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AUTHOR	Keller, Michael
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ABSTRACT

This eighth annual Student Outcome and Achievement Report (SOAR) provides information that can be used to track high school student outcomes at the state level. The SOAR system collects information about college performance of new high school graduates in Maryland, including: remedial work needed in math, English, and reading; grades in first math and English courses; and cumulative grade point average. Data about students' high school experiences are drawn from the Scholastic Assessment Test (SAT) and the American College Testing (ACT) program. This report looks at students who graduated from a Maryland high school during the 1997-98 school year and who enrolled in a Maryland college or university during the 1998-99 academic year. All public two- and four-year campuses in Maryland and 11 state-aided independent institutions are included. The report contains four sections: the first examines the differences between college performance of students who did or did not complete a college preparatory curriculum in high school; the second presents the results of a multiple regression analysis which seeks to identify factors that best predict first-year college performance; the third examines trends in the data over the past five years; and the fourth, new to this year's report, presents the four-year graduation and transfer rates of students from Maryland community colleges and the five-year graduation rates of students from public four-year institutions on the basis of whether or not they took a college preparatory course of study in high school. Thirty-five tables summarize the data. (CH/EV)

MARYLAND HIGHER EDUCATION COMMISSION

COLLEGE PERFORMANCE OF NEW MARYLAND HIGH SCHOOL GRADUATES

-STUDENT OUTCOME AND ACHIEVEMENT REPORT-

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Principal Author: Michael Keller

MARYLAND HIGHER EDUCATION COMMISSION
16 Francis Street, Annapolis, Maryland 21401

MARYLAND HIGHER EDUCATION COMMISSION

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 eighth consecutive year in which county superintendents and high school principals have received annual reports of how well students from their particular schools performed at the college level. All public two- and four-year campuses in Maryland and 11 state-aided independent institutions currently participate in SOAR.

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

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

This report draws on the combined sets of data to examine the relationship between students' academic performance and experiences in high school and how well they did in their initial year in college. Specifically, it looks at students who graduated from a Maryland high school in the 1997-1998 school year who enrolled at a Maryland college or university during the 1998-1999 academic year. Beginning this year, the Commission also examined the long-term graduation and transfer patterns of students who enrolled at public colleges and universities in fall 1994 and 1995 based on the SAT and ACT information. This analysis, which provided additional insight into the factors which impact college success, was performed by linking student records in the Commission's enrollment and degree systems with those from the expanded SOAR files in corresponding years.

The report contains four sections. The first examines the differences between the college performance of students who did or did not complete a college preparatory curriculum in high school. The second contains the results of a multiple regression analysis which seeks to identify the factors that best predict first-year college performance. The third examines trends in the data over the past five years. The fourth presents the four-year graduation and transfer rates of students from Maryland community colleges and the five-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, 30 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 found that students were truthful in supplying information about their courses and grades.

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

4. 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.

COLLEGE PERFORMANCE OF CORE AND NON CORE STUDENTS

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

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

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

Students who did not fulfill this exact curriculum were deemed "non core." USM's requirements differ very slightly from those above: students must take two years of a laboratory science, have two or more years of the same foreign language, and complete three specific math courses: two years of algebra and one of geometry. Integration of these additional requirements into the "core" definition was not possible because of the nature of the SAT/ACT data.

As in previous years, core students in 1998-1999 performed better than non core students on every measure of college academic achievement. Fewer core students required remedial assistance in math, English and reading. Core students also earned higher grades in their initial math and English courses in college and had higher grade point averages after their first year. With a few exceptions, core students outperformed non core students regardless of the county or region in which they attended high school, the specific college or university at which they were enrolled, or on the basis of race or gender. The results were very comparable to those of the last four years.

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

Remediation

Considerably more non core students (41 percent) than core students (27 percent) needed remedial assistance in math. Substantially more non core students (28 percent) than core students (16 percent) required remediation in both English and reading. Nonetheless, it is sobering that more than one quarter of the students who took a college-preparatory curriculum in high school, which includes three years of mathematics, were still assessed for remediation in math.

Of the core students at the community colleges, 43 percent required remedial help in math, 29 percent in English, and 27 percent in reading. Of the non core community college students, 55 percent were assessed for remediation in math, 41 percent in English, and 38 percent in reading. Baltimore City Community College led the two-year institutions in the proportion of core and noncore students requiring remedial assistance in math, English and reading.

Thirteen percent of the core students at public four-year campuses were assessed as needing math remediation, as were 8 percent in reading and 7 percent in English. Of the none core students, 21 percent required help in math, 13 percent in reading and 11 percent in English. Among the public four-year institutions, the four historically black colleges and universities represented the largest share of the students needing remediation.

Both core and non core students from Baltimore City and Western Maryland had the highest remediation rates in mathematics and English of the "service delivery areas" (major jurisdictions) in the state. Baltimore City students also led the State in remediation in reading. In addition, remediation rates in English for both core and non core students in Prince George's and Baltimore Counties were above the State average.

A greater percentage of African Americans than other races needed remedial help. Of the African-American students who completed a college preparatory curriculum, 44 percent required remediation in math and 32 percent in both reading and English. A majority of non-core African American students (61 percent) were assessed for remediation in math, as were nearly half (48 percent) in both reading and English.

Grade in First Math Course

Core students statewide earned an average grade of 2.5 (on a 4.0 scale) in their first math course in college, compared to 2.3 for non core students. A greater percentage of core students (79 percent) achieved a "C" or better than did non core students (75 percent). Students who attended high school in Prince George's and Montgomery Counties, as well as in Southern Maryland and the Lower Eastern Shore, lagged behind the statewide average in the initial college math grade.

