

# COLLEGE PERFORMANCE OF NEW MARYLAND HIGH SCHOOL GRADUATES

STUDENT OUTCOME AND ACHIEVEMENT REPORT

**MARCH 2005** 

## MARYLAND HIGHER EDUCATION COMMISSION

John J. Oliver, Jr., Chairman

Donald J. Slowinski, Sr., Vice Chairman

Joann A. Boughman

**Anne Osborn Emery** 

Alicia Coro Hoffman

Ilona Modly Hogan

Kevin M. O'Keefe

Emmett Paige, Jr.

Sherman L. Ragland, II

Justin M. Towles

Mario F. VillaSanta

Calvin W. Burnett Secretary of Higher Education

Robert L. Ehrlich, Jr. Governor

Michael S. Steele Lt. Governor

#### 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 11th 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 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 2001-2002 school year who enrolled at a Maryland college or university during the 2002-2003 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 1999 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.

Principal Author: Michael J. Keller

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 1996-1997. 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, one-third 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, 45 percent of Maryland public high school graduates enrolled at a college or university in the State, and 30 percent had taken the SAT or ACT (Table 1). Approximately 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 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 2002-2003 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 earlier years.

These findings are strengthened by ACT analyses, which show that core students in Maryland consistently earn higher composite test scores than have their non core counterparts. ACT uses a somewhat different definition of "core" than the one adopted in this study.

#### Remediation

Considerably more non core students (40 percent) than core students (28 percent) needed remedial assistance in math. More non core students (22 percent) than core students (14 percent) required remediation in English (writing), and more non core students (21 percent) than core students (15 percent) needed help in reading.

Of the core students at the community colleges, nearly half (49 percent) required remedial help in math, 25 percent in English, and 23 percent in reading. Of the non core community college students, 59 percent were assessed for remediation in math, 34 percent in English, and 31 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 English and reading and was the highest in the percentage of non core students needing help in math.

Fourteen percent of the core students at public four-year campuses were assessed as needing math remediation, as were 9 percent in reading and 7 percent in English. Of the non core students, 16 percent required help in math, 11 percent in reading and 8 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, Prince George's County and the Eastern Shore had the highest remediation rates in math of the "service delivery areas" (major jurisdictions) in the state. The greatest remediation rates among core students in English were in Prince George's County, Western Maryland, Baltimore City and Montgomery County; these areas also were among the highest in the State in terms of English remediation for non core students. 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, 48 percent required remediation in math, 35 percent in reading and 27 percent in English. A majority of non core African American students (62 percent) were assessed for remediation in math, nearly half (48 percent) were in reading, and 41 percent in English.

#### **Grade in First Math Course**

Core students statewide earned an average grade of 2.6 (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 (82 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). Frederick County 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 2.0 for non core students) lagged behind those of other ethnicities. Nonetheless, a solid majority of African American students (72 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 2.8 in their initial English course in college, compared to 2.6 for non core students. A substantial majority of both core (89 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 in Prince George's County (2.6). The highest English grades for core students were attained by those in Western Maryland schools (3.1).

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 whites and Asians 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 81 percent of the non core students.

## **Grade Point Average**

Statewide, core students earned a cumulative grade point average in college of 2.7, 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 (2.3 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 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 SAT Math Score

High School Grade Point Average

Whether Student was Enrolled in Honors Math Course

Race Gender

Average Grade in High School Math Courses

First English Grade High School Grade Point Average

SAT Verbal Score

Gender Race

Whether Student Was Enrolled in Honors English Course

Average Grade in High School English Courses

Grade Point Average High School Grade Point Average

SAT Math Score SAT Verbal Score

Race Gender

Whether Student was Enrolled in Honors Chemistry Course

Average Grade in High School English Courses

Average Grade in High School Natural Science Courses

This is the eighth 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 had been the best indicator of performance in the first math course in the previous seven studies, but the SAT math score topped it in the current analysis.

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

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 eighth consecutive year in which gender emerged as a relevant predictor for all three variables and the third 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 whites and Asians.

#### 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 11 years, analyses on the basis of students' high school curricula have been conducted for only eight. 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. About one-fourth of the core students in all of these years and approximately 40 percent of the non core students in five of the six years required remedial help in math.

A consistently high percentage of <u>core</u> 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. The percentage of core community college students who required remediation in math has risen steadily in the past five reports, and it now stands at the highest level since this breakdown was initiated. This result appears to be due to the standardization of placement tests and cut-off scores at the two-year institutions. Many two-year institutions took this opportunity to toughen their remediation standards. However, the proportion of core community college students who needed remedial assistance in English dropped in the past four reports 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 Susquehanna (Cecil and Harford Counties) schools have regularly exceeded most other jurisdictions in terms of a need for math remediation and those from Western Maryland schools have been consistently above other areas of the State in terms of being assessed for remedial help in English.

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 these students required assistance in math and at least 40 percent needed it in reading. Forty percent or more of the non core African American students needed remedial help in English in five 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. 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 reports. A greater percentage of core than non core students in each year achieved this grade. Core students who attended Western Maryland 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 the past four reports.

#### **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 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. 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 eight years. No other item has come close to its predictive power, although several showed strength in seven 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 eight years. The SAT math score was an important predictor of students' first math grade in each of the eight years (and was the top explanatory variable in this year's report) and of grade point average in seven years. In seven 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 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 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 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 1997 and who had earned a bachelor's degree from any public campus in the State within six years of matriculation. Tables 36 displays the percentage of first-time, full-time freshmen at a Maryland community college who enrolled directly from high school in fall 1994 to 1999 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 consistently 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. 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. 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 cohorts.

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.

