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ABSTRACT

This seventh 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 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 1996-97 school year and who enrolled in a Maryland college or university during the 1997-98 academic year. All public two- and four-year campuses in Maryland and 12 state-aided independent institutions are included. The report contains three 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; and the third examines trends in the data over the past four years. Thirty-three tables summarize the data. (CH)

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COLLEGE PERFORMANCE OF NEW MARYLAND HIGH SCHOOL GRADUATES

-STUDENT OUTCOME AND ACHIEVEMENT REPORT-

SEPTEMBER 1999

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INTRODUCTION

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

In 1990, the Commission established the Student Outcome and Achievement Report (SOAR) to fulfill this mandate. In addition to providing information that can be used for tracking student outcomes at the state level, SOAR was intended to be a tool to help local educators with the evaluation of high school preparatory programs, curriculum development, counseling, and the establishment of education policy. This is the seventh 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.

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 personal 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 by social security number 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 1996-1997 school year who enrolled at a Maryland college or university during the 1997-1998 academic year. All public two- and four-year campuses in Maryland and 12 state-aided independent institutions currently participate in SOAR. The report contains three 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 four years.



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, 28 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. Policies regarding the identification and placement of remedial students at Maryland community colleges were in transition in fall 1997. All two-year institutions 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. 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 1997-1998 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 highly comparable to those of the last three years.

Remediation

Considerably more non core students (36 percent) than core students (23 percent) needed remedial assistance in math. Nearly twice as many non core students (22 percent) than core students (12 percent) required remediation in English, and substantially more non core students (24 percent) than core students (14 percent) needed help in reading. Nonetheless, it is sobering that almost 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 <u>core</u> students at the community colleges, 38 percent required remedial help in math, one-quarter in reading, and 21 percent in English. Of the non core community college students, 49 percent were assessed for remediation in math, 35 percent in reading, and 32 percent in English. 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.

Eleven percent of the core students at public four-year campuses were assessed as needing math remediation, as were 6 percent in reading and 5 percent in English.



Eighteen percent of the non core students required help in math and 9 percent in both English and reading. Among the public four-year institutions, two historically black campuses--Bowie and University of Maryland Eastern Shore--represented the largest share of the students needing remediation. However, it must be noted that Coppin, which has continually had one of the largest percentage of first year students on remediation among the public four-year campuses, provided incorrect remediation data this year.

Both core and non core students from Baltimore City and Prince George's County had among the highest remediation rates in mathematics, English and reading of the "service delivery areas" (major jurisdictions) in the state. In addition, remediation rates in math and English for both core and non core students in Western Maryland were considerably 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, 38 percent required remediation in math, 25 percent in reading, and 24 percent in English. A majority of non-core African American students (53 percent) were assessed for remediation in math, as were 42 percent in reading and 38 percent in English.

Grade in First Math Course

Core students statewide earned an average grade of 2.5 (on a 4.0 scale) in their first math course in college, compared to 2.3 for non core students. A greater percentage of core students (79 percent) achieved a "C" or better than did non core students (74 percent). The lowest math grades of any major jurisdiction were received by students who attended high school in Prince George's County (2.2 for core students and 2.1 for non core students).

Women tended to earn noticeably higher math grades than did men, both among core and non core students. The math grades of African Americans (2.2 for core students and 2.1 for non core students) lagged behind those of whites and Asians. Nonetheless, a majority of African American students (71 percent of the core and 67 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. Students who attended high schools in Montgomery and Prince George's Counties trailed the State in grades in college English.

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, 82 percent of the African Americans in the core category achieved a grade of "C" or better, as did 76 percent of the non core students.

Grade Point Average

Statewide, core students earned a cumulative grade point average in college of 2.5, compared to 2.3 for non core students. The highest averages were earned by students who attended high school in Frederick County, the lowest by graduates from Baltimore City and Prince George's County schools. 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

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a t significance level of .05 on the multiple regression analysis <u>and</u> 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 Math Course Whether Student Was Enrolled in Honors Calculus Course

Type of Campus

Gender

First English Grade High School Grade Point Average

Average Grade in High School English Courses

SAT Verbal Score

Gender

Whether Student Was Enrolled in Honors Foreign Language Course

Grade Point Average High School Grade Point Average

SAT Verbal Score

Average Grade in High School English Courses

SAT Math Score

Average Grade in High School Social Sciences Courses

Whether Student Was Enrolled in Honors Social Sciences Course Whether Student Was Enrolled in Honors Pre-Calculus Course

Gender

For the fourth consecutive year, the best predictor of college performance by far for all three variables was student high school grade average. The SAT math score, the student's average grade in high school math courses, and whether the student was enrolled in honors math and calculus courses were among the good predictors of the first college math grade. The average grade in high school English courses, the SAT verbal score, and whether the student was enrolled in an honors foreign languages course provided an excellent indication of how they 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 social sciences courses, and enrollment in high school honors courses in social sciences and pre-calculus.

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 fourth 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, the type of campus a student attended proved to be a good predictor of the initial college math grade. Community college students earned substantially lower grades in first year math than did their counterparts at four-year institutions.

TRENDS IN COLLEGE PERFORMANCE OF HIGH SCHOOL GRADUATES

Tables 16 to 33 present trends during the past four 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 seven years, analyses on the basis of students' high school curricula have been conducted for only part of this period. In general, the figures show substantial continuity in the performance of students.

Remediation

In each of the four years, a greater percentage of students was assessed for remediation in math than in English or reading. In three of the four years, about one-fourth of the core students and between 36 percent and 40 percent of the non core students required remedial help in math. There was almost no change across the years, both among core and non core students, in the percentage who needed remedial assistance in English and reading.

A consistently high percentage of <u>core</u> community college students needed remediation in each of the four years: between 31 percent and 40 percent in math, 19 to 21 percent in English, and 20 to 25 percent in reading. An even greater proportion of non core community college students required remedial assistance: more than 40 percent each year in math and approximately one-third in English and 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 and the Susquehanna region (Cecil and Harford Counties) have continually had greater than average remediation rates in math.