Women tended to earn noticeably higher math grades than did men, both among core and non core students. The math grades of African Americans (2.3 for core students and 2.1 for non core students) lagged behind those of other races. Nonetheless, a majority of African American students (73 percent of the core and 71 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 2.6 in their initial English course in college, compared to 2.4 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 were received by students who attended high schools on the Lower Eastern Shore (2.4 for core students and 1.8 for non core students).

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 Asians and whites among both core and non core students. Nonetheless, 83 percent of the African Americans in the core category achieved a grade of "C" or better, as did 79 percent of the non core students.

Grade Point Average

Statewide, core students earned a cumulative grade point average in college of 2.5, compared to 2.3 for non core students. The highest averages were earned by students who attended high school in Western Maryland and Frederick County, the lowest by graduates from schools in Baltimore City, Prince George's County and the Lower Eastern Shore. The grade point averages of women, both core and non core, exceeded those of men. African-American students had lower grade point averages (2.2 for core and 2.0 for non core) than those of other races.

FACTORS AFFECTING COLLEGE PERFORMANCE

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

Method

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

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

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

First Math Grade	High School Grade Point Average SAT Math Score Average Grade in High School Math Courses Whether Student Was Enrolled in Honors Chemistry Course SAT Verbal Score Gender
First English Grade	High School Grade Point Average Average Grade in High School English Courses SAT Verbal Score Gender
Grade Point Average	High School Grade Point Average SAT Verbal Score SAT Math Score Average Grade in High School English Courses Average Grade in High School Foreign Language Courses Whether Student Was Enrolled in Honors English Course Gender Father's Educational Level Whether Student Took an American Literature Course

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

Strong predictors of college grade point average, beyond the student's high school grade point average, were the SAT verbal and math scores, average grade in high school English and foreign language courses, enrollment in a high school honors course in English, and whether the student took a course in American literature.

Intriguingly, gender was a significant factor in determining college performance on all three of the variables--even after controlling for all of the other high school experiences and demographic factors. It would be difficult to dismiss this finding, especially since this is the fifth consecutive year in which gender emerged as a relevant predictor for 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. In addition, father's educational level proved to be a good predictor of grade point average. This factor is considered to be one of the top measures of socio-economic status.

TRENDS IN COLLEGE PERFORMANCE OF HIGH SCHOOL GRADUATES

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

Remediation

The percentage of core and noncore students who required remediation in math, English and reading in 1998-1999 was the highest since this breakdown was initiated five years ago. This result may be due to the standardization of placement tests and cut-off scores at community colleges, where the percentage of students needing remedial help was the highest since the core/noncore analysis was introduced.

In each of the five years, a greater percentage of students was assessed for remediation in math than in English or reading. In four of the five years, about one-fourth of the core students and between 36 percent and 41 percent of the non core students required remedial help in math. There was a noticeable increase in 1998-1999, both among core and non core students, in the percentage who needed remedial assistance in English and reading from the figures of all previous years.

A consistently high percentage of core community college students needed remediation in each of the five years: between 31 percent and 43 percent in math, 19 to 29 percent in English, and 20 to 27 percent in reading. An even greater proportion of non core community college students required remedial assistance: between 42 and 55 percent in math, 31 to 41 percent in English, and 33 to 38 percent in reading.

Students from Baltimore City and Prince George's County have consistently had among the highest remediation rates in math, English and reading of the major jurisdictions in Maryland. In addition, students from Western Maryland schools have regularly exceeded most other jurisdictions in terms of a need for math and English remediation. Students from Frederick County have continually had greater than average remediation rates in math. In the last four years, more students in Southern Maryland schools have been assessed as needing remedial help in reading.

In each of the five 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 four of the last five years, a

majority of these students required assistance in math and at least 40 percent needed it in English. Forty percent or more of the noncore African American students needed remedial help in reading in all of the years.

Performance in First Math Course

A somewhat greater percentage of core students achieved a "C" or better than did non core students in their first math course in college in each of the five years, although the difference between the two groups has narrowed slightly since 1994-1995. 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, more than 70 percent of African American students who took a college preparatory curricula in high school 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 five years. A greater percentage of core than non core students in each year achieved this grade, but the difference between the two has narrowed steadily from seven to four percentage points. Students who attended Western Maryland high schools have consistently led the State in the proportion who earned a "C" or better in the first English class. In comparison, students in Montgomery and Prince George's Counties have continually trailed the State average.

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

Grade Point Average

The cumulative grade point averages of core students have consistently exceeded those of non core students in each of the five years. Core students earned a 2.5 in each year, while non core students achieved a 2.3 in the past two years and a 2.2 previously. Core and non core students from Western Maryland and Frederick County have

consistently had among the highest grade averages and have exceeded the State average in each year. In contrast, students from Baltimore City have continually lagged behind their Maryland counterparts, as have those in Prince George's County in most instances.

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

Factors Affecting College Performance

Of the 66 high school experience and background variables, the one that has been by far the best predictor of college performance is high school point grade average. This has been the strongest factor for all of the measures of college performance (first college math and English grade and college grade point average) in all of the five years. No other item has come close to its predictive power, although several showed strength in four 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 five years. The SAT math score was an important predictor of students' first math grade in each of the five years and of grade point average in four years. In four 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. As strange as it may seem, 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. A recent study by the U.S. Department of Education suggested that it does. An examination of a national cohort of 10th grade students who were tracked for 13 years found that a solid academic background in high school 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.