Table 1
Number of 2001-2002 Maryland Public High School Graduates and the Number and Percentage of Those Who Enrolled at a Maryland College or University in 2002-2003 (By Jurisdiction)

					llege and Took
	H. S. Grads	Enrolle	d in College	SAT	or ACT
	N	N	% H.S. Grads	N	% H.S. Grads
Anne Arundel	4,466	2,160	48.4%	1,295	29.0%
Baltimore City	4,529*	1,327	29.3%	973	21.5%
Baltimore	6,917	2,913	42.1%	1,986	28.7%
Frederick	2,479	1,147	46.3%	752	30.3%
Lower Shore	1,445	692	47.9%	486	33.6%
Somerset	167	73	43.7%	46	27.5%
Wicomico	792	385	48.6%	263	33.2%
Worcester	486	234	48.1%	177	36.4%
Mid Maryland	4,955	2,431	49.1%	1,783	36.0%
Carroll	'	919	47.4%	644	33.2%
Howard	3,015	1,512	50.1%	1,139	37.8%
Montgomery	8,373	4,615	55.1%	3,163	37.8%
Prince George's	7,661	2,966	38.7%	1,984	25.9%
Southern Maryland	3,441	1,496	43.5%	949	27.6%
Calvert	1,084	467	43.1%	348	32.1%
Charles	1,506	668	44.4%	390	25.9%
St. Mary's	851	361	42.4%	211	24.8%
Susquehanna	3,333	1,565	47.0%	996	29.9%
Cecil	898	339	37.8%	178	19.8%
Harford	2,435	1,226	50.3%	818	33.5%
Upper Shore	1,497	604	40.3%	416	27.8%
Caroline	344	122	35.5%	86	25.0%
Dorchester	290	110	37.9%	79	27.2%
Kent	186	67	36.0%	48	25.8%
Queen Anne's	396	180	45.5%	117	29.5%
Talbot	281	125	44.5%	86	30.6%
Western Maryland	2,295	1,051	45.8%	697	30.4%
Allegany	743	387	52.1%	255	34.3%
Garrett	293	129	44.0%	78	26.6%
Washington	1,259	535	42.5%	364	28.9%
ALL MARYLAND**	51,391	23,347	45.4%	15,496	30.2%

<sup>\*</sup> Graduates from Edison schools are not available.

<sup>\*\*</sup>Note: Total includes unknown county

Table 2
Percent of Core and Non-Core Curriculum Students Needing Remediation in College (By Jurisdiction)

	Ma	ath	Eng	glish	Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	31%	41%	5%	5%	6%	5%
Baltimore City	35%	59%	20%	44%	28%	48%
Baltimore	18%	21%	12%	18%	13%	19%
Frederick	26%	38%	9%	15%	10%	13%
Lower Shore	37%	55%	14%	28%	14%	19%
Somerset	45%	50%	13%	23%	13%	37%
Wicomico	36%	54%	14%	27%	14%	14%
Worcester	38%	56%	14%	30%	14%	19%
Mid Maryland	23%	35%	8%	14%	10%	16%
Carroll	30%	46%	9%	13%	15%	19%
Howard	19%	29%	7%	15%	8%	15%
Montgomery	26%	38%	19%	27%	13%	19%
Prince George's	43%	51%	21%	25%	31%	37%
Southern Maryland	13%	20%	10%	17%	9%	13%
Calvert	15%	18%	8%	11%	7%	10%
Charles	13%	22%	12%	26%	13%	22%
St. Mary's	11%	21%	10%	15%	6%	7%
Susquehanna	31%	42%	13%	20%	5%	11%
Cecil	27%	35%	15%	12%	10%	6%
Harford	32%	44%	12%	21%	5%	12%
Upper Shore	35%	47%	11%	24%	13%	26%
Caroline	36%	70%	9%	30%	15%	26%
Dorchester	29%	58%	16%	31%	13%	40%
Kent	46%	35%	21%	20%	29%	20%
Queen Anne's	31%	41%	7%	20%	9%	23%
Talbot	35%	37%	10%	20%	8%	20%
Western Maryland	27%	37%	21%	32%	9%	14%
Allegany	24%	35%	8%	20%	3%	8%
Garrett	26%	25%	10%	15%	3%	8%
Washington	29%	42%	32%	44%	15%	19%
ALL MARYLAND	28%	40%	14%	22%	15%	21%

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

	% With 'C	or Better	Average	e Grade
	Core	Non-Core	Core	Non-Core
Anne Arundel	85%	79%	2.7	2.4
Baltimore City	80%	65%	2.5	1.9
Baltimore	84%	78%	2.7	2.5
Frederick	88%	83%	2.9	2.7
Lower Shore	84%	77%	2.6	2.4
Somerset	73%	100%	2.2	3.2
Wicomico	84%	76%	2.7	2.3
Worcester	88%	71%	2.7	2.2
Mid Maryland	82%	81%	2.7	2.5
Carroll	80%	81%	2.7	2.5
Howard	83%	81%	2.7	2.5
Montgomery	81%	78%	2.6	2.5
Prince George's	75%	72%	2.3	2.1
Southern Maryland	84%	80%	2.6	2.4
Calvert	87%	82%	2.8	2.6
Charles	81%	75%	2.6	2.2
St. Mary's	85%	82%	2.6	2.4
Susquehanna	84%	76%	2.6	2.4
Cecil	79%	74%	2.6	2.4
Harford	85%	77%	2.7	2.4
Upper Shore	80%	80%	2.6	2.5
Caroline	80%	80%	2.8	3.0
Dorchester	95%	80%	2.7	2.5
Kent	44%	71%	1.7	1.9
Queen Anne's	90%	81%	2.7	2.4
Talbot	69%	81%	2.4	2.6
Western Maryland	89%	87%	2.8	2.7
Allegany	89%	88%	2.7	2.8
Garrett	100%	93%	3.2	3.1
Washington	87%	86%	2.8	2.6
ALL MARYLAND	82%	78%	2.6	2.4

Table 4
Performance in First College English Course of
Core and Non-Core Curriculum Students
(By Jurisdiction)

	% With 'C	or Better	Average	e Grade
	Core	Non-Core	Core	Non-Core
Anne Arundei	88%	87%	2.7	2.6
Baltimore City	87%	80%	2.7	2.3
Baltimore	90%	87%	2.8	2.6
Frederick	91%	85%	2.9	2.6
Lower Shore	89%	82%	2.7	2.4
Somerset	92%	91%	2.9	2.9
Wicomico	87%	84%	2.7	2.5
Worcester	92%	77%	2.7	2.2
Mid Maryland	91%	87%	2.8	2.7
Carroll	92%	86%	2.8	2.6
Howard	90%	88%	2.9	2.7
Montgomery	88%	84%	2.7	2.5
Prince George's	87%	86%	2.6	2.5
Southern Maryland	91%	82%	2.9	2.5
Calvert	94%	85%	3.1	2.7
Charles	87%	80%	2.7	2.3
St. Mary's	95%	81%	2.9	2.5
Susquehanna	91%	87%	2.9	2.7
Cecil	91%	92%	2.8	2.8
Harford	91%	86%	2.9	2.7
Upper Shore	95%	88%	2.9	2.6
Caroline	94%	79%	3.0	2.2
Dorchester	96%	92%	3.0	2.6
Kent	79%	91%	2.4	2.6
Queen Anne's	100%	87%	2.9	2.7
Talbot	97%	89%	2.8	2.5
Western Maryland	93%	90%	3.1	2.8
Allegany	92%	90%	3.1	2.8
Garrett	77%	79%	2.1	2.3
Washington	96%	91%	3.2	2.9
ALL MARYLAND	89%	85%	2.8	2.6