In each of the four 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. At least 38 percent of these students in each year required assistance in English and reading and between 47 percent and 56 percent in math.

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 four 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, 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 four 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 County have continually trailed the State average.

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

Grade Point Average

The cumulative grade point averages of core students have consistently exceeded those of non core students in each of the four years. Core students earned a 2.5 in each year,



while non core students achieved a 2.3 in 1997-1998 and a 2.2 in all other years. 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.

Women have consistently earned higher grade point averages than men during the three 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 four years. No other item has come close to its predictive power, although several showed strength in three 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 four years. The SAT math score was an important predictor of students' first math grade in each of the four years and of grade point average in three years. In three 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, and average grade in high school social sciences courses has foretold the college grade point average of students. As strange as it may seem, gender has been a determinant on all three of the variables in all of the years.



TABLES



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

| j | Ma | ath | Eng | glish | Rea | ding |
|-------------------|------|----------|------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Anne Arundel | 22% | 33% | 10% | 16% | 15% | 21% |
| Baltimore City | 27% | 54% | 18% | 41% | 20% | 44% |
| Baltimore | 21% | 26% | 12% | 22% | 14% | 23% |
| Frederick | 30% | 42% | 17% | 21% | 10% | 9% |
| Lower Shore | 22% | 30% | 16% | 25% | 9% | 20% |
| Somerset | 41% | 43% | 25% | 36% | 13% | 38% |
| Wicomico | 17% | 33% | 14% | 22% | 9% | 20% |
| Worchester | 28% | 22% | 15% | 27% | 9% | 15% |
| Mid Maryland | 20% | 31% | 9% | 21% | 10% | 16% |
| Carroll | 9% | 15% | 9% | 25% | 6% | 11% |
| Howard | 26% | 42% | 10% | 18% | 13% | 20% |
| Montgomery | 16% | 31% | 5% | 12% | 12% | 20% |
| Prince George's | 30% | 40% | 19% | 28% | 18% | 29% |
| Southern Maryland | 11% | 16% | 9% | 17% | 25% | 39% |
| Calvert | 11% | 20% | 8% | 13% | 16% | 30% |
| Charles | 13% | 17% | 9% | 21% | 31% | 46% |
| St. Mary's | 7% | 12% | 7% | 16% | 25% | 37% |
| Susquehanna | 28% | 39% | 9% | 17% | 6% | 7% |
| Cecil | 24% | 33% | 15% | · 11% | 16% | 5% |
| Harford | 29% | 40% | 8% | 18% | 4% | 8% |
| Upper Shore | 24% | 37% | 7% | 15% | 7% | 13% |
| Caroline | 18% | 33% | 4% | 8% | 8% | 0% |
| Dorchester | 30% | 31% | 9% | 15% | 13% | 8% |
| Kent | 24% | 29% | 0% | 14% | 0% | 7% |
| Queen Anne | 19% | 44% | 5% | 18% | 2% | 18% |
| Talbot | 30% | 36% | 13% | 14% | 7% | 18% |
| Western Maryland | 30% | 48% | 16% | 28% | 11% | 18% |
| Allegany | 31% | 43% | 13% | 21% | 14% | 23% |
| Garrett | 16% | 50% | 10% | 28% | 6% | 0% |
| Washington | 34% | 53% | 20% | 33% | 9% | 17% |
| ALL MARYLAND | 23% | 36% | 12% | 22% | 14% | 24% |