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

1. While SOAR collects annualized information (students who enrolled in the summer, fall and spring), the enrollment systems consist of a snapshot of those in attendance at a point of time each fall. Hence, only students who entered college in the fall are included.

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

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

The results demonstrate that Maryland high school students who took a solid academic core of courses were more likely to earn a baccalaureate or to attain a community college degree or certificate or transfer to a four-year institution than were those who did not. The five-year graduation rate for core students enrolled at public four-year institutions was 56 percent, compared to 48 percent for non core students. Likewise, nearly half of the full-time freshmen at Maryland community colleges who took a college preparatory curriculum in high school (46 percent in the 1994 class and 47 percent in the 1995 cohort) had earned a community college credential or had transferred within four years; this was the case for only slightly more than one-third of the non core students in both years. These patterns were consistent across gender, race, and major jurisdiction for students at both public four-year institutions and community colleges.

TABLES

Table 1

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

	Math		English		Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	22%	31%	9%	15%	15%	18%
Baltimore City	39%	63%	28%	50%	28%	53%
Baltimore	22%	35%	19%	32%	19%	29%
Frederick	32%	47%	13%	20%	14%	18%
Lower Shore	26%	40%	19%	27%	17%	28%
Somerset	38%	44%	24%	31%	24%	31%
Wicomico	24%	33%	21%	27%	16%	27%
Worchester	27%	46%	11%	27%	15%	29%
Mid Maryland	24%	34%	13%	22%	11%	18%
Carroll	22%	22%	11%	13%	6%	10%
Howard	26%	40%	14%	27%	13%	22%
Montgomery	25%	39%	14%	22%	12%	20%
Prince George's	31%	41%	20%	32%	19%	32%
Southern Maryland	14%	21%	8%	16%	22%	37%
Calvert	16%	19%	8%	16%	15%	25%
Charles	16%	24%	8%	21%	25%	45%
St. Mary's	9%	20%	8%	13%	26%	40%
Susquehanna	28%	38%	11%	21%	6%	10%
Cecil	23%	20%	7%	11%	5%	5%
Harford	29%	43%	12%	24%	7%	11%
Upper Shore	19%	43%	11%	21%	16%	25%
Caroline	19%	43%	9%	14%	15%	29%
Dorchester	21%	52%	7%	30%	16%	26%
Kent	11%	44%	10%	20%	5%	10%
Queen Anne'	21%	41%	15%	18%	23%	24%
Talbot	20%	38%	11%	19%	16%	28%
Western Maryland	41%	60%	20%	41%	15%	25%
Allegany	63%	80%	18%	41%	20%	38%
Garrett	39%	40%	18%	31%	4%	8%
Washington	28%	57%	22%	44%	13%	22%
ALL MARYLAND	**27%**	**41%**	**16%**	**28%**	**16%**	**28%**

Table 2

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

	% With 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Anne Arundel	78%	75%	2.4	2.3
Baltimore City	77%	75%	2.4	2.3
Baltimore	80%	80%	2.5	2.5
Frederick	82%	78%	2.6	2.3
Lower Shore	78%	73%	2.4	2.0
Somerset	64%	75%	2.0	1.8
Wicomico	82%	71%	2.5	1.9
Worchester	73%	74%	2.2	2.1
Mid Maryland	83%	80%	2.6	2.5
Carroll	85%	86%	2.6	2.5
Howard	82%	75%	2.6	2.4
Montgomery	78%	72%	2.4	2.2
Prince George's	76%	70%	2.4	2.1
Southern Maryland	80%	75%	2.4	2.2
Calvert	76%	88%	2.5	2.3
Charles	76%	63%	2.3	1.9
St. Mary's	87%	82%	2.7	2.5
Susquehanna	82%	77%	2.6	2.4
Cecil	80%	87%	2.4	2.6
Harford	83%	74%	2.7	2.3
Upper Shore	86%	77%	2.7	2.4
Caroline	88%	100%	2.8	3.7
Dorchester	89%	71%	2.9	2.0
Kent	89%	100%	2.7	3.0
Queen Anne's	87%	62%	2.7	1.8
Talbot	81%	86%	2.6	2.8
Western Maryland	83%	79%	2.7	2.5
Allegany	80%	61%	2.5	1.9
Garrett	90%	93%	2.9	2.9
Washington	85%	82%	2.7	2.7
ALL MARYLAND	**79%**	**75%**	**2.5**	**2.3**

Table 3

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

	% With 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Anne Arundel	88%	88%	2.7	2.6
Baltimore City	85%	84%	2.5	2.4
Baltimore	90%	86%	2.7	2.6
Frederick	86%	87%	2.7	2.5
Lower Shore	85%	70%	2.4	1.8
Somerset	87%	83%	2.4	2.4
Wicomico	86%	74%	2.4	1.8
Worchester	84%	64%	2.3	1.6
Mid Maryland	89%	81%	2.7	2.3
Carroll	88%	81%	2.6	2.3
Howard	90%	81%	2.8	2.4
Montgomery	83%	77%	2.5	2.2
Prince George's	85%	81%	2.5	2.4
Southern Maryland	89%	87%	2.7	2.5
Calvert	91%	92%	2.8	2.7
Charles	88%	85%	2.6	2.5
St. Mary's	88%	84%	2.7	2.5
Susquehanna	90%	86%	2.7	2.5
Cecil	89%	85%	2.6	2.4
Harford	90%	86%	2.8	2.6
Upper Shore	91%	78%	2.7	2.2
Caroline	89%	100%	2.6	2.8
Dorchester	100%	88%	3.2	2.2
Kent	100%	43%	2.7	1.4
Queen Anne's	88%	67%	2.7	2.0
Talbot	88%	90%	2.6	2.6
Western Maryland	93%	86%	2.9	2.7
Allegany	91%	85%	2.8	2.7
Garrett	95%	88%	2.9	2.7
Washington	95%	86%	3.0	2.6
ALL MARYLAND	**87%**	**83%**	**2.6**	**2.4**

