



# Developmental Education in Florida Community Colleges

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**Abstract.** The lack of readiness of many first-time-in-college (FTIC) degree-seeking students and the resultant need for developmental education<sup>1</sup> is not a new issue. The need for developmental education at postsecondary institutions has been discussed within the nation as long ago as 1828. Currently, some four-year institutions across the nation are phasing out previously instituted developmental education programs, and community colleges have a higher proportion of developmental students than four-year programs. In Florida, only community colleges and one university, Florida A & M University, are authorized by statute to offer developmental education. The Education Commission of the States (ECS) has noted that large numbers of students now need remediation, many of whom are minority, low-income or disadvantaged. According to ECS, the success rate of community colleges in preparing remedial students to enter and succeed in college-level work has profound implications for their effectiveness in expanding access to higher education.<sup>2</sup> The Florida Community College System (FCCS) serves many nontraditional and low-income students. Seventy-nine percent (79%) of lower division PELL awards occur within the FCCS.

Approximately 47% of students age 18 and under are college-ready when entering Florida's community colleges. Additionally, a decline in college readiness is experienced by older students entering college for the first time after a break from high school. Of all FCCS FTIC degree-seeking students, approximately 65% fail at least one entry level test (ELT) in reading, writing, or math. The current review for FCCS developmental education programs demonstrates the benefit of college preparatory courses for students who progress in developmental education. The 2004 Accountability Measures indicate that developmental students who successfully complete their college prep courses have the same success rate as Associate in Arts (AA) Degree students in general. Success is defined as having graduated, being enrolled in good standing, or having left in good standing.

Developmental students who successfully complete their college prep courses have the same success rate as AA Degree students in general.

**Context of Developmental Education in Postsecondary Education.** The subject of remedial education in college was examined in 1828 when Yale University addressed the debate on this issue in the *Yale Report* in terms of the impact of "underprepared students" on the image of excellence. The President of Harvard University, Charles William Eliot, acknowledged his university's responsibility to "underprepared students" in his inaugural address about 40 years later.<sup>3</sup> The need for remediation for some numbers of FTIC degree-seeking students continues. According to ECS, the "open door" policies of community colleges have for a long

<sup>1</sup> The terms *developmental education*, *college preparatory*, and *college prep* are used interchangeably in this program review report due to the current use of these terms statewide.

<sup>2</sup> Jenkins, Davis and Boswell, Katherine. (2002, September). *State Policies on Community College Remedial Education: Findings from a National Survey*. Denver, Colorado: Education Commission of the States Center for Community College Policy.

<sup>3</sup> Smittle, Pat, Ed.D., "Community College Open Door Policy," Memorandum of August 19, 1993, to Dr. Larry Tyree, President of Santa Fe Community College.

time resulted in the need for educating students who are not prepared for college-level work. Currently, states across the country are asking community colleges to take on an even greater share of remedial instruction. Some states (at least 10), are preventing or at least discouraging public four-year institutions from offering remedial education.<sup>4</sup> With Florida A & M University as the only university in Florida authorized to offer developmental education, the FCCS has most of the responsibility for this state's delivery of developmental education programs.

**College Preparatory Testing, Placement, and Review.** In 1984, the Florida Legislature adopted Rule 6A-10.0315, Florida Administrative Code (F.A.C.), to address college preparatory testing, placement, and instruction. Implemented in 1985, this rule required all FTIC degree-seeking students to be tested before registration and then enroll in college preparatory courses if below standards stated in the rule. As of June 30, 1997, all Florida community colleges were required to administer the Florida College Entry-Level Placement Test (CPT), and current common cut scores for the CPT were implemented statewide. Students with minimum scores for the elementary algebra, reading comprehension, and sentence skills portions of the CPT are considered "ready" for college-level math, reading, and writing. Students scoring less than the standard CPT scores listed in Rule 6A-10.0315, F.A.C., are required to enroll in college preparatory communication and computation instruction. Colleges may exempt students from these tests if the students meet correlated college-ready scores on the SAT or ACT.<sup>5</sup> In the fall of 2000, the ACT and SAT scores required for a student to be considered college-ready were increased in order to align them with the required scores of the CPT.