Table 5
Cumulative Grade Point Average After First Year of
Core and Non-Core Curriculum Students
(By Jurisdiction)

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

Table 6
Percent of Core and Non-Core Curriculum Students Needing Remediation in College
(By Institution)

	М	ath	End	glish	Rea	ading
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	17 F. P			(Alexander)	a service	
Allegany	52%	71%	21%	53%	8%	21%
Anne Arundel	52%	64%	5%	6%	6%	6%
Baltimore City	80%	93%	67%	83%	61%	80%
Baltimore County	30%	37%	25%	37%	30%	37%
Carroll	71%	80%	15%	19%	35%	35%
Cecil	59%	52%	28%	19%	17%	10%
Chesapeake	67%	77%	26%	44%	30%	47%
Frederick	46%	57%	15%	19%	18%	21%
Garrett	47%	50%	14%	23%	4%	14%
Hagerstown	40%	51%	43%	59%	20%	28%
Harford	54%	64%	19%	27%	6%	14%
Howard	51%	62%	18%	31%	18%	31%
Montgomery	55%	59%	40%	43%	26%	30%
Prince George's	51%	58%	22%	28%	46%	53%
Southern Maryland	19%	24%	18%	26%	13%	18%
Wor-Wic	84%	89%	33%	43%	18%	20%
All Community Colleges	49%	59%	25%	34%	23%	31%
University System of Maryland			14.0		CALL TO THE STATE OF	
Bowie	85%	87%	17%	27%	29%	37%
Coppin	74%	70%	-	-	64%	70%
Frostburg	11%	7%	-	-	-	-
Towson	17%	15%	12%	12%	8%	6%
UMBC	2%	1%	*	*	5%	5%
UMCP	3%	5%	-	-	-	-
UMES	33%	45%	9%	10%	30%	34%
All University System of MD	11%	13%	3%	4%	6%	8%
Morgan	50%	54%	46%	52%	52%	53%
All Public Four-Year	14%	16%	7%	8%	9%	.11%
Independents					All the state of the	
Capitol College	46%	40%	9%	20%	-	-
Columbia Union	62%	72%	31%	39%	-	-
Loyola	0%	0%	-	-	-	-
MD Institute College of Art	-	-	-	-	-	-
McDaniel	-	-	-	-	-	-
Mount St. Mary's	20%	28%	-	-	-	- [
Villia Julie	0%	0%	0%	0%	2%	1%
All Independents	4%	7%	3%	4%	dation which is all	t english in the
All Campuses	28%	40%	14%	22%	15%	21%

<sup>\*</sup>Less than 0.5 percent

Notes: Salisbury, St. Mary's, College of Notre Dame, Goucher, Johns Hopkins, and Washington College do not have remedial programs. UMCP, Frostburg, Loyola, and Mount St. Mary's do not offer remediation in English and reading; Maryland Institute College of Art and McDaniel do not offer these programs in math and reading; Coppin does not provide these in English; and Capitol and Columbia Union 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		a gara-d'agenti			
Allegany	94%	84%	2.7	2.5	
Anne Arundel	83%	70%	2.5	2.0	
Baltimore City	69%	77%	2.1	2.4	
Baltimore County	73%	65%	2.2	2.1	
Carroll	65%	67%	2.1	2.1	
Cecil	53%	60%	1.5	2.1	
Chesapeake	77%	94%	2.7	3.2	
Frederick	83%	75%	2.7	2.4	
Garrett	86%	88%	2.6	2.8	
Hagerstown	86%	84%	2.8	2.5	
Harford	83%	76%	2.6	2.3	
Howard	65%	65%	2.0	1.8	
Montgomery	77%	75%	2.3	2.4	
Prince George's	82%	81%	2.6	2.4	
Southern Maryland	80%	74%	2.5	2.1	
Wor-Wic	91%	75%	2.9	2.7	
All Community Colleges	79%	74%	2.4	2.3	
University of Maryland			(A)		
Bowie	66%	71%	2.3	2.1	
Coppin	91%	68%	3.0	2.4	
Frostburg	80%	80%	2.2	2.2	
Salisbury	83%	80%	2.6	2.5	
Towson	92%	83%	2.9	2.6	
UMBC	82%	77%	2.8	2.4	
UMCP	83%	82%	2.7	2.6	
UMES	74%	73%	2.3	2.3	
All University of Maryland	83%	80%	2.7	2.5	
Morgan	71%	63%	2.1	1.8	
St. Mary's	92%	96%	2.9	3.0	
All Public Four-Year	83%	79%	2.6	2.4	
Independents			Harris Territoria		
Capitol College	56%	50%	1.9	1.8	
Columbia Union	82%	60%	2.6	2.0	
Goucher	87%	80%	2.8	2.4	
Loyola	95%	94%	3.3	3.1	
Mount St. Mary's	96%	94%	3.0	3.1	
Notre Dame	85%	93%	2.7	3.3	
Villa Julie	93%	88%	3.0	2.7	
Washington College	89%	83%	3.2	3.0	
All Independents	91%	88%	3.0	2.8	
All Campuses	82%	78%	2.6	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. McDaniel did not provide data about performance in the first math course.