Table 4

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

	Core	Non-Core
Anne Arundel	2.5	2.4
Baltimore City	2.4	2.1
Baltimore	2.5	2.4
Frederick	2.7	2.4
Lower Shore	2.4	2.2
Somerset	2.4	2.6
Wicomico	2.5	2.3
Worchester	2.4	2.0
Mid Maryland	2.6	2.4
Carroll	2.6	2.5
Howard	2.6	2.4
Montgomery	2.6	2.3
Prince George's	2.4	2.2
Southern Maryland	2.6	2.4
Calvert	2.6	2.4
Charles	2.6	2.3
St. Mary's	2.7	2.5
Susquehanna	2.6	2.4
Cecil	2.5	2.5
Harford	2.6	2.4
Upper Shore	2.5	2.2
Caroline	2.5	2.1
Dorchester	2.9	2.1
Kent	2.3	2.0
Queen Anne's	2.4	2.1
Talbot	2.5	2.3
Western Maryland	2.8	2.4
Allegany	2.8	2.4
Garrett	3.0	2.6
Washington	2.7	2.4
ALL MARYLAND	**2.5**	**2.3**

Table 5

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

	Math		English		Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges						
Allegany	77%	80%	36%	60%	43%	58%
Anne Arundel	33%	41%	12%	18%	18%	25%
Baltimore City	78%	95%	63%	81%	70%	81%
Baltimore County	41%	53%	42%	55%	36%	47%
Carroll	41%	36%	20%	19%	5%	9%
Cecil	40%	38%	9%	14%	9%	14%
Chesapeake	27%	52%	11%	27%	23%	36%
Frederick	55%	66%	27%	30%	26%	27%
Garrett	57%	59%	43%	52%	10%	18%
Hagerstown	36%	64%	39%	36%	23%	28%
Harford	55%	59%	20%	36%	9%	12%
Howard	52%	71%	29%	48%	24%	39%
Montgomery	48%	57%	29%	35%	24%	32%
Prince George's	36%	42%	30%	41%	24%	34%
Southern Maryland	18%	21%	12%	21%	40%	52%
Wor-Wic	53%	73%	41%	57%	32%	47%
All Community Colleges	**43%**	**55%**	**29%**	**41%**	**27%**	**38%**
University System of Maryland						
Bowie	74%	72%	29%	31%	32%	40%
Coppin	56%	71%	35%	47%	33%	47%
Frostburg	-	-	-	-	-	-
Salisbury	2%	4%	0%	0%	2%	2%
Towson	20%	29%	13%	17%	5%	9%
UMBC	6%	8%	1%	1%	18%	25%
UMCP	2%	3%	-	-	-	-
UMES	48%	59%	24%	34%	31%	45%
All University Systems of MD	**11%**	**21%**	**6%**	**10%**	**7%**	**13%**
Morgan	**24%**	26%	22%	24%	23%	26%
All Public Four-Year	**13%**	**21%**	**7%**	**11%**	**8%**	**13%**
Independents						
Capitol College	20%	43%	13%	7%	-	-
Hood	8%	18%	2%	0%	11%	18%
Loyola	0%	0%	-	-	-	-
Mount St. Mary's	53%	63%	-	-	-	-
Villa Julie	2%	1%	2%	8%	20%	27%
All Independents	**8%**	**10%**	**1%**	**3%**	**6%**	**9%**
All Campuses	**27%**	**41%**	**16%**	**28%**	**16%**	**28%**

Notes: St. Mary's, College of Notre Dame, Johns Hopkins, Maryland Institute College of Art, St. John's, Washington College and Western Maryland do not have remedial programs. UMCP, Frostburg, Loyola and Mount St. Mary's do not offer remediation in English and reading, and Capitol does not offer these programs in reading. No math figures were supplied by Frostburg.

Table 6

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

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Community Colleges				
Allegany	80%	80%	2.6	2.3
Anne Arundel	69%	73%	2.1	2.2
Baltimore City	73%	73%	2.6	2.4
Baltimore County	71%	75%	2.3	2.3
Carroll	79%	89%	2.4	2.6
Cecil	95%	75%	2.7	2.3
Chesapeake	92%	77%	2.9	2.5
Frederick	82%	71%	2.5	2.0
Garrett	91%	83%	3.0	2.8
Hagerstown	80%	77%	2.5	2.4
Harford	74%	73%	2.2	2.2
Howard	70%	69%	2.1	2.1
Montgomery	65%	61%	2.0	1.8
Prince George's	69%	68%	2.1	2.1
Southern Maryland	73%	68%	2.2	2.1
Wor-Wic	77%	65%	2.2	1.1
All Community Colleges	**72%**	**70%**	**2.2**	**2.1**
University of Maryland				
Bowie	88%	71%	2.6	2.1
Coppin	76%	61%	2.6	1.8
Frostburg	78%	75%	2.2	1.9
Salisbury	87%	82%	2.7	2.6
Towson	87%	84%	2.8	2.6
UMBC	83%	79%	2.7	2.4
UMCP	82%	76%	2.6	2.4
UMES	80%	81%	2.5	2.4
All University of Maryland	**83%**	**78%**	**2.6**	**2.4**
Morgan	76%	70%	2.4	2.1
St. Mary's	93%	91%	3.1	3.0
All Public Four-Year	**83%**	**77%**	**2.6**	**2.4**
Independents				
Capitol College	92%	92%	2.9	2.3
Hood	90%	78%	3.0	2.9
Loyola	95%	95%	3.1	2.9
Mount St. Mary's	84%	85%	2.6	2.7
Notre Dame	98%	93%	3.0	2.3
St. John's	100%	100%	3.0	3.5
Villa Julie	88%	84%	2.7	2.6
Washington College	87%	100%	3.3	3.2
Western Maryland	84%	92%	2.8	2.8
All Independents	**90%**	**88%**	**2.9**	**2.7**
All Campuses	**79%**	**75%**	**2.5**	**2.3**