Table 2
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 | 81% | 74% | 2.6 | 2.3 |
| Baltimore City | 79% | 73% | 2.5 | 2.2 |
| Baltimore | 80% | 72% | 2.5 | 2.3 |
| Frederick | 80% | 84% | 2.7 | 2.6 |
| Lower Shore | 79% | 91% | 2.6 | 2.9 |
| Somerset | 83% | 92% | 2.6 | 2.6 |
| Wicomico | 79% | 92% | 2.7 | 3.0 |
| Worchester | 79% | 89% | 2.4 | 2.9 |
| Mid Maryland | 81% | 74% | 2.6 | 2.3 |
| Carroll | 82% | 71% | 2.6 | 2.2 |
| Howard | 81% | 76% | 2.7 | 2.4 |
| Montgomery | 78% | 70% | 2.4 | 2.2 |
| Prince George's | 73% | 68% | 2.2 | 2.1 |
| Southern Maryland | 77% | 74% | 2.4 | 2.3 |
| Calvert | 78% | 86% | 2.4 | 2.6 |
| Charles | 76% | 63% | 2.3 | 2.0 |
| St. Mary's | 76% | 83% | 2.4 | 2.5 |
| Susquehanna | 82% | 84% | 2.6 | 2.6 |
| Cecil | 79% | 85% | 2.6 | 2.8 |
| Harford | 83% | 84% | 2.6 | 2.6 |
| Upper Shore | 86% | 80% | 2.6 | 2.4 |
| Caroline | 82% | 100% | 2.3 | 3.4 |
| Dorchester | 96% | 100% | 2.8 | 3.3 |
| Kent | 86% | 100% | 2.4 | 2.6 |
| Queen Anne's | 82% | 72% | 2.5 | 2.0 |
| Talbot | 85% | 69% | 2.7 | 2.3 |
| Western Maryland | 84% | 82% | 2.5 | 2.5 |
| Allegany | 81% | 84% | 2.3 | 2.4 |
| Garrett | 91% | 100% | 2.8 | 2.9 |
| Washington | 84% | 77% | 2.4 | 2.7 |
| ALL MARYLAND | 79% | 74% | 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 | e Grade |
|-------------------|-----------|-----------|---------|----------|
| | Core | Non-Core | Core | Non-Core |
| Anne Arundel | 87% | 87% | 2.7 | 2.5 |
| Baltimore City | 86% | 77% | 2.6 | 2.3 |
| Baltimore | 88% | 86% | 2.6 | 2.5 |
| Frederick | 91% | 85% | 2.7 | 2.6 |
| Lower Shore | 88% | 83% | 2.6 | 2.4 |
| Somerset | 79% | 90% | 2.6 | 2.3 |
| Wicomico | 88% | 77% | 2.5 | 2.4 |
| Worchester | 91% | 89% | 2.6 | 2.8 |
| Mid Maryland | 89% | 85% | 2.7 | 2.5 |
| Carroll | 89% | 85% | 2.7 | 2.4 |
| Howard | 89% | 86% | 2.7 | 2.5 |
| Montgomery | 84% | 77% | 2.5 | 2.2 |
| Prince George's | 85% | 80% | 2.5 | 2.3 |
| Southern Maryland | 90% | 86% | 2.8 | 2.5 |
| Calvert | 94% | 83% | 2.9 | 2.4 |
| Charles | 87% | 82% | 2.6 | 2.5 |
| St. Mary's | 93% | 94% | 2.8 | 2.7 |
| Susquehanna | 86% | 87% | 2.6 | 2.5 |
| Cecil | 88% | 86% | 2.5 | 2.5 |
| Harford | 86% | 87% | 2.6 | 2.5 |
| Upper Shore | 88% | 81% | 2.6 | 2.3 |
| Caroline | 92% | 80% | 2.7 | 2.2 |
| Dorchester | 85% | 91% | 2.5 | 2.5 |
| Kent | 83% | 100% | 2.6 | 2.7 |
| Queen Anne's | 86% | 67% | 2.7 | 2.1 |
| Talbot | 91% | 85% | 2.6 | 2.4 |
| Western Maryland | 92% | 90% | 2.8 | 2.6 |
| Allegany | 91% | 87% | 2.7 | 2.6 |
| Garrett | 93% | 77% | 2.6 | 2.0 |
| Washington | 92% | 95% | 2.9 | 2.7 |
| 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 | 2.6 | 2.3 |
| Baltimore City | 2.4 | 2.1 |
| Baltimore | 2.5 | 2.4 |
| Frederick | 2.7 | 2.7 |
| Lower Shore | 2.6 | 2.3 |
| Somerset | 2.8 | 2.2 |
| Wicomico | 2.6 | 2.1 |
| Worchester | 2.5 | 2.7 |
| Mid Maryland | 2.6 | 2.4 |
| Carroll | 2.7 | 2.4 |
| Howard | 2.6 | 2.3 |
| Montgomery | 2.6 | 2.2 |
| Prince George's | 2.3 | 2.2 |
| Southern Maryland | 2.6 | 2.3 |
| Calvert | 2.7 | 2.2 |
| Charles | 2.6 | 2.2 |
| St. Mary's | 2.7 | 2.5 |
| Susquehanna | 2.5 | 2.4 |
| Cecil | 2.5 | 2.6 |
| . Harford | 2.5 | 2.3 |
| Upper Shore | 2.6 | 2.3 |
| Caroline | 2.6 | 2.3 |
| Dorchester | 2.5 | 2.1 |
| Kent | 2.4 | 2.8 |
| Queen Anne's | 2.6 | 2.0 |
| Talbot | 2.7 | 2.7 |
| Western Maryland | 2.6 | 2.4 |
| Allegany | 2.6 | 2.5 |
| Garrett | 2.8 | 2.3 |
| Washington | 2.6 | 2.2 |
| ALL MARYLAND | 2.5 | 2.3 |



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

| | Ma | ath | Eng | lish | Rea | iding |
|------------------------------|------|----------|----------|----------------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Community Colleges | | | regultik | Hillian | | joeguj |
| Allegany | 58% | 76% | 27% | 36% | 28% | 43% |
| Anne Arundel | 40% | 47% | 16% | 23% | 25% | 30% |
| Baltimore City | 83% | 85% | 64% | 79% | 69% | 82% |
| Baltimore County | 37% | 47% | 27% | 41% | 29% | 43% |
| Carroll | 16% | 23% | 18% | 41% | 7% | 15% |
| Cecil | 41% | 61% | 23% | 17% | 25% | 19% |
| Chesapeake | 43% | 52% | 8% | 19% | 8% | 13% |
| Frederick | 52% | 67% | 32% | 37% | 14% | 18% |
| Garrett | 18% | 47% | 21% | 33% | 4% | 0% |
| Hagerstown | 46% | 62% | 31% | 46% | 13% | 22% |
| Harford | 51% | 58% | 13% | 23% | 5% | 9% |
| Howard | 74% | 82% | 25% | 33% | 30% | 33% |
| Montgomery | 31% | 43% | 9% | 17% | 24% | 34% |
| Prince George's | 31% | 43% | 30% | 42% | 24% | 35% |
| Southern Maryland | 13% | 16% | 14% | 21% | 45% | 54% |
| Wor-Wic | 49% | 57% | 39% | 53% | 21% | 31% |
| All Community Colleges | 38% | 49% | 21% | 32% | 25% | 35% |
| University System of Marylan | d | | | Alexander dest | | |
| Bowie | 69% | 77% | 41% | 45% | 31% | 42% |
| Coppin | - | - | - | - | - | - |
| Frostburg | 14% | 12% | - | - | - | - |
| Salisbury | 2% | 1% | 0% | 0% | 2% | 2% |
| Towson | 19% | 31% | 11% | 18% | 6% | 7% |
| UMBC | 4% | 8% | 1% | 1% | 12% | 12% |
| UMCP | 4% | 8% | - | - | - | - |
| UMES | 48% | 58% | 29% | 42% | 35% | 48% |
| All University Systems of MD | 12% | 18% | 5% | 8% | 5% | 8% |
| Morgan | 11% | 21% | 11% | 19% | 12% | 22% |
| All Public Four-Year | 11% | 18% | 5% | 9% | 6% | 9% |
| Independents | | 13 | 1.00% | | | |
| Capitol College | 30% | 42% | 13% | 17% | - | - |
| Hood | 5% | 13% | 0% | 0% | 5% | 0% |
| Loyola | 0% | 0% | - | - | - | - |
| Mount St. Mary's | 43% | 55% | - | - | - | - |
| Villa Julie | 1% | 0% | 2% | 1% | 5% | 8% |
| All Independents | 5% | 8% | 1% | 1% | 1% | 2% |
| All Campuses | 23% | 36% | 12% | 22% | 14% | 24% |

Notes: St. Mary's, College of Notre Dame, Goucher, Johns Hopkins, Maryland Institute College of Art, College of Peabody, 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. Incorrect remediation figures were supplied by Coppin.