Table 8
Performance in First College English Course of
Core and Non-Core Curriculum Students
(By Institution)

				e Grade
	Core	Non-Core	Core	Non-Core
Community Colleges		a o dikabbahan a sas	1	Political Report
Allegany	87%	84%	3.0	2.7
Anne Arundel	81%	80%	2.5	2.4
Baltimore City	64%	61%	1.9	1.7
Baltimore County	81%	77%	2.5	2.3
Carroll	83%	80%	2.5	2.5
Cecil	85%	91%	2.6	2.6
Chesapeake	91%	82%	2.8	2.4
Frederick	85%	75%	2.5	2.2
Garrett	60%	60%	1.6	1.6
Hagerstown	95%	92%	3.2	3.0
Harford	90%	81%	2.9	2.5
Howard	79%	81%	2.5	2.4
Montgomery	80%	76%	2.5	2.3
Prince George's	95%	94%	2.8	2.8
Southern Maryland	87%	77%	2.6	2.2
Wor-Wic	84%	75%	2.4	2.2
All Community Colleges	84%	79%	2.6	2.4
University System of Maryland	# 4		Leanie	
Bowie	80%	82%	2.2	2.2
Coppin	84%	85%	2.3	2.2
Frostburg	93%	87%	2.7	2.5
Salisbury	96%	95%	2.9	2.8
Towson	96%	95%	3.2	3.1
UMBC	93%	87%	3.1	2.8
UMCP	93%	93%	2.8	2.7
UMES	91%	87%	2.9	2.6
AII USM	93%	91%	2.9	2.7
Morgan	81%	76%	2.4	2.1
St. Mary's	94%	97%	3.3	3.5
All Public Four-Year	92%	90%	2.9	2.7
Independents	0.407	700/	4.0	
Capitol College	64%	70%	1.9	1.6
Columbia Union	88%	79%	2.5	2.4
Goucher	97%	94%	3.0	2.9
Loyola  Manufand Institute College of Art	98%	96% 79%	3.3	3.2
Maryland Institute College of Art McDaniel	100% 98%	79% 94%	3.3 2.9	2.6 2.7
Mount St. Mary's	96% 95%	94%	3.0	2.7
Notre Dame	91%	88%	2.9	2.9
Villa Julie	96%	94%	2.9	2.8
Washington College	95%	100%	3.3	2.8
All Independents	95%	93%	3.0	2.8
All Campuses	89%	85%	2.8	2.6
Notes: Johns Honkins does not i	2311.13.14.76.76			

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	all order to the	Berger wilder eine Erste begeben der State der
Allegany	2.6	2.2
Anne Arundel	2.6	2.4
Baltimore City	2.0	2.1
Baltimore County	2.3	2.1
Carroll	2.5	2.3
Cecil	2.6	2.4
Chesapeake	2.4	2.2
Frederick	2.6	2.2
Garrett	2.4	2.2
Hagerstown	2.8	2.5
Harford	2.5	2.2
Howard	2.4	2.1
Montgomery	2.5	2.3
Prince George's	2.3	2.2
Southern Maryland	2.5	2.2
Wor-Wic	2.4	2.2
All Community Colleges	2.5	2.2
University of Maryland		Month of the second sec
Bowie	2.5	2.3
Coppin	2.2	2.2
Frostburg	2.6	2.5
Salisbury	2.8	2.7
Towson	2.9	2.8
UMBC	2.8	2.5
UMCP	3.0	2.9
UMES All University of Maryland	2.6 <b>2.8</b>	2.4 <b>2.7</b>
Morgan	2.2	<b>2.0</b>
St. Mary's	3.0	3.0
All Public Four-Year	2.8	2.6
Independents	<b>4.9</b>	
Capitol College	2.4	1.8
Columbia Union	2.6	2.2
Goucher	3.0	2.8
Johns Hopkins	3.0	3.1
Loyola	3.2	3.0
Maryland Institute College of Art	3.4	2.9
McDaniel	3.0	2.7
Mount St. Mary's	2.7	2.7
Notre Dame	2.8	2.8
Villa Julie	2.9	2.8
Washington College	3.2	2.9
All Independents	3.0	2.8
All Campuses	2.7	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		Rea	ding
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender	Control of Agriculture	Vy Seet		g visite	gg Aleja OK	
Men	24%	37%	14%	23%	13%	20%
Women	31%	43%	14%	22%	16%	23%
Race			der og viller og skalen. 10. saket 1. saket 1			.*
African-American	48%	62%	27%	41%	35%	48%
Asian	17%	18%	14%	19%	14%	18%
White	22%	32%	9%	15%	7%	10%
Other	40%	50%	23%	30%	18%	27%

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	a and a second		A THE	
Men	78%	73%	2.4	2.2
Women	85%	83%	2.7	2.6
Race	The second	Parameter Company		
African-American	72%	66%	2.2	2.0
Asian	81%	79%	2.6	2.5
White	86%	81%	2.7	2.5
Other	79%	84%	2.5	2.4

Table 12
Performance in First English Course of
Core and Non-Core Curriculum Students
(By Gender and Race)

	% with 'C' or Better		Average	e Grade
	Core	Non-Core	Core	Non-Core
Gender	godinakonorra BODES	5-4000	\$1000 - 313 - 1	
Men	86%	82%	2.6	2.4
Women	92%	88%	2.9	2.7
Race		a de de la capacidad de la cap	を表現の を表現している。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できまれる。 できままる。 できまる。 できる。 でる。 できる。 できる。 できる。 できる。 できる。 できる。 できる。 できる。 できる。 できる。 でる。 でる。 でる。 でる。 でる。 でる。 でる。	
African-American	85%	81%	2.5	2.3
Asian	89%	84%	2.8	2.6
White	92%	87%	2.9	2.7
Other	83%	85%	2.5	2.5

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

	Core	Non-Core
Gender		1. 不理解:
Men	2.5	2.3
Women	2.8	2.6
Race		
Race African-American	2.3	2.0
2 1880 CONTACT   100 C	2.3 2.8	2.0 2.6
African-American		1

Table 14
Results of Multiple Regression Analysis Using Grade in First Math Course as Dependent Variable

Step	Independent Variable	R	R²	R <sup>2</sup> Change	T	Sig T	Correlation
1	SAT Math Score	.2439	.0595	.0595	9.611	.0000	.2439
2	High School GPA	.2862	.0819	.0225	11.022	.0000	.1828
3	Honors-Math	.2904	.0843	.0024	4.752	.0000	.1774
4	SAT Verbal Score	.2906	.0844	.0001	-1.235	.2169	.1700
5	Race	.3016	.0910	.0065	5.293	.0000	.1677
6	Gender	.3473	.1206	.0296	12.628	.0000	.1278
7	Average Grade-Math	.3650	.1332	.0126	8.742	.0000	.1211