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

Table 7

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

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Community Colleges				
Allegany	88%	84%	2.8	2.8
Anne Arundel	80%	82%	2.4	2.5
Baltimore City	68%	61%	2.0	1.8
Baltimore County	81%	83%	2.5	2.5
Carroll	72%	69%	2.0	1.8
Cecil	89%	79%	2.6	1.9
Chesapeake	89%	65%	2.7	1.9
Frederick	80%	81%	2.4	2.3
Garrett	82%	89%	2.2	2.3
Hagerstown	93%	82%	3.0	2.5
Harford	82%	78%	2.5	2.3
Howard	84%	69%	2.6	2.1
Montgomery	69%	64%	2.0	1.9
Prince George's	80%	75%	2.4	2.2
Southern Maryland	84%	85%	2.6	2.5
Wor-Wic	75%	51%	1.7	0.8
All Community Colleges	**79%**	**75%**	**2.4**	**2.2**
University System of Maryland				
Bowie	90%	86%	2.5	2.1
Coppin	88%	85%	2.6	2.4
Frostburg	93%	91%	2.5	2.4
Salisbury	97%	98%	2.9	2.7
Towson	93%	92%	2.9	2.8
UMBC	93%	89%	2.9	2.7
UMCP	90%	88%	2.7	2.5
UMES	93%	92%	2.8	2.8
All USM	**92%**	**90%**	**2.8**	**2.6**
Morgan	88%	87%	2.6	2.5
St. Mary's	96%	93%	3.0	2.8
All Public Four-Year	**92%**	**90%**	**2.8**	**2.6**
Independents				
Capitol College	69%	100%	2.2	2.7
Hood	100%	91%	3.1	2.5
Loyola	98%	97%	3.0	2.9
Maryland Institute College of Art	100%	100%	3.3	2.6
Mount St. Mary's	91%	93%	2.7	2.9
Notre Dame	93%	100%	3.0	3.0
St. John's	90%	100%	2.8	4.0
Villa Julie	95%	93%	2.8	2.6
Washington College	100%	100%	3.2	2.6
Western Maryland	96%	93%	3.0	2.8
All Independents	**95%**	**95%**	**2.9**	**2.8**
All Campuses	**87%**	**83%**	**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 English course.

Table 8

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

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

Note: Grade point averages for Johns Hopkins represent just the second semester.

Table 9

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

	Math		English		Reading	
	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender						
Men	23%	36%	17%	27%	15%	24%
Women	29%	46%	15%	30%	17%	31%
Race						
African-American	44%	61%	32%	48%	32%	48%
Asian	14%	24%	10%	18%	16%	24%
White	22%	33%	11%	19%	11%	18%
Other	30%	42%	19%	25%	18%	24%

Table 10

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

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Gender				
Men	75%	72%	2.3	2.2
Women	83%	79%	2.6	2.4
Race				
African-American	73%	71%	2.3	2.1
Asian	85%	79%	2.7	2.5
White	81%	76%	2.5	2.3
Other	75%	72%	2.4	2.2

Table 11

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

	% with 'C' or Better		Average Grade	
	Core	Non-Core	Core	Non-Core
Gender				
Men	84%	79%	2.5	2.3
Women	90%	86%	2.7	2.6
Race				
African-American	83%	79%	2.4	2.2
Asian	86%	81%	2.6	2.4
White	89%	85%	2.7	2.5
Other	84%	73%	2.4	2.1

Table 12

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

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

Table 13

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	.2586	.0669	.0669	12.436	.0000	.2586
2	SAT Math Score	.2884	.0832	.0163	7.328	.0000	.2007
3	Average Grade-Math	.3060	.0937	.0105	7.292	.0000	.1851
4	Honors Chemistry	.3111	.0968	.0031	3.836	.0001	.1617
5	SAT Verbal Score	.3115	.0970	.0003	2.069	.0386	.1240
6	Gender	.3320	.1102	.0132	8.818	.0000	.1045

Table 14

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	.2255	.0509	.0509	12.037	.0000	.2255
2	Average Grade - English	.2780	.0773	.0264	9.758	.0000	.1947
3	SAT Verbal Score	.2912	.0848	.0075	7.831	.0000	.1947
4	Gender	.3203	.1026	.0178	10.202	.0000	.1585

Table 15

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	.3467	.1202	.1202	16.584	.0000	.3467
2	SAT Verbal Score	.3949	.1560	.0357	6.265	.0000	.2694
3	SAT Math Score	.3975	.1580	.0021	5.083	.0000	.2478
4	Average Grade-English	.4228	.1787	.0207	7.414	.0000	.2281
5	Average Grade- Languages	.4281	.1833	.0045	5.420	.0000	.2023
6	Honors- English	.4304	.1852	.0019	2.081	.0375	.1993
7	Gender	.4456	.1986	.0134	9.455	.0000	.1365
8	Father's Educational Level	.4482	.2009	.0023	3.718	.0002	.1298
9	Took American Literature	.4491	.2017	.0008	2.294	.0218	.1153