The Florida State Board of Community Colleges developed a comprehensive Student Data Base and in 1999 provided an in-depth analysis of Florida's college preparatory programs in community colleges using information from this data base. This review was conducted by Dr. Patricia Windham, Director of Educational Effectiveness and Research, of the then Florida State Board of Community Colleges.<sup>6</sup> Her report, *Bridging the Gap*, presents valuable data on FTIC students, who were tracked from the fall 1993 term through the spring of 1998. This study addresses the age of the students, among other important factors and provides related background information for the current program review. According to Dr. Windham, there is a decline in college readiness associated with the break between high school and college, and "the longer you are out, the worse it gets." *Bridging the Gap*, Table 5 (Appendix A), delineates the following information for FTIC students:

- Forty-seven percent (47%) are age 18 and under.
- Fifty-three percent (53%) are age 19 through 55 years (and older).

This information is important when coupled with *Data Trend 33, Postsecondary Success Begins with High School Preparation*, produced in March 2005 by the office of now Associate Vice Chancellor for Evaluation Dr. Windham of the Division of Community Colleges and Workforce Education. *Data Trend 33* notes that students who take higher level reading and math courses in high school more often score 3 or higher on the Florida Comprehensive Assessment Test (FCAT); students who score 3 on reading and 4 on math for the FCAT more often pass the math and reading sections of the CPT. The data trend report concludes that academic success at the postsecondary level begins with higher level preparation at the secondary level. The report also highlights the need for more rigorous high school and middle school coursework. More rigorous coursework at the secondary level can reduce the need for developmental education for FTIC students; nevertheless, the ongoing need for developmental education at the postsecondary level is a current reality due to (1) high numbers of students not college-ready after high school and (2) students who take a break between high school and college and then decline in readiness.

<sup>4</sup> Education Commission of the States, *ibid*.

<sup>5</sup> Students who present scores on either the College Board's SAT-1 or the American College Testing Program's Enhanced ACT test that meet or exceed the scores specified in Rule 6A-10.0315, F.A.C., may be exempted from taking the Florida College Entry-Level Placement Test (CPT) at the option of the president of the community college.

<sup>6</sup> Windham, Patricia, Ph.D., (1999) *Bridging the Gap*. Tallahassee, Florida: Florida Department of Education.

**Designated Courses of the Program Review.** Courses designated as college preparatory in the State Course Numbering System (SCNS) were included in the current review. In terms of subsequent course success, Math (MAT) 1033 and the college-level courses Math (MAC) 1101 and English (ENC) 1105 were included in this review.

**Methodology.** Department of Education (DOE) staff gathered and analyzed data from the Student Data Base inclusive of the years 1999 through 2003. In addition, a detailed developmental education survey was developed by the Division of Community Colleges and Workforce Education (DCCWE) and disseminated in February 2005 to each of the state's 28 community colleges. The response rate by the community colleges was 100%. DCCWE staff analyzed the data from the survey.

**College Preparatory Success Rate.** The Student Data Base includes a segment identified as Accountability Measure 4 Part 1, which tracks information on students needing to take college prep courses in either reading, writing, or math. The measure looks at students failing a given portion of a placement test and then determines how many of those students enrolled in college prep courses within two years of testing. A final component of Measure 4 Part 1 is a determination of how many students completed the highest level course for the required college prep area within those same two years. Students completing the highest level courses are then ready to enroll in college level courses.

**College-Ready Status of Entering Community College Students.** Graph I depicts a fall, 2000-2001 cohort of FTIC degree-seeking students who failed an entry level test (ELT) in reading, writing or math. A significant majority (65.63%) of students in this cohort failed at least one entry level test. The percentage of college-ready students passing all entry level tests was 34.37%.