Table 15
Results of Multiple Regression Analysis Using Grade in First English Course as Dependent Variable

Step	Independent Variable	R	R²	R <sup>2</sup> Change	Т	Sig T	Correlation
1	High School GPA	.1537	.0236	.0236	10.181	.0000	.1537
2	SAT Verbal Score	.2272	.0516	.0280	6.916	.0000	.1845
3	Gender	.2847	.0811	.0294	11.825	.0000	.1648
4	Race	.3013	.0908	.0097	6.686	.0000	.1531
5	Honors-English	.3035	.0921	.0013	4.091	.0000	.1386
6	Average Grade-English	.3279	.1075	.0154	9.527	.0000	.1186

**Table 16**Results of Multiple Regression Analysis Using Grade Point Average as Dependent Variable

Step	Independent Variable	R	R²	R <sup>2</sup> Change	Т	Sig T	Correlation
1	High School GPA	.2330	.0543	.0543	16.185	.0000	.2330
2	SAT Math Score	.3258	.1062	.0519	7.509	.0000	.2583
3	SAT Verbal Score	.3449	.1190	.0128	4.694	.0000	.2585
4	Race	.3637	.1322	.0133	8.178	.0000	.2204
5	Gender	.4323	.1869	.0546	17.283	.0000	.1956
6	Honors-Chemistry	.4339	.1883	.0014	4.728	.0000	.1709
7	Average Grade-English	.4569	.2088	.0205	5.689	.0000	.1434
8	Average Grade-Science	.4593	.2110	.0022	3.813	.0001	.1283

Table 17
Trends in Core and Non Core Curriculum Students Needing Math Remediation in College (By Major Jurisdiction)

	1996	6-1997	1997	'-1998	1998	3-1999	199	99-2000	2000	0-2001	200	2-2003
	Core	Non-Core										
Anne Arundel	23%	38%	22%	33%	22%	31%	19%	28%	24%	31%	31%	41%
Baltimore City	34%	56%	27%	54%	39%	63%	37%	53%	31%	54%	35%	59%
Baltimore	21%	31%	21%	26%	22%	35%	18%	22%	19%	22%	18%	21%
Frederick	38%	58%	30%	42%	32%	47%	24%	42%	26%	43%	26%	38%
Lower Shore	6%	21%	22%	30%	26%	40%	26%	41%	29%	41%	37%	55%
Mid Maryland	15%	29%	20%	31%	24%	34%	25%	34%	26%	34%	23%	35%
Montgomery	**	**	16%	31%	25%	39%	27%	41%	25%	35%	26%	38%
Prince George's	28%	43%	30%	40%	31%	41%	34%	45%	38%	47%	43%	51%
Southern Maryland	10%	17%	11%	16%	14%	21%	6%	14%	10%	17%	13%	20%
Susquehanna	30%	45%	28%	39%	28%	38%	33%	48%	34%	45%	31%	42%
Upper Shore	23%	39%	24%	37%	19%	43%	32%	45%	38%	45%	35%	47%
Western Maryland	33%	53%	30%	48%	41%	60%	34%	45%	37%	47%	27%	37%
ALL MARYLAND	25%	40%	23%	36%	27%	41%	26%	38%	27%	38%	28%	40%

<sup>\*\*</sup>Figures from Montgomery County are not meaningful because of incorrect data supplied by Montgomery College.

Table 18
Trends in Core and Non-Core Curriculum Students Needing English Remediation in College (By Jurisdiction)

	1996	-1997	199	7-1998	1998	-1999	199	9-2000	2000	)-2001	2002	2-2003
	Core	Non-Core										
Anne Arundel	9%	17%	10%	16%	9%	15%	7%	15%	11%	16%	5%	5%
Baltimore City	22%	45%	18%	41%	28%	50%	29%	53%	25%	50%	20%	44%
Baltimore	14%	27%	12%	22%	19%	32%	17%	24%	17%	23%	12%	18%
Frederick	22%	33%	17%	21%	13%	20%	11%	24%	11%	17%	9%	15%
Lower Shore	10%	25%	16%	25%	19%	27%	10%	21%	13%	21%	14%	28%
Mid Maryland	7%	17%	9%	21%	13%	22%	11%	18%	8%	15%	8%	14%
Montgomery	5%	13%	5%	12%	14%	22%	15%	25%	12%	18%	19%	27%
Prince George's	16%	27%	19%	28%	20%	32%	17%	27%	22%	30%	21%	25%
Southern Maryland	10%	16%	9%	17%	8%	16%	10%	14%	10%	20%	10%	17%
Susquehanna	9%	13%	9%	17%	11%	21%	14%	20%	11%	22%	13%	20%
Upper Shore	9%	18%	7%	15%	11%	21%	11%	18%	14%	27%	11%	24%
Western Maryland	14%	28%	16%	28%	20%	41%	18%	20%	19%	26%	21%	32%
ALL MARYLAND	12%	24%	12%	22%	16%	28%	15%	25%	15%	25%	14%	22%

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

	1996	-1997	1997	-1998	1998-	-1999	1999-	-2000	2000	)-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	15%	23%	15%	21%	15%	18%	9%	15%	8%	11%	6%	5%
Baltimore City	20%	42%	20%	44%	28%	53%	26%	53%	30%	55%	28%	48%
Baltimore	14%	25%	14%	23%	19%	29%	15%	21%	18%	23%	13%	19%
Frederick	11%	18%	10%	9%	14%	18%	9%	22%	11%	18%	10%	13%
Lower Shore	13%	23%	9%	20%	17%	28%	11%	20%	13%	16%	14%	19%
Mid Maryland	6%	15%	10%	16%	11%	18%	9%	15%	15%	21%	10%	16%
Montgomery	11%	21%	12%	20%	12%	20%	11%	21%	10%	16%	13%	19%
Prince George's	16%	27%	18%	29%	19%	32%	19%	33%	27%	36%	31%	37%
Southern Maryland	25%	38%	25%	39%	22%	37%	7%	10%	11%	22%	9%	13%
Susquehanna	5%	10%	6%	7%	6%	10%	7%	13%	6%	12%	5%	11%
Upper Shore	9%	18%	7%	13%	16%	25%	11%	17%	15%	26%	13%	26%
Western Maryland	14%	21%	11%	18%	15%	25%	11%	16%	10%	14%	9%	14%
ALL MARYLAND	14%	25%	14%	24%	-5 16% ·	28%			16%	25%	15%	21%