Table 6 Performance in First College Math Course of Core and Non Core Curriculum Students (By Institution)

| | % with 'C | or Better | Average | e Grade |
|----------------------------|-----------|-----------|---------|----------|
| | Core | Non-Core | Core | Non-Core |
| Community Colleges | 6 | | | |
| Allegany | 75% | 84% | 2.4 | 2.5 |
| Anne Arundel | 73% | 71% | 2.2 | 2.2 |
| Baltimore City | 88% | 71% | 3.0 | 2.6 |
| Baltimore County | 72% | 64% | 2.2 | 2.0 |
| Carroll | 73% | 50% | 2.1 | 1.4 |
| Cecil | 81% | 89% | 2.8 | 3.1 |
| Chesapeake | 82% | 73% | 2.5 | 1.9 |
| Frederick | 76% | 77% | 2.4 | 2.5 |
| Garrett | 88% | 100% | 2.6 | 3.0 |
| Hagerstown | 81% | 77% | 2.5 | 2.6 |
| Harford | 79% | 79% | 2.4 | 2.4 |
| Howard | 71% | 90% | 2.4 | 2.7 |
| Montgomery | 67% | 59% | 2.1 | 1.9 |
| Prince George's | 68% | 62% | 2.0 | 1.8 |
| Southern Maryland | 70% | 71% | 2.2 | 2.1 |
| Wor-Wic | 71% | 88% | 2.0 | 2.6 |
| All Community Colleges | 72% | 68% | 2.2 | 2.1 |
| University of Maryland | | | | |
| Bowie | 76% | 70% | 2.1 | 2.1 |
| Coppin | 66% | 82% | 2.2 | 2.2 |
| Frostburg | 80% | 77% | 2.1 | 2.0 |
| Salisbury | 85% | 85% | 2.6 | 2.7 |
| Towson | 83% | 80% | 2.7 | 2.5 |
| UMBC | 84% | 80% | 2.8 | 2.6 |
| UMCP | 82% | 75% | 2.6 | 2.3 |
| UMES | 82% | 83% | 2.4 | 2.5 |
| All University of Maryland | 82% | 78% | 2.6 | 2.4 |
| Morgan | 71% | 70% | 2.3 | 2.3 |
| St. Mary's | 87% | 94% | 2.7 | 2.6 |
| All Public Four-Year | 81% | 77% | 2.5 | 2.4 |
| Independents | | | | |
| Capitol College | 86% | 82% | 2.5 | 2.3 |
| Goucher | 1 0.70 | 100% | 3.0 | 3.0 |
| Hood | 96% | 100% | 3.3 | 3.3 |
| Loyola | 94% | 96% | 3.2 | 2.8 |
| Mount St. Mary's | 88% | 94% | 2.8 | 2.9 |
| Notre Dame | 95% | 82% | 3.0 | 2.6 |
| St. John's | 100% | 100% | 3.0 | 3.0 |
| Villa Julie | 90% | 80% | 2.8 | 2.7 |
| Washington College | 82% | 88% | 2.6 | 2.8 |
| Western Maryland | 91% | 64% | 3.0 | 1.7 |
| All Independents | 91% | 87% | 2.9 | 2.7 |
| All Campuses | 79% | 74% | 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 | e Grade |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|---------|------------------|
| | Core | Non-Core | Core | Non-Core |
| Community Colleges | in the second se | g Staffer (v. 1994). George | | |
| Allegany | 90% | 84% | 2.5 | 2.8 |
| Anne Arundel | 80% | 80% | 2.4 | 2.4 |
| Baltimore City | 55% | 61% | 1.5 | 1.7 |
| Baltimore County | 80% | 77% | 2.3 | 2.2 |
| Carroll | 74% | 70% | 2.2 | 1.9 |
| Cecil | 83% | 91% | 2.5 | 2.6 |
| Chesapeake | 82% | 77% | 2.4 | 2.2 |
| Frederick | 88% | 76% | 2.5 | 2.5 |
| Garrett | 69% | 80% | 1.8 | 2.0 |
| Hagerstown | 91% | 93% | 2.9 | 2.8 |
| Harford | 79% | 84% | 2.4 | 2.4 |
| Howard | 83% | 76% | 2.5 | 2.3 |
| Montgomery | 72% | 68% | 2.1· | 1.9 |
| Prince George's | 81% | 74% | 2.4 | 2.1 |
| Southern Maryland | 84% | 80% | 2.6 | 2.4 |
| Wor-Wic | 77% | 71% | 1.8 | 1.3 |
| All Community Colleges | 80% | 76% | 2.4 | 2.2 |
| University System of Maryland | | | 供數議》 試 | egrafi Egrafi |
| Bowie | 82% | 80% | 2.1 | 2.1 |
| Coppin | 92% | 91% | 2.6 | 2.6 |
| Frostburg | 90% | 84% | 2.4 | 2.3 |
| Salisbury | 95% | 95% | 2.7 | 2.6 |
| Towson | 92% | 91% | 2.8 | 2.7 |
| UMBC | 93% | 94% | 2.9 | 2.8 |
| UMCP | 90% | 86% | 2.7 | 2.5 |
| UMES | 96% | 94% | 2.9 | 2.9 |
| Allusm | 91% | 89% | 2.7 | 2.6 |
| Morgan | 87% | 87% | 2.7 | 2.5 |
| St. Mary's | 97% | 98% | 3.2 | 3.1 |
| All Public Four-Year | 91% | 89% | 2.7 | 2.6 |
| Independents | | | | |
| Capitol College | 86% | 92% | 2.9 | 3.0 |
| Goucher | 94% | 91% | 3.0 | 2.7 |
| Hood | | 92% | 3.2 | 2.9 |
| Loyola | 99% | 97% | 3.2 | 3.1 |
| Maryland Institute College of Art | 96% | 89% | 3.1 | 3.1 |
| Mount St. Mary's | 95% | 90% | 2.9 | 2.7 |
| Notre Dame | 99% | 100% | 3.2 | 3.2 |
| St. John's | 100% | 100% | 3.2 | 2.0 |
| Villa Julie | | 82% | 2.6 | 2.3 |
| Washington College | 97% | 100% | 3.0 | 3.0 |
| Western Maryland | 95% | 92% | 3.0 | 2.6 |
| All Independents | 95% | 91% | 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 | | Meset Altebra |
| Allegany | 2.6 | 2.4 |
| Anne Arundel | 2.3 | 2.2 |
| Baltimore City | 2.1 | 2.2 |
| Baltimore County | 2.2 | 2.1 |
| Carroll | 2.4 | 2.1 |
| Cecil | 2.6 | 2.6 |
| Chesapeake | 2.3 | 1.9 |
| Frederick | 2.5 | 2.5 |
| Garrett | 2.4 | 2.4 |
| Hagerstown | 2.4 | 2.2 |
| Harford | 2.2 | 2.2 |
| Howard | 2.2 | 2.1 |
| Montgomery | 2.2 | 2.1 |
| Prince George's | 2.2 | 2.0 |
| Southern Maryland | 2.5 | 2.2 |
| Wor-Wic | 2.0 | 1.8 |
| All Community Colleges | 2.3 | 2:1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |
| University of Maryland | | |
| Bowie | 2.4 | 2.3 |
| Coppin | 2.4 | 2.1 |
| Frostburg | 2.4 | 2.3 |
| Salisbury | 2.7 | 2.6 |
| Towson | 2.6 | 2.5 |
| UMBC | | |
| 1 | 2.7 | 2.5 |
| UMCP | 2.8 | 2.6 |
| UMES | 2.5 | 2.5 |
| All University of Maryland Morgan | 2.7 2.4 | 2.5 2.3 |
| St. Mary's | 2.9 | 2.9 |
| All Public Four-Year | 2.7 | 2.5 |
| Independents | | 是 5.想用的實際實際 |
| Capitol College | 2.5 | 2.4 |
| Goucher | 3.0 | 2.9 |
| Hood | 3.1 | 2.8 |
| Johns Hopkins | 2.9 | 3.0 |
| Loyola | 3.1 | 2.9 |
| Maryland Institute College of Art | 3.1 | 3.1 |
| Mount St. Mary's | 2.7 | 2.5 |
| Notre Dame | 3.1 | 3.0 |
| St. John's | 3.0 | 2.4 |
| Villa Julie | 2.8 | 2.5 |
| Washington College | 2.8 | 2.7 |
| Western Maryland | 3.0 | 2.6 |
| All Independents | 2.9 | 2.7 |
| | | |
| 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)