**Graph I**  
**FTIC Degree-Seeking Students Who Failed an ELT**  
**in Reading, Writing or Math, Fall 2000-2001 Cohort**

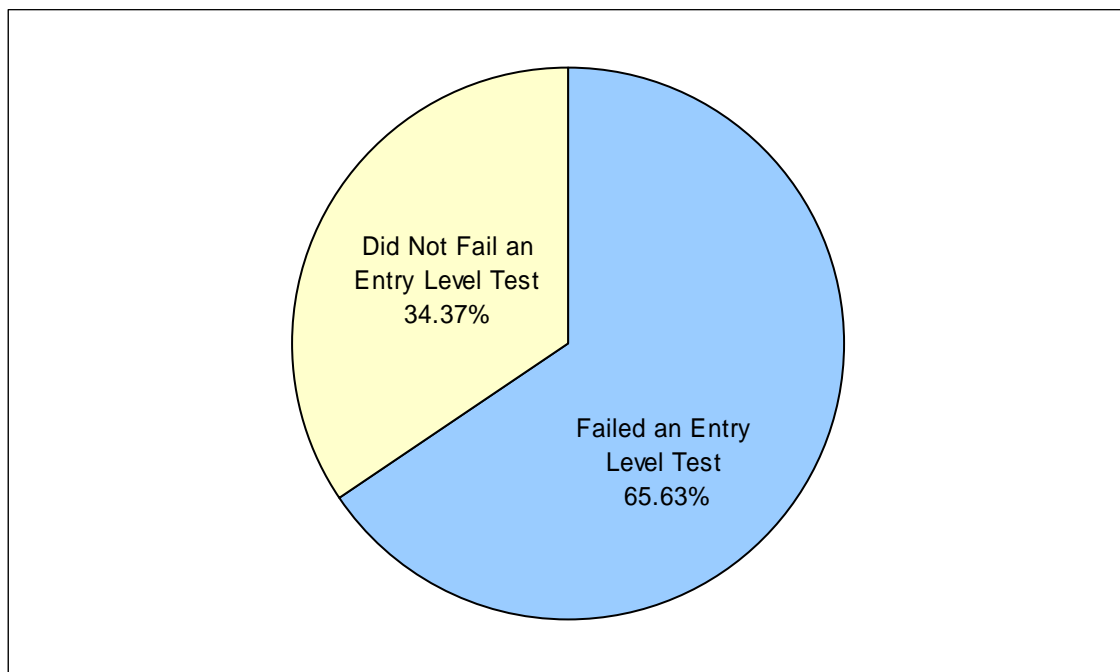


Table I shows FTIC degree-seeking students failing an ELT by ethnicity of students for the fall 2000-2001 cohort. With 84.11% of Black/Non-Hispanic students failing an ELT, this group had the highest failure rate, while Hispanics (72.24%) and Other (70.22%) had the next highest failure rates, with Asians (66.55%) and American Indians/Alaskans (65.45%) having similar rates of failure. White students had the lowest failure rate at 58.66%; however, the percentage of failure still exceeds one-half of this group taking the test.