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)

	1996	-1997	1997	-1998	1998-	1999	1999-	2000	2000	-2001	2002	-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	75%	74%	81%	74%	78%	75%	80%	71%	82%	78%	85%	79%
Baltimore City	77%	73%	79%	73%	77%	75%	77%	75%	77%	73%	80%	65%
Baltimore	78%	78%	80%	72%	80%	80%	80%	78%	79%	81%	84%	78%
Frederick	80%	76%	80%	84%	82%	78%	84%	84%	83%	78%	88%	83%
Lower Shore	80%	72%	79%	91%	78%	73%	77%	77%	82%	89%	84%	77%
Mid Maryland	80%	79%	81%	74%	83%	80%	83%	77%	83%	79%	82%	81%
Montgomery	78%	70%	78%	70%	78%	72%	76%	67%	82%	78%	81%	78%
Prince George's	75%	72%	73%	68%	76%	70%	70%	62%	78%	74%	75%	72%
Southern Maryland	78%	72%	77%	74%	80%	75%	79%	72%	78%	74%	84%	80%
Susquehanna	79%	79%	82%	84%	82%	77%	83%	77%	82%	77%	84%	76%
Upper Shore	83%	81%	86%	80%	86%	77%	72%	69%	82%	84%	80%	80%
Western Maryland	82%	78%	84%	82%	83%	79%	87%	87%	89%	87%	89%	87%
ALL MARYLAND	78%	74%	79%	74%	79%	75%	78%	71%	81%	78%	82%	78%

Table 20

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)

	1996	-1997	1997	'-1998	1998-	1999	1999	-2000	2000-2001		2002-2003	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	87%	85%	87%	87%	88%	88%	90%	91%	90%	90%	88%	87%
Baltimore City	87%	85%	86%	77%	85%	84%	84%	78%	87%	79%	87%	80%
Baltimore	87%	83%	88%	86%	90%	86%	90%	89%	89%	87%	90%	87%
Frederick	91%	81%	91%	85%	86%	87%	89%	91%	90%	90%	91%	85%
Lower Shore	93%	89%	88%	83%	85%	70%	92%	84%	87%	80%	89%	82%
Mid Maryland	89%	85%	89%	85%	89%	81%	90%	89%	89%	84%	91%	87%
Montgomery	84%	78%	84%	77%	83%	77%	86%	82%	87%	84%	88%	84%
Prince George's	88%	81%	85%	80%	85%	81%	85%	81%	89%	86%	87%	86%
Southern Maryland	90%	84%	85%	86%	89%	87%	89%	89%	89%	79%	91%	82%
Susquehanna	88%	85%	89%	87%	90%	86%	91%	82%	89%	86%	91%	87%
Upper Shore	90%	87%	90%	81%	91%	78%	88%	84%	85%	80%	95%	88%
Western Maryland	90%	90%	92%	90%	93%	86%	90%	87%	93%	84%	93%	90%
ALL MARYLAND	88%	83%	87%	83%	87%	83%	<b>88%</b>	85%	88%	85%	89%	85%

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

Table 22

	1996	5-1997	1997	-1998	1998	-1999	1999	-2000	2000	-2001	2002	-2003
	Core	Non-Core										
Anne Arundel	2.5	2.3	2.6	2.3	2.5	2.4	2.6	2.4	2.7	2.6	2.8	2.6
Baltimore City	2.3	2.0	2.4	2.1	2.4	2.1	2.3	2.1	2.3	2.0	2.4	2.1
Baltimore	2.4	2.3	2.5	2.4	2.5	2.4	2.5	2.4	2.6	2.4	2.6	2.5
Frederick	2.6	2.3	2.7	2.7	2.7	2.4	2.8	2.4	2.7	2.5	2.8	2.5
Lower Shore	2.4	2.3	2.6	2.3	2.4	2.2	2.5	2.3	2.5	2.3	2.6	2.3
Mid Maryland	2.6	2.3	2.6	2.4	2.6	2.4	2.7	2.5	2.7	2.5	2.8	2.5
Montgomery	2.5	2.2	2.6	2.2	2.6	2.3	2.6	2.3	2.6	2.4	2.7	2.5
Prince George's	2.4	2.2	2.3	2.2	2.4	2.2	2.3	2.2	2.4	2.1	2.4	2.2
Southern Maryland	2.6	2.3	2.6	2.3	2.6	2.4	2.7	2.4	2.7	2.4	2.7	2.5
Susquehanna	2.5	2.3	2.5	2.4	2.6	2.4	2.6	2.3	2.7	2.4	2.7	2.4
Upper Shore	2.5	2.3	2.6	2.3	2.5	2.2	2.5	2.3	2.4	2.3	2.6	2.4
Western Maryland	2.7	2.3	2.6	2.4	2.8	2.4	2.7	2.5	2.8	2.5	2.8	2.6
ALL MARYLAND	2.5	2.2	2.5	2.3	2.5	2.3	2.6	2.3	2.6	2.4	2.7	2.4

Table 23

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		2002-2003	
	Core	Non-Core	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%	49%	59%
Public Four-Year	14%	21%	11%	18%	13%	21%	13%	17%	12%	17%	14%	16%
independent	7%	7%	5%	8%	8%	10%	7%	8%	3%	4%	4%	7%
ALL CAMPUSES	25%	40%	23%	36%	27%	41%	26%	38%	27%	38%	28%	40%

Table 24

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

	1996	5-1997	1997	1997-1998		1999	1999-2000		2000-2001		2002-2003	
	Core	Non-Core	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%	25%	34%
Public Four-Year	7%	13%	5%	9%	7%	11%	7%	10%	8%	9%	7%	8%
Independent	2%	4%	1%	1%	1%	3%	1%	2%	2%	3%	3%	4%
ALL CAMPUSES	12%	24%	12%	22%	16%	28%	15%	25%	15%	25%	14%	22%

Table 25

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

	1996	-1997	1997	'-1998	1998	-1999	1999	-2000	2000	-2001	2002	-2003
	Core	Non-Core										
Community Colleges	24%	35%	25%	35%	27%	38%	21%	35%	25%	34%	23%	31%
Public Four-Year	6%	9%	6%	9%	8%	13%	7%	11%	9%	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%	15%	21%