| | Ma | ath | Eng | lish | Rea | ding |
|------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Gender | | | 主题答法。秦 | enanthis | | |
| Men | 20% | 31% | 13% | 21% | 14% | 22% |
| Women | 25% | 40% | 11% | 23% | 14% | 26% |
| Race | | en in the first section of the secti | | | | |
| African-American | 38% | 53% | 24% | 38% | 25% | 42% |
| Asian | 10% | 18% | 7% | 16% | 14% | 19% |
| White | 19% | 30% | 8% | 15% | 10% | 15% |
| Other | 25% | 40% | 11% | 24% | 15% | 29% |

Table 10
Performance in First Math Course of
Core and Non Core Curriculum Students
(By Gender and Race)

| | % with 'C | or Better | Averag | e Grade |
|------------------|-----------|-----------|--------|----------|
| | Core | Non-Core | Core | Non-Core |
| Gender | | | | |
| Men | 75% | 70% | 2.3 | 2.1 |
| Women | 82% | 78% | 2.6 | 2.5 |
| Race | | + 1 | | |
| African-American | 71% | 67% | 2.2 | 2.1 |
| Asian | 81% | 76% | 2.6 | 2.4 |
| White | 81% | 76% | 2.5 | 2.3 |
| Other Other | 77% | 67% | 2.4 | 2.0 |

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Table 11

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 | | | | |
| Men | 83% | 79% | 2.4 | 2.2 |
| Women | 90% | 86% | 2.7 | 2.6 |
| Race | | | usiah ilij | |
| African-American | 82% | 76% | 2.4 | 2.2 |
| Asian | 88% | 83% | 2.6 | 2.4 |
| White | 89% | 86% | 2.7 | 2.5 |
| Other | 85% | 74% | 2.5 | 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 |
| | | |
| | 47 J. E. S. S. Santon, Appl. 1997. | GRADO DE SON ENGINERANTE |
| Race | | |
| Race African-American | 2.2 | 2.0 |
| | 2.2 2.6 | 2.0 2.4 |
| African-American | | |



Table 13
Results of Multiple Regression Analysis Using Grade in First Math Course as Dependent Variable

| Step | Independent Variable | R | R² | R ² Change | T | Sig T | Correlation |
|------|----------------------|-------|-------|-----------------------|--------|-------|-------------|
| 1 | High School GPA | .2722 | .0741 | .0741 | 10.416 | .0000 | .2722 |
| 2 | SAT Math Score | .3215 | .1034 | .0293 | 8.795 | .0000 | .2494 |
| 3 | Average Grade-Math | .3401 | .1156 | .0123 | 7.746 | .0000 | .2177 |
| 4 | Honors Math | .3481 | .1212 | .0055 | 3.249 | .0012 | .2179 |
| 5 | Honors Caculus | .3498 | .1224 | .0012 | 2.421 | .0155 | .1996 |
| 6 | Type of Campus | .3537 | .1251 | .0027 | 3.335 | .0099 | .1190 |
| 7 | Gender | .3759 | .1413 | .0162 | 9.858 | .0000 | .1148 |