Table 16

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	24%	37%	20%	36%	23%	38%	22%	33%	22%	31%
Baltimore City	29%	45%	27%	44%	34%	56%	27%	54%	39%	63%
Baltimore	19%	32%	17%	26%	21%	31%	21%	26%	22%	35%
Frederick	27%	50%	30%	36%	38%	58%	30%	42%	32%	47%
Lower Shore	10%	21%	10%	15%	6%	21%	22%	30%	26%	40%
Mid Maryland	17%	26%	14%	26%	15%	29%	20%	31%	24%	34%
Montgomery	22%	34%	12%	26%	**	**	16%	31%	25%	39%
Prince George's	32%	46%	24%	38%	28%	43%	30%	40%	31%	41%
Southern Maryland	19%	30%	7%	19%	10%	17%	11%	16%	14%	21%
Susquehanna	28%	46%	26%	44%	30%	45%	28%	39%	28%	38%
Upper Shore	15%	33%	20%	32%	23%	39%	24%	37%	19%	43%
Western Maryland	36%	49%	*	*	33%	53%	30%	48%	41%	60%
ALL MARYLAND	**24%**	**38%**	**19%**	**32%**	**25%**	**40%**	**23%**	**36%**	**27%**	**41%**

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

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

Table 17

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	9%	17%	8%	18%	9%	17%	10%	16%	9%	15%
Baltimore City	21%	38%	25%	47%	22%	45%	18%	41%	28%	50%
Baltimore	11%	24%	14%	23%	14%	27%	12%	22%	19%	32%
Frederick	13%	27%	19%	35%	22%	33%	17%	21%	13%	20%
Lower Shore	12%	22%	10%	35%	10%	25%	16%	25%	19%	27%
Mid Maryland	12%	25%	11%	19%	7%	17%	9%	21%	13%	22%
Montgomery	8%	19%	4%	14%	5%	13%	5%	12%	14%	22%
Prince George's	15%	31%	15%	27%	16%	27%	19%	28%	20%	32%
Southern Maryland	11%	21%	7%	18%	10%	16%	9%	17%	8%	16%
Susquehanna	9%	20%	10%	23%	9%	13%	9%	17%	11%	21%
Upper Shore	8%	29%	11%	22%	9%	18%	7%	15%	11%	21%
Western Maryland	17%	26%	*	*	14%	28%	16%	28%	20%	41%
ALL MARYLAND	**12%**	**24%**	**11%**	**24%**	**12%**	**24%**	**12%**	**22%**	**16%**	**28%**

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

Table 18

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	15%	24%	13%	23%	15%	23%	15%	21%	15%	18%
Baltimore City	21%	40%	23%	46%	20%	42%	20%	44%	28%	53%
Baltimore	15%	27%	13%	24%	14%	25%	14%	23%	19%	29%
Frederick	7%	13%	9%	14%	11%	18%	10%	9%	14%	18%
Lower Shore	15%	33%	12%	37%	13%	23%	9%	20%	17%	28%
Mid Maryland	7%	19%	9%	17%	6%	15%	10%	16%	11%	18%
Montgomery	6%	17%	11%	21%	11%	21%	12%	20%	12%	20%
Prince George's	16%	30%	17%	25%	16%	27%	18%	29%	19%	32%
Southern Maryland	11%	22%	25%	37%	25%	38%	25%	39%	22%	37%
Susquehanna	6%	12%	5%	9%	5%	10%	6%	7%	6%	10%
Upper Shore	6%	21%	8%	15%	9%	18%	7%	13%	16%	25%
Western Maryland	8%	16%	*	*	14%	21%	11%	18%	15%	25%
ALL MARYLAND	**12%**	**24%**	**13%**	**25%**	**14%**	**25%**	**14%**	**24%**	**16%**	**28%**

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

Table 19

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	77%	74%	79%	75%	75%	74%	81%	74%	78%	75%
Baltimore City	77%	73%	79%	72%	77%	73%	79%	73%	77%	75%
Baltimore	77%	66%	78%	76%	78%	78%	80%	72%	80%	80%
Frederick	77%	75%	82%	76%	80%	76%	80%	84%	82%	78%
Lower Shore	80%	74%	87%	85%	80%	72%	79%	91%	78%	73%
Mid Maryland	80%	78%	77%	79%	80%	79%	81%	74%	83%	80%
Montgomery	74%	71%	77%	69%	78%	70%	78%	70%	78%	72%
Prince George's	69%	62%	73%	67%	75%	72%	73%	68%	76%	70%
Southern Maryland	83%	67%	80%	80%	78%	72%	77%	74%	80%	75%
Susquehanna	76%	78%	75%	72%	79%	79%	82%	84%	82%	77%
Upper Shore	78%	83%	83%	71%	83%	81%	86%	80%	86%	77%
Western Maryland	84%	78%	82%	80%	82%	78%	84%	82%	83%	79%
ALL MARYLAND	**76%**	**70%**	**78%**	**73%**	**78%**	**74%**	**79%**	**74%**	**79%**	**75%**