<sup>\*</sup> 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)

	1996	-1997	1997	'-1998	1998-	-1999	1999-2000	)	2000	)-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	71%	67%	72%	68%	72%	70%	72%	64%	75%	74%	79%	74%
Public Four-Year	81%	80%	81%	77%	83%	77%	80%	75%	83%	80%	83%	79%
Independent	87%	83%	91%	87%	90%	88%	90%	85%	85%	86%	91%	88%
ALL CAMPUSES	78%	74%	79%	74%	79%	75%	78%	71%	81%	78%	82%	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)

	1996	-1997	1997	-1998	1998-	1999	1999	-2000	2000	0-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	81%	76%	80%	76%	79%	75%	81%	79%	82%	79%	84%	79%
Public Four-Year	92%	90%	91%	89%	92%	90%	91%	90%	92%	90%	92%	90%
Independent	93%	94%	95%	91%	95%	95%	96%	95%	95%	93%	95%	93%
ALL CAMPUSES	88%	83%	87%	83%	% <b>:87%</b> 5	% 83%	88%	85%	88%	85%	89%	85%

Table 28

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

	1996	-1997	1997	-1998	1998-	1999	1999-	2000	2000	-2001	2002	-2003
	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	2.4	2.2	2.5	2.2
Public Four-Year	2.6	2.4	2.7	2.5	2.7	2.5	2.7	2.6	2.7	2.6	2.8	2.6
Independent	2.8	2.6	2.9	2.7	2.9	2.8	2.9	2.8	2.9	2.8	3.0	2.8
ALL CAMPUSES	2.5	2.2	2.5	2.3	7 2,5	4 2.3	2.6	2.3	2.6	2.4	2.7	2.4

Table 29

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

	1996	5-1997	1997	'-1998	1998	-1999	1999-	-2000	2000	-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	21%	37%	20%	31%	23%	36%	23%	33%	24%	34%	24%	37%
Women	28%	44%	25%	40%	29%	46%	29%	43%	29%	41%	31%	43%
Race												
African-American	39%	56%	38%	53%	44%	61%	41%	55%	43%	56%	48%	62%
Asian	13%	19%	10%	18%	14%	24%	16%	21%	14%	20%	17%	18%
White	21%	35%	19%	30%	22%	33%	22%	31%	23%	31%	22%	32%
Other	31%	42%	25%	40%	30%	42%	33%	48%	32%	38%	40%	50%

**Table 30**Trends in Core and Non-Core Curriculum Students Needing English Remediation in College (By Gender and Race)

[	1996	-1997	1997	-1998	1998-	1999	1999-	2000	2000	-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	12%	23%	13%	21%	17%	27%	15%	25%	15%	25%	14%	23%
Women	12%	24%	11%	23%	15%	30%	15%	26%	15%	24%	14%	22%
Race												
African-American	25%	40%	24%	38%	32%	48%	28%	44%	30%	45%	27%	41%
Asian	7%	14%	7%	16%	10%	18%	10%	18%	10%	18%	14%	19%
White	8%	17%	8%	15%	11%	19%	11%	16%	10%	15%	9%	15%
Other	11%	20%	11%	24%	19%	25%	21%	30%	16%	27%	23%	30%

Table 31

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

	1996	5-1997	1997	-1998	1998-	1999	1999	-2000	2000	-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	12%	22%	14%	22%	15%	24%	12%	21%	14%	21%	13%	20%
Women	15%	27%	14%	26%	17%	31%	14%	27%	17%	27%	16%	23%
Race												
African-American	25%	40%	25%	42%	32%	48%	27%	44%	34%	50%	35%	48%
Asian	13%	18%	14%	19%	16%	24%	14%	23%	14%	21%	14%	18%
White	10%	18%	10%	15%	11%	18%	8%	13%	9%	13%	7%	10%
Other	14%	26%	15%	29%	18%	24%	15%	29%	15%	25%	18%	27%

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)

	1996	-1997	1997	-1998	1998-19	99	1999	-2000	2000	-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	74%	71%	75%	70%	75%	72%	73%	68%	76%	74%	78%	73%
Women	81%	77%	82%	78%	83%	79%	83%	75%	85%	83%	85%	83%
Race												
African-American	75%	71%	71%	67%	73%	71%	67%	61%	73%	68%	72%	66%
Asian	83%	81%	81%	76%	85%	79%	81%	79%	85%	81%	81%	79%
White	78%	75%	81%	76%	81%	76%	82%	75%	83%	81%	86%	81%
Other	75%	65%	77%	67%	75%	72%	73%	63%	79%	75%	79%	84%

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)

	1996	-1997	1997	'-1998	1998-	-1999	1999-	-2000	2000	-2001	2002	-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	83%	80%	83%	79%	84%	79%	84%	82%	85%	81%	86%	82%
Women	91%	86%	90%	86%	90%	86%	91%	88%	91%	88%	92%	88%
Race												
African-American	87%	80%	82%	76%	83%	79%	83%	80%	85%	80%	85%	81%
Asian	85%	84%	88%	83%	86%	81%	87%	87%	88%	87%	89%	84%
White	88%	85%	89%	86%	89%	85%	90%	87%	90%	86%	92%	87%
Other	84%	72%	85%	74%	84%	73%	83%	83%	83%	79%	83%	85%

Table 34

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

	1996	-1997	1997	7-1998	1998-	1999	1999-	2000	2000	-2001	2002	2-2003
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender												
Men	2.4	2.1	2.4	2.2	2.4	2.2	2.4	2.2	2.4	2.2	2.5	2.3
Women	2.6	2.3	2.6	2.4	2.6	2.4	2.7	2.4	2.7	2.5	2.8	2.6
Race												
African-American	2.2	2.0	2.2	2.0	2.2	2.0	2.2	2.1	2.2	2.0	2.3	2.0
Asian	2.7	2.6	2.6	2.4	2.6	2.5	2.7	2.5	2.7	2.6	2.8	2.6
White	2.6	2.3	2.6	2.4	2.6	2.4	2.7	2.5	2.7	2.5	2.8	2.5
Other	2.4	2.1	2.5	2.2	2.5	2.2	2.4	2.2	2.5	2.3	2.5	2.4

Table 35

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 to 1997 (By Gender, Race and Major Jurisdiction).