**Table I**  
**FTIC Degree-Seeking Students Failing an ELT**  
**by Ethnicity of Students, Fall 2000–2001 Cohort**

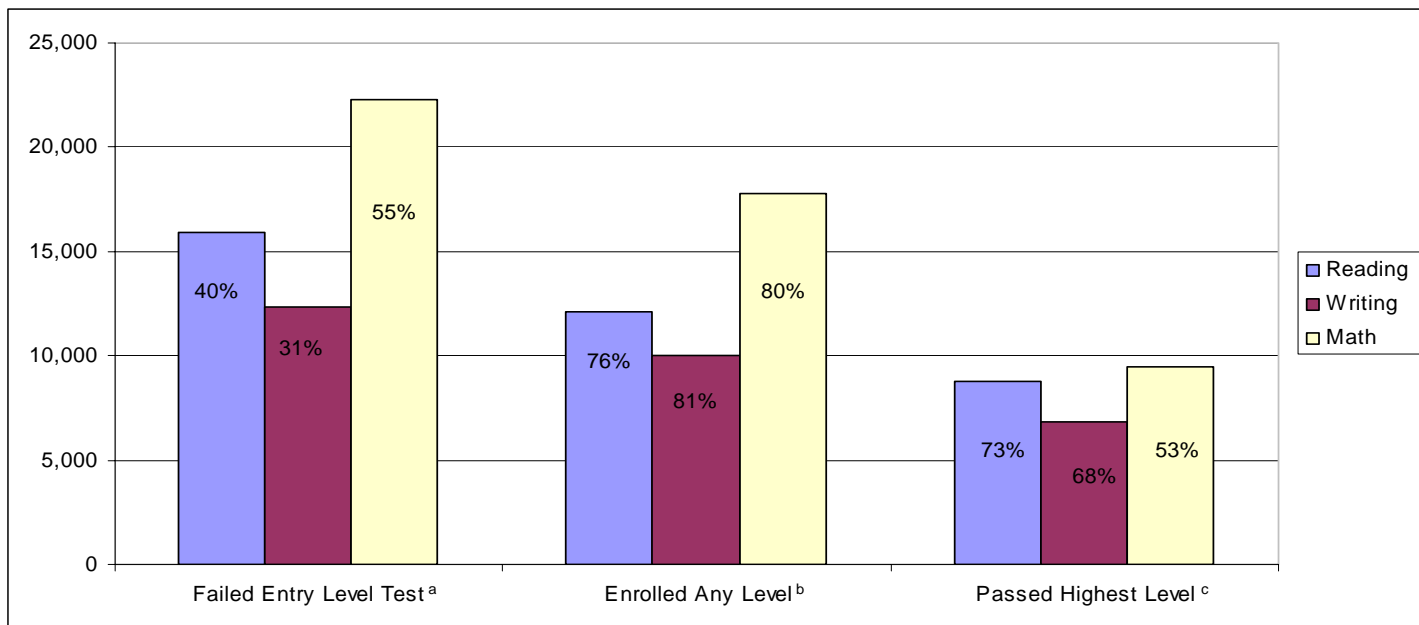
| Ethnicity                          | Took an ELT | Number Failed ELT | Percent Failed ELT |
|------------------------------------|-------------|-------------------|--------------------|
| Asian Pacific Islander             | 1,121       | 746               | 66.55%             |
| Black/Non-Hispanic                 | 6,778       | 5,701             | 84.11%             |
| Hispanic                           | 6,818       | 4,925             | 72.24%             |
| American Indian/<br>Alaskan Native | 165         | 108               | 65.45%             |
| White                              | 24,869      | 14,588            | 58.66%             |
| Other                              | 450         | 316               | 70.22%             |
| Total                              | 40,201      | 26,384            | 65.63%             |

**Success in the Highest Level Course for an ELT Failed.** Graph II depicts how many of the fall 2000-2001 cohort students failed the reading, writing or math ELT and how many of those students enrolled in college prep courses within two years of testing. This graph also shows how many students completed the highest level course for the required area within those same two years. The greatest number of students failed the math ELT (22,289 students or 55%), while 15,949 (40%) failed reading and 12,378 (31%) failed writing. It is of note that the math ELT continues over time to be the test that has the highest failure rate for FTIC students.<sup>7</sup>

An examination of data for students who enrolled in college prep courses after failing an ELT reveals that the lowest success rate is for mathematics, with 9,437 students (53.10%) passing the highest level of math after enrolling. In writing, 6,802 students (67.85%) passed the highest level, and 8,868 students (73.02%) passed the highest level for college prep reading.

<sup>7</sup> *Bridging the Gap*, *ibid.*

**Graph II**  
**Fall 2000–2001 Cohort of FTIC Degree-Seeking**  
**Students Enrolling in Any Level College Prep Course and**  
**Percent of Students Passing Highest Level within**  
**Two Years of Taking an ELT**



