999-2000		2000-2001		2002-2003		2004-2005	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	2.4	2.2	2.4	2.2	2.4	2.2	2.4	2.2	2.5	2.3	2.5	2.3
Women	2.6	2.4	2.6	2.4	2.7	2.4	2.7	2.5	2.8	2.6	2.7	2.5
Race												
African-American	2.2	2.0	2.2	2.0	2.2	2.1	2.2	2.0	2.3	2.0	2.2	2.0
Asian	2.6	2.4	2.6	2.5	2.7	2.5	2.7	2.6	2.8	2.6	2.8	2.6
White	2.6	2.4	2.6	2.4	2.7	2.5	2.7	2.5	2.8	2.5	2.8	2.6
Other	2.5	2.2	2.5	2.2	2.4	2.2	2.5	2.3	2.5	2.4	2.5	2.4

Table 35

Trends in Long-Term Outcomes of Core and Non Core Students Who Enrolled as New Full-Time Freshmen
Maryland Community Colleges and Public Four Year Campuses

	Four-Year Graduation and Transfer Rate at Community Colleges			Six-Year Graduation Rates at Public Four-Year Campuses		
	N	CORE	NON CORE	N	CORE	NON CORE
1994	4,264	46.0%	33.7%	5,580	64.0%	57.1%
1995	4,810	47.2%	36.0%	6,229	64.4%	57.1%
1996	4,474	47.0%	36.9%	6,642	65.0%	56.8%
1997	4,605	45.1%	39.9%	6,694	66.1%	62.0%
1998	4,813	44.1%	36.9%	7,123	67.0%	65.1%
1999	4,589	45.4%	35.8%	6,956	66.1%	66.5%
2000	5,133	48.6%	39.4%	-	-	-

Table 36

Long-Term Outcomes of Core and NonCore Students Who Enrolled as New Full-Time Freshman at Maryland Community Colleges and Public Four-Year Campuses.

	Four-Year Graduation and Transfer Rate-Community Colleges (2000 Cohorts)			Six-Year Graduation Rates at Public Four-Year Campuses (1999 Cohorts)		
	N	CORE	NONCORE	N	CORE	NONCORE
Gender						
Men	2,293	46.3%	40.7%	3,280	60.8%	62.7%
Women	2,838	50.2%	38.4%	3,676	70.5%	70.1%
Race						
African-American	1,131	32.0%	20.6%	1,827	53.2%	51.7%
Asian	324	53.0%	54.5%	661	75.6%	70.9%
White	3,316	53.2%	46.6%	4,040	71.0%	72.0%
Other	362	46.8%	33.9%	428	67.5%	65.4%
Major Jurisdiction						
Anne Arundel	601	54.3%	50.0%	566	70.7%	73.7%
Baltimore City	408	35.3%	15.3%	628	52.0%	45.9%
Baltimore	707	45.1%	32.3%	1,141	64.1%	66.2%
Frederick	262	57.4%	51.2%	219	70.7%	69.3%
Lower Shore	105	53.1%	36.6%	209	64.9%	69.7%
Mid Maryland	403	49.4%	43.9%	656	73.1%	70.8%
Montgomery	753	51.5%	42.4%	1,308	76.6%	73.0%
Prince George's	626	53.3%	40.4%	1,182	58.9%	59.4%
Southern Maryland	280	50.3%	64.4%	281	73.3%	71.9%
Susquehanna	484	50.3%	43.7%	335	66.6%	71.3%
Upper Shore	128	47.6%	47.9%	153	65.5%	66.4%
Western Maryland	324	54.4%	47.6%	273	63.5%	64.1%