		1994			1995			1996			1997	
	N	CORE	NON CORE									
All Students	5,580	64.0%	57.1%	6,229	64.4%	57.1%	6,642	65.0%	56.8%	6,694	66.1%	62.0%
				ļ								
<u>Gender</u>						ŀ						
Men	2,577	59.2%	52.3%	2,775	58.7%	52.7%	3,006	60.4%	54.6%	3,140	60.7%	56.8%
Women	3,003	67.8%	62.7%	3,454	68.6%	61.5%	3,636	68.3%	59.3%	3,554	70.4%	67.5%
<u>Race</u>									1			
African-American	1,685	50.0%	46.1%	1,842	50.1%	43.0%	1,934	49.5%	47.8%	1,810	51.7%	48.9%
Asian	542	68.0%	56.8%	550	73.0%	63.6%	516	72.0%	73.1%	666	73.0%	69.8%
White	3,123	69.7%	66.0%	3,536	70.1%	67.0%	3,818	70.9%	61.3%	3,854	71.0%	67.5%
Other	230	66.2%	60.9%	301	59.2%	53.4%	374	63.4%	56.8%	364	69.3%	60.9%
Major Jurisdiction												
Anne Arundel	411	71.1%	67.0%	510	66.0%	66.3%	494	71.5%	61.0%	521	73.6%	68.4%
Baltimore City	608	50.4%	44.9%	639	46.9%	40.5%	760	46.8%	37.3%	592	55.2%	41.2%
Baltimore	739	63.0%	55.1%	919	68.7%	59.7%	999	64.6%	58.2%	994	62.8%	59.1%
Frederick	160	72.8%	65.8%	168	66.0%	81.5%	198	68.2%	53.2%	212	67.2%	70.6%
Lower Shore	207	55.0%	53.5%	204	59.5%	50.0%	243	63.6%	51.3%	206	63.2%	68.5%
Mid Maryland		69.0%	70.3%	571	69.3%	62.1%	682	72.1%	63.9%	666	73.8%	65.6%
Montgomery	1,092	70.4%	66.5%	1,089	68.4%	58.8%	1,161	72.1%	64.2%	1,334	71.6%	68.8%
Prince George's	1,092	56.1%	47.7%	1,152	58.0%	56.0%	1,077	57.5%	56.1%	1,161	59.3%	57.6%
Southern Maryland		70.8%	50.0%	257	66.2%	72.0%	276	68.3%	62.8%	283	67.7%	65.7%
Susquehanna	229	73.4%	66.7%	315	72.4%	58.0%	346	71.2%	62.7%	350	67.6%	66.1%
Upper Shore	100	68.0%	59.0%	131	66.7%	51.5%	158	63.1%	65.9%	123	70.7%	66.7%
Western Maryland	211	62.3%	60.9%	270	72.5%	57.6%	245	68.3%	62.8%	244	63.0%	70.5%

Table 36

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 1999 (by Gender, Race, and Major Jurisdiction)

		1994			1995			1996			1997			1998			1999	
	N	CORE	NONCORE	N	CORE	NONCORE	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%	4,813	44.1%	36.9%	4,589	45.4%	35.8%
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%	2,203	41.7%	36.4%	2,075	43.3%	36.4%
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%	2,610	45.9%	37.7%	2,507	47.2%	35.0%
Race																		
African-American	783	26.1%	17.7%	956	27.5%	19.9%	918	32.1%	19.8%	939	24.2%	21.4%	1,127	24.2%	23.4%	1,143	25.9%	20.9%
Asian	199	56.0%	44.5%	281	67.4%	55.6%	261	58.0%	59.9%	310	58.5%	49.9%	284	56.7%	58.4%	253	56.6%	52.8%
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%	3,091	49.3%	42.7%	2,884	50.0%	42.6%
Other	214	51.0%	29.6%	256	39.5%	27.2%	271	41.7%	32.5%	284	44.2%	35.0%	311	37.6%	30.8%	309	48.2%	34.5%
Major Jurisdiction				<b></b>														
Anne Arundel	486	50.1%	42.6%	643	52.8%	44.9%	564	46.2%	39.4%	550	49.9%	41.6%	593	48.2%	49.7%	576	51.0%	51.6%
Baltimore City	365	33.5%	21.1%	400	33.0%	18.5%	354	38.4%	23.3%	329	32.7%	25.2%	440	26.8%	24.2%	408	20.8%	18.0%
Baltimore	627	41.0%	25.3%	594	42.6%	41.7%	507	38.7%	35.1%	595	37.8%	36.9%	582	34.9%	35.8%	583	38.2%	34.9%
Frederick	236	47.4%	42.6%	234	50.0%	31.7%	247	48.8%	49.4%	228	49.3%	48.6%	256	45.7%	45.5%	243	55.3%	41.9%
Lower Shore	46	42.0%	40.0%	71	46.9%	31.8%	65	34.9%	50.0%	68	47.8%	40.9%	86	47.5%	44.0%	82	53.0%	27.2%
Mid Maryland	365	50.4%	35.7%	361	45.7%	41.2%	335	51.4%	34.8%	351	49.2%	55.8%	358	51.2%	44.0%	317	51.5%	35.7%
Montgomery	574	43.0%	35.9%	712	47.3%	36.8%	684	51.7%	38.6%	730	45.3%	41.0%	755	44.6%	34.8%	746	48.9%	40.1%
Prince George's	574	40.4%	29.2%	642	42.0%	22.5%	626	43.4%	29.0%	640	34.4%	29.9%	635	38.7%	29.1%	579	33.7%	23.2%
Southern Maryland	268	51.3%	42.7%	303	58.1%	57.0%	260	52.6%	50.4%	284	60.3%	56.4%	289	56.1%	39.0%	164	67.6%	35.6%
Susquehanna	309	47.6%	33.9%	360	47.3%	31.4%	339	50.6%	42.4%	364	45.6%	43.8%	365	43.3%	41.5%	352	53.1%	35.2%
Upper Shore	108	48.6%	46.9%	101	57.2%	42.3%	110	50.8%	32.6%	100	60.7%	46.9%	102	46.6%	40.6%	104	43.6%	38.1%
Western Maryland	244	62.7%	41.4%	311	55.0%	52.6%	307	53.6%	49.0%	290	52.8%	42.0%	287	55.5%	44.8%	285	46.4%	45.2%