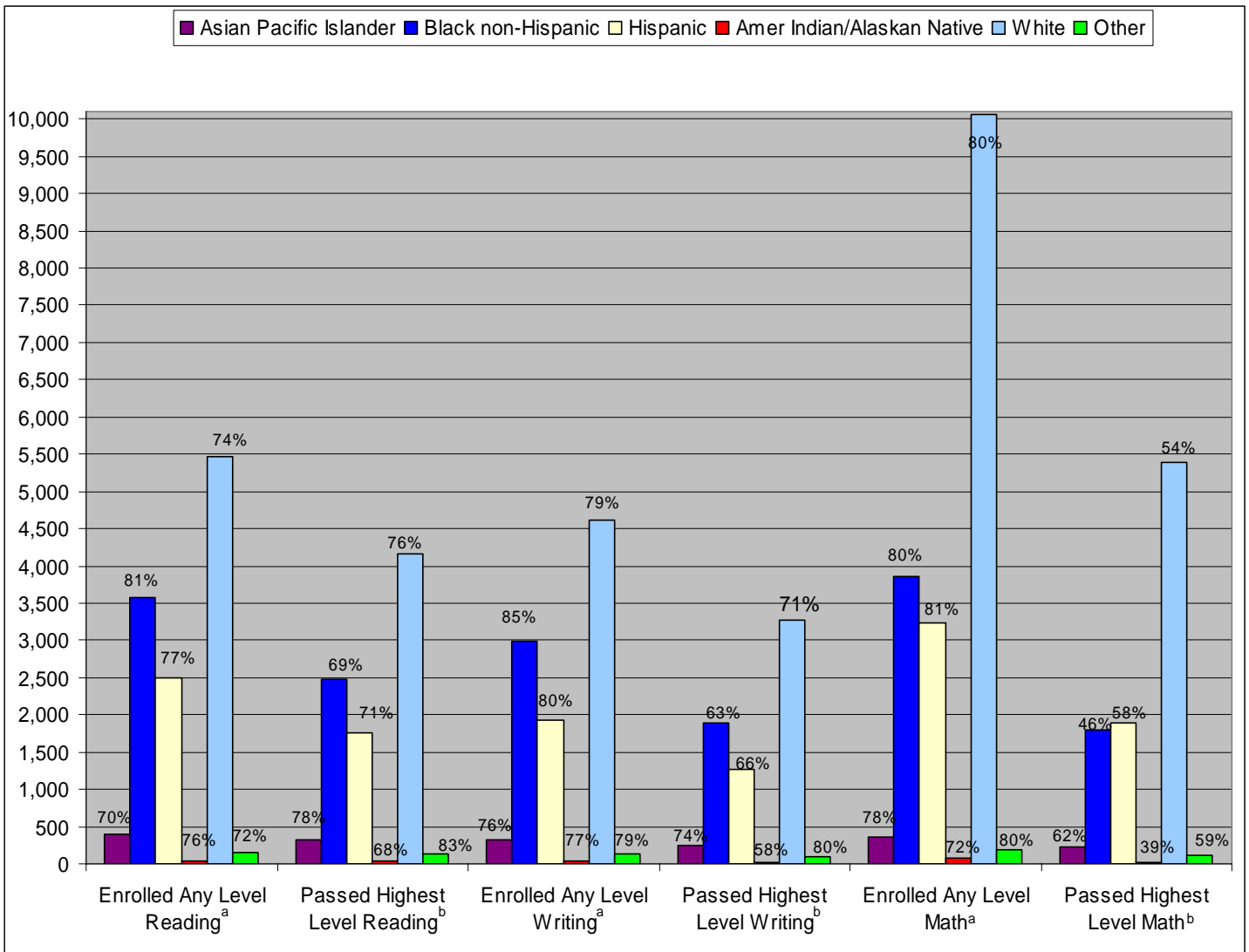
<sup>a</sup>Percent failing an ELT reflects a percentage of the total 40,201 students tested (fall 2000-2001 cohort). Any student may fail more than one area test.

<sup>b</sup>Percent enrolled any level reflects a percentage of the number who failed each corresponding area test.

<sup>c</sup>Percent passed highest level reflects a percentage of the number who enrolled in each corresponding area of study after failing the ELT.