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

| Step | Independent Variable | R | R² | R ² Change | T | Sig T | Correlation |
|------|--------------------------|-------|-------|-----------------------|--------|-------|-------------|
| 1 | High School GPA | .2584 | .0667 | .0667 | 12.259 | .0000 | .2584 |
| 2 | Average Grade - English | .3095 | .0958 | .0291 | 9.949 | .0000 | .2323 |
| 3 | SAT Verbal Score | .3256 | .1060 | .0102 | 7.933 | .0000 | .1968 |
| 4 | Gender . | .3462 | .1199 | .0139 | 8.827 | .0000 | .1530 |
| 5 | Honors-Foreign Languages | .3475 | .1208 | .0009 | 2.332 | .0197 | .1240 |

Table 15
Results of Multiple Regression Analysis Using Grade Point Average as Dependent Variable

| Step | Independent Variable | R | R² | R ² Change | T | Sig T | Correlation |
|------|----------------------------|-------|-------|-----------------------|--------|-------|-------------|
| 1 | High School GPA | .3737 | .1396 | .1396 | 16.683 | .0000 | .3737 |
| 2 | SAT Verbal Score | .4228 | .1787 | .0391 | 6.355 | .0000 | .2916 |
| 3 | Average English Grade | .4520 | .2043 | .0255 | 7.026 | .0000 | .2860 |
| 4 | SAT Math Score | .4543 | .2064 | .0022 | 5.006 | .0000 | .2637 |
| 5 | Avg.Grade-Social Sciences | .4598 | .2114 | .0050 | 6.292 | .0000 | .2532 |
| 6 | Honors-Social Sciences | .4626 | .2140 | .0026 | 2.074 | .0382 | .2314 |
| 7 | Honors - Pre Calculus | .4645 | .2158 | .0018 | 2.731 | .0063 | .1949 |
| 8 | Gender | .4839 | .2342 | .0184 | 11.015 | .0000 | .1619 |
| 9 | Years Studied-Languages | .4841 | .2344 | .0002 | 1.004 | .3156 | .1399 |
| 10 | Father's Educational Level | .4847 | .2349 | .0005 | 1.913 | .0558 | .1130 _ |



Table 16

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

| | 199 | 4-1995 | 199 | 5-1996 | 1996 | 5-1997 | 1997 | '- <mark>1998</mark> |
|-------------------|------|----------|------|----------|------|----------|------|----------------------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Anne Arundel | 24% | 37% | 20% | 36% | 23% | 38% | 22% | 33% |
| Baltimore City | 29% | 45% | 27% | 44% | 34% | 56% | 27% | 54% |
| Baltimore | 19% | 32% | 17% | 26% | 21% | 31% | 21% | 26% |
| Frederick | 27% | 50% | 30% | 36% | 38% | 58% | 30% | 42% |
| Lower Shore | 10% | 21% | 10% | 15% | 6% | 21% | 22% | 30% |
| Mid Maryland | 17% | 26% | 14% | 26% | 15% | 29% | 20% | 31% |
| Montgomery | 22% | 34% | 12% | 26% | ** | ** | 16% | 31% |
| Prince George's | 32% | 46% | 24% | 38% | 28% | 43% | 30% | 40% |
| Southern Maryland | 19% | 30% | 7% | 19% | 10% | 17% | 11% | 16% |
| Susquehanna | 28% | 46% | 26% | 44% | 30% | 45% | 28% | 39% |
| Upper Shore | 15% | 33% | 20% | 32% | 23% | 39% | 24% | 37% |
| Western Maryland | 36% | 49% | * | * | 33% | 53% | 30% | 48% |
| ALL MARYLAND | 24% | 38% | 19% | 32% | 25% | 40% | 23% | 36% |

^{*}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 | 199 | 7-1998 |
|-------------------|------|----------|------|----------|-------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Anne Arundel | 9% | 17% | 8% | 18% | 9% | 17% | 10% | 16% |
| Baltimore City | 21% | 38% | 25% | 47% | 22% | 45% | 18% | 41% |
| Baltimore | 11% | 24% | 14% | 23% | 14% | 27% | 12% | 22% |
| Frederick | 13% | 27% | 19% | 35% | 22% | 33% | 17% | 21% |
| Lower Shore | 12% | 22% | 10% | 35% | 10% | 25% | 16% | 25% |
| Mid Maryland | 12% | 25% | 11% | 19% | 7% | 17% | 9% | 21% |
| Montgomery | 8% | 19% | 4% | 14% | 5% | 13% | 5% | 12% |
| Prince George's | 15% | 31% | 15% | 27% | 16% | 27% | 19% | 28% |
| Southern Maryland | 11% | 21% | 7% | 18% | 10% | 16% | 9% | 17% |
| Susquehanna | 9% | 20% | 10% | 23% | 9% | 13% | 9% | 17% |
| Upper Shore | 8% | 29% | 11% | 22% | 9% | 18% | 7% | 15% |
| Western Maryland | 17% | 26% | * | * | 14% | 28% | 16% | 28% |
| ALL MARYLAND | 12% | 24% | 11% | 24% | 12% | 24% | 12% | 22% |