Table 20

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	89%	81%	89%	84%	87%	85%	87%	87%	88%	88%
Baltimore City	89%	86%	89%	84%	87%	85%	86%	77%	85%	84%
Baltimore	88%	80%	89%	84%	87%	83%	88%	86%	90%	86%
Frederick	89%	74%	89%	74%	91%	81%	91%	85%	86%	87%
Lower Shore	91%	90%	92%	91%	93%	89%	88%	83%	85%	70%
Mid Maryland	90%	80%	89%	79%	89%	85%	89%	85%	89%	81%
Montgomery	86%	80%	85%	76%	84%	78%	84%	77%	83%	77%
Prince George's	86%	76%	84%	83%	88%	81%	85%	80%	85%	81%
Southern Maryland	87%	79%	90%	88%	90%	84%	85%	86%	89%	87%
Susquehanna	89%	82%	90%	78%	88%	85%	89%	87%	90%	86%
Upper Shore	86%	82%	85%	85%	90%	87%	90%	81%	91%	78%
Western Maryland	94%	88%	93%	90%	90%	90%	92%	90%	93%	86%
ALL MARYLAND	**88%**	**81%**	**88%**	**86%**	**88%**	**83%**	**87%**	**83%**	**87%**	**83%**

Table 21

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Anne Arundel	2.5	2.2	2.6	2.3	2.5	2.3	2.6	2.3	2.5	2.4
Baltimore City	2.4	2.0	2.3	2.0	2.3	2.0	2.4	2.1	2.4	2.1
Baltimore	2.4	2.1	2.5	2.3	2.4	2.3	2.5	2.4	2.5	2.4
Frederick	2.6	2.3	2.6	2.3	2.6	2.3	2.7	2.7	2.7	2.4
Lower Shore	2.4	2.3	2.5	2.1	2.4	2.3	2.6	2.3	2.4	2.2
Mid Maryland	2.6	2.2	2.5	2.3	2.6	2.3	2.6	2.4	2.6	2.4
Montgomery	2.5	2.2	2.5	2.1	2.5	2.2	2.6	2.2	2.6	2.3
Prince George's	2.3	2.0	2.3	2.2	2.4	2.2	2.3	2.2	2.4	2.2
Southern Maryland	2.5	2.3	2.7	2.6	2.6	2.3	2.6	2.3	2.6	2.4
Susquehanna	2.6	2.3	2.5	2.2	2.5	2.3	2.5	2.4	2.6	2.4
Upper Shore	2.3	2.3	2.4	2.1	2.5	2.3	2.6	2.3	2.5	2.2
Western Maryland	2.7	2.6	2.7	2.5	2.7	2.3	2.6	2.4	2.8	2.4
ALL MARYLAND	**2.5**	**2.2**	**2.5**	**2.2**	**2.5**	**2.2**	**2.5**	**2.3**	**2.5**	**2.3**

Table 22

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	35%	50%	31%	42%	40%	54%	38%	49%	43%	55%
Public Four-Year	17%	21%	9%	16%	14%	21%	11%	18%	13%	21%
Independent	12%	12%	5%	8%	7%	7%	5%	8%	8%	10%
ALL CAMPUSES	**24%**	**38%**	**19%**	**32%**	**25%**	**40%**	**23%**	**36%**	**27%**	**41%**

Table 23

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	21%	35%	19%	33%	19%	31%	21%	32%	29%	41%
Public Four-Year	6%	11%	6%	10%	7%	13%	5%	9%	7%	11%
Independent	3%	5%	1%	3%	2%	4%	1%	1%	1%	3%
ALL CAMPUSES	**12%**	**24%**	**11%**	**24%**	**12%**	**24%**	**12%**	**22%**	**16%**	**28%**

Table 24

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	20%	33%	24%	35%	24%	35%	25%	35%	27%	38%
Public Four-Year	6%	12%	5%	9%	6%	9%	6%	9%	8%	13%
Independent	2%	3%	1%	4%	2%	4%	1%	2%	6%	9%
ALL CAMPUSES	**12%**	**24%**	**13%**	**25%**	**14%**	**25%**	**14%**	**24%**	**16%**	**28%**

Table 25

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	73%	65%	73%	67%	71%	67%	72%	68%	72%	70%
Public Four-Year	76%	71%	80%	79%	81%	80%	81%	77%	83%	77%
Independent	89%	88%	89%	86%	87%	83%	91%	87%	90%	88%
ALL CAMPUSES	**76%**	**70%**	**78%**	**73%**	**78%**	**74%**	**79%**	**74%**	**79%**	**75%**

Table 26

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	82%	73%	81%	74%	81%	76%	80%	76%	79%	75%
Public Four-Year	92%	89%	92%	92%	92%	90%	91%	89%	92%	90%
Independent	93%	91%	95%	91%	93%	94%	95%	91%	95%	95%
ALL CAMPUSES	**88%**	**81%**	**88%**	**82%**	**88%**	**83%**	**87%**	**83%**	**87%**	**83%**

Table 27

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Community Colleges	2.3	2.0	2.3	2.1	2.3	2.1	2.3	2.1	2.3	2.1
Public Four-Year	2.6	2.4	2.6	2.5	2.6	2.4	2.7	2.5	2.7	2.5
Independent	2.8	2.6	2.8	2.6	2.8	2.6	2.9	2.7	2.9	2.8
ALL CAMPUSES	**2.5**	**2.2**	**2.5**	**2.2**	**2.5**	**2.2**	**2.5**	**2.3**	**2.5**	**2.3**

Table 28

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender										
Men	22%	35%	17%	29%	21%	37%	20%	31%	23%	36%
Women	26%	41%	20%	35%	28%	44%	25%	40%	29%	46%
Race										
African American	38%	53%	32%	47%	39%	56%	38%	53%	44%	61%
Asian	11%	13%	8%	13%	13%	19%	10%	18%	14%	24%
White	21%	34%	16%	27%	21%	35%	19%	30%	22%	33%
Other	31%	33%	20%	25%	31%	42%	25%	40%	30%	42%