Graph III on page 6 extends the examination of the fall 2000-2001 cohort “enrolled any level” and “passed highest level” within two years of taking an ELT to an analysis of ethnicity for these categories in relation to college prep reading, writing, and math courses. Within each ethnic group, the lowest success rate is in math. Rates of success in passing the highest level of math (stated in the order of lowest to highest percentage) are as follows: 38.81% of American Indian/Alaskan students enrolling in any level of math passed the highest level; 46.44% of the Black/Non-Hispanic students enrolling in any level; 53.58% of the White students enrolling in any level; 58.48% of the Hispanic students enrolling in any level; 59.09% of the Other category enrolling in any level; and 62.43% of Asian students enrolling in any level passed the highest level of math.

Graph III



Note: Information for American Indian/Alaskan Native does not display due to low numbers of students in this category.

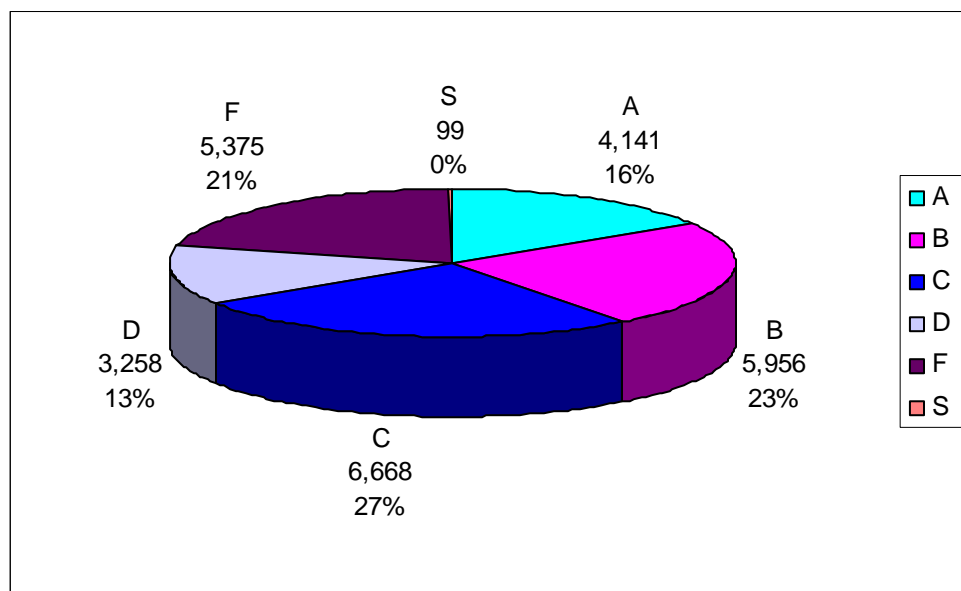
<sup>a</sup>Percent enrolled any level reading, writing, or math reflects a percentage of the number in an ethnic group who failed each corresponding area test.

<sup>b</sup>Percent passed highest level reflects a percentage of the number who enrolled in each corresponding area of study after failing the ELT.

**Subsequent Course Success.** The DOE tracks students who begin in developmental education and subsequently take the following English or math courses within two years: MAT 1033 (Intermediate Algebra), MAC 1105 (College Algebra), and ENC 1101 (Communications I). Graphs IV, V, and VI portray the number and percentage of students who began in developmental education in 2002-2003 and then took subsequent courses in the same subject area in 2002-2003 or 2003-2004. The data is displayed by grade earned.