^{*}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 | 1-1995 | 1995 | -1996 | 1996 | -1997 | 1997 | -1998 |
|-------------------|------|----------|------|----------|------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Anne Arundel | 15% | 24% | 13% | 23% | 15% | 23% | 15% | 21% |
| Baltimore City | 21% | 40% | 23% | 46% | 20% | 42% | 20% | 44% |
| Baltimore | 15% | 27% | 13% | 24% | 14% | 25% | 14% | 23% |
| Frederick | 7% | 13% | 9% | 14% | 11% | 18% | 10% | 9% |
| Lower Shore | 15% | 33% | 12% | 37% | 13% | 23% | 9% | 20% |
| Mid Maryland | 7% | 19% | 9% | 17% | 6% | 15% | 10% | 16% |
| Montgomery | 6% | 17% | 11% | 21% | 11% | 21% | 12% | 20% |
| Prince George's | 16% | 30% | 17% | 25% | 16% | 27% | 18% | 29% |
| Southern Maryland | 11% | 22% | 25% | 37% | 25% | 38% | 25% | 39% |
| Susquehanna | 6% | 12% | 5% | 9% | 5% | 10% | 6% | 7% |
| Upper Shore | 6% | 21% | 8% | 15% | 9% | 18% | 7% | 13% |
| Western Maryland | 8% | 16% | * | * | 14% | 21% | 11% | 18% |
| ALL MARYLAND | 12% | 24% | 13% | 25% | 14% | 25% | 14% | 24% |

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

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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 | 1-1995 | 1995 | -1996 | 1996 | -1997 | 1997 | -1998 |
|-------------------|------|----------|------|----------|------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Anne Arundel | 89% | 81% | 89% | 84% | 87% | 85% | 87% | 87% |
| Baltimore City | 89% | 86% | 89% | 84% | 87% | 85% | 86% | 77% |
| Baltimore | 88% | 80% | 89% | 84% | 87% | 83% | 88% | 86% |
| Frederick | 89% | 74% | 89% | 74% | 91% | 81% | 91% | 85% |
| Lower Shore | 91% | 90% | 92% | 91% | 93% | 89% | 88% | 83% |
| Mid Maryland | 90% | 80% | 89% | 79% | 89% | 85% | 89% | 85% |
| Montgomery | 86% | 80% | 85% | 76% | 84% | 78% | 84% | 77% |
| Prince George's | 86% | 76% | 84% | 83% | 88% | 81% | 85% | 80% |
| Southern Maryland | 87% | 79% | 90% | 88% | 90% | 84% | 90% | 86% |
| Susquehanna | 89% | 82% | 90% | 78% | 88% | 85% | 86% | 87% |
| Upper Shore | 86% | 82% | 85% | 85% | 90% | 89% | 88% | 81% |
| Western Maryland | 94% | 88% | 93% | 90% | 92% | 90% | 92% | 90% |
| ALL MARYLAND | 88% | 81% | 88% | 82% | 88% | 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 |
|-------------------|------|----------|------|----------|------|----------|------|----------|
| | 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 |
| Baltimore City | 2.4 | 2.0 | 2.3 | 2.0 | 2.3 | 2.0 | 2.4 | 2.1 |
| Baltimore | 2.4 | 2.1 | 2.5 | 2.3 | 2.4 | 2.3 | 2.5 | 2.4 |
| Frederick | 2.6 | 2.3 | 2.6 | 2.3 | 2.6 | 2.3 | 2.7 | 2.7 |
| Lower Shore | 2.4 | 2.3 | 2.5 | 2.1 | 2.4 | 2.3 | 2.6 | 2.3 |
| Mid Maryland | 2.6 | 2.2 | 2.5 | 2.3 | 2.6 | 2.3 | 2.6 | 2.4 |
| Montgomery | 2.5 | 2.2 | 2.5 | 2.1 | 2.5 | 2.2 | 2.6 | 2.2 |
| Prince George's | 2.3 | 2.0 | 2.3 | 2.2 | 2.4 | 2.2 | 2.3 | 2.2 |
| Southern Maryland | 2.5 | 2.3 | 2.7 | 2.6 | 2.6 | 2.3 | 2.6 | 2.3 |
| Susquehanna | 2.6 | 2.3 | 2.5 | 2.2 | 2.5 | 2.3 | 2.5 | 2.4 |
| Upper Shore | 2.3 | 2.3 | 2.4 | 2.1 | 2.5 | 2.3 | 2.6 | 2.3 |
| Western Maryland | 2.7 | 2.6 | 2.7 | 2.5 | 2.7 | 2.3 | 2.6 | 2.4 |
| ALL MARYLAND | 2.5 | 2.2 | 2.5 | 2.2 | 2.5 | 2.2 | 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 | 1995-1996 | | 1996-1997 | | -1998 |
|--------------------|------|----------|------|-----------|------|-----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Community Colleges | 35% | 50% | 31% | 42% | 40% | 54% | 38% | 49% |
| Public Four-Year | 17% | 21% | 9% | 16% | 14% | 21% | 11% | 18% |
| Independent | 12% | 12% | 5% | 8% | 7% | 7% | 5% | 8% |
| ALL CAMPUSES | 24% | 38% | 19% | 32% | 25% | 40% | 23% | 36% |

Table 23
Trends in Core and Non Core Curriculum Students Needing English
Remediation in College (By Higher Education Segment)

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

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 | |
|--------------------|------|----------|------|----------|-----------|----------|-----------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Community Colleges | 20% | 33% | 24% | 35% | 24% | 35% | 25% | 35% |
| Public Four-Year | 6% | 12% | 5% | 9% | 6% | 9% | 6% | 9% |
| Independent | 2% | 3% | 1% | 4% | 2% | 4% | 1% | 2% |
| ALL CAMPUSES | 12% | 24% | 13% | 25% | 14% | 25% | 14% | 24% |



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 | |
|--------------------|-----------|----------|-----------|----------|-----------|----------|-----------|--------------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Community Colleges | 73% | 65% | 73% | 67% | 71% | 67% | 72% | 68% |
| Public Four-Year | 76% | 71% | 80% | 79% | 81% | 80% | 81% | 7 7 % |
| Independent | 89% | 88% | 89% | 86% | 87% | 83% | 91% | 87% |
| ALL CAMPUSES | 76% | 70% | 78% | 73% | 78% | 74% | 79% | 74% |