Table 29

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender										
Men	13%	27%	13%	24%	12%	23%	13%	21%	17%	27%
Women	12%	24%	11%	24%	12%	24%	11%	23%	15%	30%
Race										
African American	24%	43%	24%	42%	25%	40%	24%	38%	32%	48%
Asian	8%	13%	7%	11%	7%	14%	7%	16%	10%	18%
White	9%	19%	8%	17%	8%	17%	8%	15%	11%	19%
Other	14%	15%	11%	17%	11%	20%	11%	24%	19%	25%

Table 30

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender										
Men	11%	24%	13%	23%	12%	22%	14%	22%	15%	24%
Women	12%	25%	14%	27%	15%	27%	14%	26%	17%	31%
Race										
African American	25%	43%	26%	42%	25%	40%	25%	42%	32%	48%
Asian	9%	15%	11%	16%	13%	18%	14%	19%	16%	24%
White	8%	17%	9%	18%	10%	18%	10%	15%	11%	18%
Other	12%	15%	17%	20%	14%	26%	15%	29%	18%	24%

Table 31

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender										
Men	72%	66%	72%	70%	74%	71%	75%	70%	75%	72%
Women	80%	74%	73%	77%	81%	77%	82%	78%	83%	79%
Race										
African American	73%	61%	73%	70%	75%	71%	71%	67%	73%	71%
Asian	79%	75%	83%	78%	83%	81%	81%	76%	85%	79%
White	77%	72%	79%	74%	78%	75%	81%	76%	81%	76%
Other	73%	69%	72%	72%	75%	65%	77%	67%	75%	72%

Table 32

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Genders										
Men	85%	77%	84%	77%	83%	80%	83%	79%	84%	79%
Women	91%	84%	90%	87%	91%	86%	90%	86%	90%	86%
Race										
African American	87%	80%	85%	82%	87%	80%	82%	76%	83%	79%
Asian	91%	82%	86%	84%	85%	84%	88%	83%	86%	81%
White	89%	81%	89%	82%	88%	85%	89%	86%	89%	85%
Other	86%	76%	86%	81%	84%	72%	85%	74%	84%	73%

Table 33

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

	1994-1995		1995-1996		1996-1997		1997-1998		1998-1999	
	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core	Core	Non-Core
Gender										
Men	2.3	2.0	2.3	2.1	2.4	2.1	2.4	2.2	2.4	2.2
Women	2.6	2.3	2.6	2.4	2.6	2.3	2.6	2.4	2.6	2.4
Race										
African American	2.2	1.9	2.2	2.0	2.2	2.0	2.2	2.0	2.2	2.0
Asian	2.6	2.4	2.6	2.4	2.7	2.6	2.6	2.4	2.6	2.5
White	2.5	2.3	2.6	2.3	2.6	2.3	2.6	2.4	2.6	2.4
Other	2.3	2.2	2.4	2.2	2.4	2.1	2.5	2.2	2.5	2.2

Table 34

Five-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 (By Gender, Race and Major Jurisdiction).

	N		CORE		NON CORE
All Students	5,580		55.7%		48.3%
Gender					
Men	2,577		49.3%		41.7%
Women	3,003		60.7%		55.8%
Race					
African American	1,685		41.4%		35.5%
Asian	542		56.3%		51.3%
White	3,123		62.3%		58.1%
Other	230		54.2%		50.0%
Major Jurisdiction					
Anne Arundel	411		63.4%		57.0%
Baltimore City	608		41.8%		34.9%
Baltimore	739		55.2%		46.9%
Frederick	160		67.2%		62.9%
Lower Shore	207		47.7%		46.5%
Mid Maryland	487		60.4%		62.0%
Montgomery	1,092		61.7%		56.8%
Prince George's	1,092		45.7%		38.2%
Southern Maryland	238		65.6%		45.0%
Susquehanna	229		65.2%		64.5%
Upper Shore	100		64.1%		40.9%
Western Maryland	211		57.0%		51.2%

Table 35

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

	1994				1995		
	N	CORE	NONCORE		N	CORE	NONCORE
All Students	4,264	46.0%	33.7%		4,810	47.2%	36.0%
Gender							
Men	2,044	43.5%	30.5%		2,222	44.0%	32.9%
Women	2,220	47.8%	37.2%		2,588	49.9%	39.2%
Race							
African American	783	26.1%	17.7%		956	27.5%	19.9%
Asian	199	56.0%	44.5%		281	67.4%	55.6%
White	3,068	48.4%	39.2%		3,317	50.7%	41.5%
Other	214	51.0%	29.6%		256	39.5%	27.2%
Major Jurisdiction							
Anne Arundel	486	50.1%	42.6%		643	52.8%	44.9%
Baltimore City	365	33.5%	21.1%		400	33.0%	18.5%
Baltimore	627	41.0%	25.3%		594	42.6%	41.7%
Frederick	236	47.4%	42.6%		234	50.0%	31.7%
Lower Shore	46	42.0%	40.0%		71	46.9%	31.8%
Mid Maryland	365	50.4%	35.7%		361	45.7%	41.2%
Montgomery	574	43.0%	35.9%		712	47.3%	36.8%
Prince George's	574	40.4%	29.2%		642	42.0%	22.5%
Southern Maryland	268	51.3%	42.7%		303	58.1%	57.0%
Susquehanna	309	47.6%	33.9%		360	47.3%	31.4%
Upper Shore	108	48.6%	46.9%		101	57.2%	42.3%
Western Maryland	244	62.7%	41.4%		311	55.0%	52.6%

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