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 | 5-1996 199 | | -1997 | 1997 | -1998 |
|--------------------|-----------|----------|------|------------|------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Community Colleges | 82% | 73% | 81% | 74% | 81% | 76% | 80% | 76% |
| Public Four-Year | 92% | 89% | 92% | 92% | 92% | 90% | 91% | 89% |
| Independent | 93% | 91% | 95% | 91% | 93% | 94% | 95% | 91% |
| ALL CAMPUSES | 88% | 81% | 88% | 82% | 88% | 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 | 5-1996 199 | | -1997 | 1997-1998 | |
|--------------------|-----------|----------|------|------------|------|----------|-----------|----------|
| | 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 |
| Public Four-Year | 2.6 | 2.4 | 2.6 | 2.5 | 2.6 | 2.4 | 2.7 | 2.5 |
| Independent | 2.8 | 2.6 | 2.8 | 2.6 | 2.8 | 2.6 | 2.9 | 2.7 |
| ALL CAMPUSES | 2.5 | 2.2 | 2.5 | 2.2 | 2.5 | 2.2 | 2.5 | 2.3 |

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Table 28
Trends in Core and Non Core Curriculum Students Needing Math
Remediation in College (By Gender and Race)

| Γ | 1994-1995 | | 1995 | 5-1996 1996 | | 5-1997 | 1997 | '-1998 |
|------------------|--------------|----------|------|-------------|------|----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Gender | - | | | | | | | |
| Men | 22% | 35% | 17% | 29% | 21% | 37% | 20% | 31% |
| Women | 26% | 41% | 20% | 35% | 28% | 44% | 25% | 40% |
| Race | | | | | | | | |
| African American | 38% | 53% | 32% | 47% | 39% | 56% | 38% | 53% |
| Asian | 11% | 13% | 8% | 13% | 13% | 19% | 10% | 18% |
| White | 21% | 34% | 16% | 27% | 21% | 35% | 19% | 30% |
| Other | 31% | 33% | 20% | 25% | 31% | 42% | 25% | 40% |

Table 29
Trends in Core and Non Core Curriculum Students Needing English
Remediation in College (By Gender and Race)

| ſ | 1994-1995 | | 1995 | -1996 | 1996-1997 | | 1997-1998 | |
|------------------|-----------|----------|------|----------|-----------|----------|-----------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| | | | | | | | | |
| Gender | | 1 | |] | | | | |
| Men | 13% | 27% | 13% | 24% | 12% | 23% | 13% | 21% |
| Women | 12% | 24% | 11% | 24% | 12% | 24% | 11% | 23% |
| Race | | | | | | | | |
| African American | 24% | 43% | 24% | 42% | 25% | 40% | 24% | 38% |
| Asian | 8% | 13% | 7% | 11% | 7% | 14% | 7% | 16% |
| White | 9% | 19% | 8% | 17% | 8% | 17% | 8% | 15% |
| Other | 14% | 15% | 11% | 17% | 11% | 20% | 11% | 24% |



Table 30

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

| Γ | 1994-1995 | | 1995 | 5-1996 | 1996 | 5-1997 | 1997 | 7-1998 |
|------------------|-----------|----------|------|----------|------|----------|------|----------|
| Γ | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Gender | | | | | | | | |
| Men | 11% | 24% | 13% | 23% | 12% | 22% | 14% | 22% |
| Women | 12% | 25% | 14% | 27% | 15% | 27% | 14% | 26% |
| Race | | | | | | | | |
| African American | 25% | 43% | 26% | 42% | 25% | 40% | 25% | 42% |
| Asian | 9% | 15% | 11% | 16% | 13% | 18% | 14% | 19% |
| White | 8% | 17% | 9% | 18% | 10% | 18% | 10% | 15% |
| Other | 12% | 15% | 17% | 20% | 14% | 26% | 15% | 29% |

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)

| Г | 1994-1995 | | 1995 | 1995-1996 199 | | -1997 | 1997-1998 | |
|------------------|-------------|----------|-------|---------------|------|----------|-----------|----------|
| Ţ | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Gender | | | | | | | | |
| Men | 72% | 66% | 72% | 70% | 74% | 71% | 75% | 70% |
| Women | 80% | 74% | 73% | 77% | 81% | 77% | 82% | 78% |
| Race | | | | | | | | |
| African American | 73% | 61% | 73% | 70% | 75% | 71% | 71% | 67% |
| Asian | 79% | 75% | 83% | 78% | 83% | 81% | 81% | 76% |
| White | 77% | 72% | 79% | 74% | 78% | 75% | 81% | 76% |
| Other | 7 3% | 69% | 72% _ | 72% | 75% | 65% | 77% | 67% |



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)

| Γ | 1994-1995 | | 199 | 1995-1996 | | 1996-1997 | | 7-1998 |
|------------------|-----------|----------|------|-----------|------|-----------|------|----------|
| | Core | Non-Core | Core | Non-Core | Core | Non-Core | Core | Non-Core |
| Gender . | | | - | | - | | | |
| Men | 85% | 77% | 84% | 77% | 83% | 80% | 83% | 79% |
| Women | 91% | 84% | 90% | 87% | 91% | 86% | 90% | 86% |
| Race | | | | | | | | |
| African American | 87% | 80% | 85% | 82% | 87% | 80% | 82% | 76% |
| Asian | 91% | 82% | 86% | 84% | 85% | 84% | 88% | 83% |
| White | 89% | 81% | 89% | 82% | 88% | 85% | 89% | 86% |
| Other | 86% | 76% | 86% | 81% | 84% | 72% | 85% | 74% |

Table 33

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

| Γ | 1994-1995 | | 1995 | 5-1996 1996 | | -1997 | 1997-1998 | |
|------------------|-----------|----------|------|-------------|------|----------|-----------|----------|
| | 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 |
| Women | 2.6 | 2.3 | 2.6 | 2.4 | 2.6 | 2.3 | 2.6 | 2.4 |
| Race | • | | | | | | | |
| African American | 2.2 | 1.9 | 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 |
| White | 2.5 | 2.3 | 2.6 | 2.3 | 2.6 | 2.3 | 2.6 | 2.4 |
| Other | 2.3 | 2.2 | 2.4 | 2.2 | 2.4 | 2.1 | 2.5 | 2.2 |





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