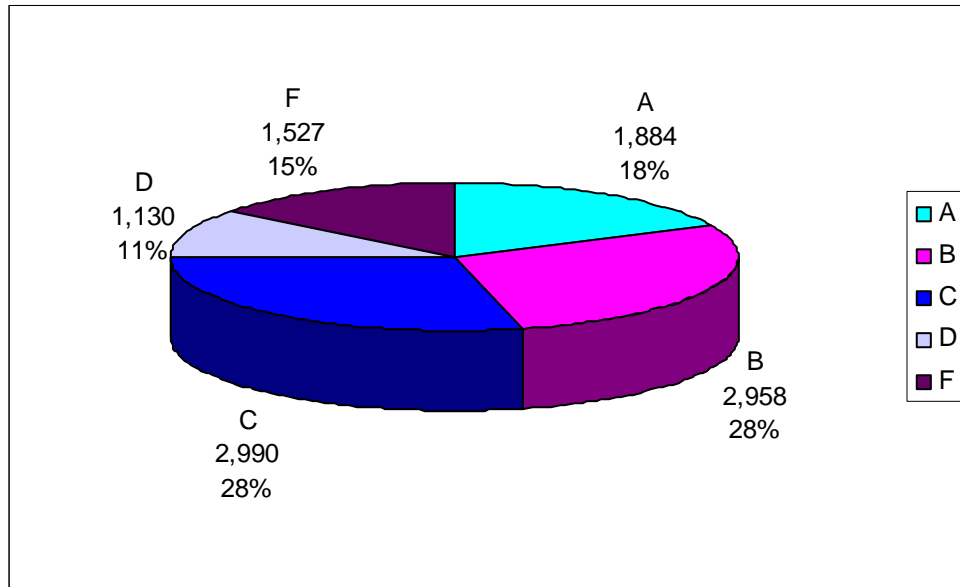
Graph IV addresses 25,516 students who took Math 0020 or Math 0024 (College Prep) and then took Math 1033 (Intermediate Algebra). Of this total population, 21% failed Math 1033. However, 39% of the students earned an A or B in the subsequent course Math 1033, and 27% made the grade of C. A grade of D was received in Math 1033 by 13% of the students.

**Graph IV**  
**Number and Percentage of Students**  
**Who Began in Developmental Education in 2002-2003**  
**and Took MAT 0020 or MAT 0024**  
**Then Took MAT1033 within Two Years, by Grade Earned in MAT 1033**



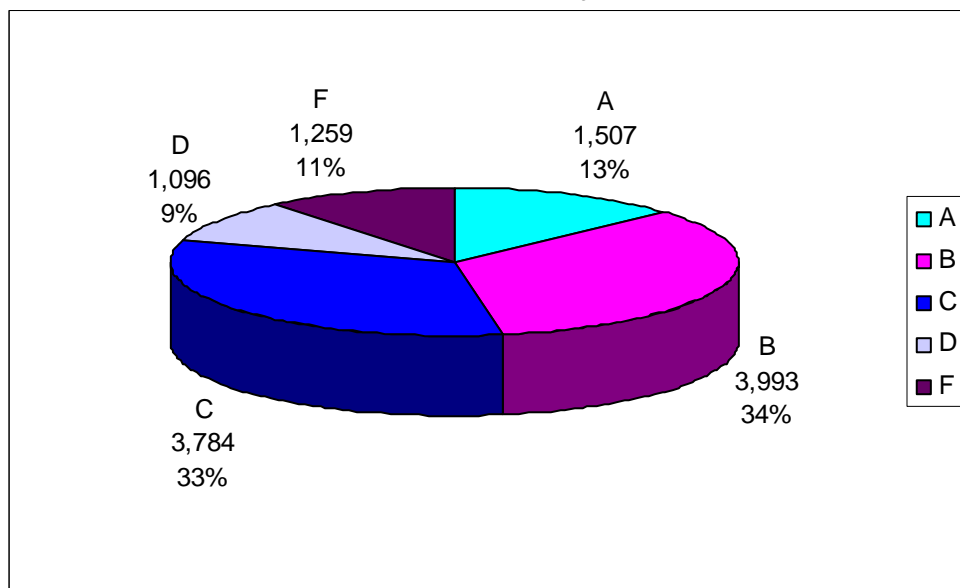
Graph V on page 8 depicts the 10,489 students who took Math 1033 (Intermediate Algebra) and then Math 1105 (College Algebra) within two years. Of this total population, 15% failed Math 1105, the first college level math course for those in this study. An A or B was earned in Math 1105 by 46% of the students who had taken Math 1033, 28% made the grade of C, and 11% received a D in Math 1105.

**Graph V**  
**Number and Percentage of Students**  
**Who Began in Developmental Education in 2002-2003 and Took MAT 1033**  
**Then Took MAC 1105 within Two Years, by Grade Earned in MAC 1105**



Graph VI depicts the 11,639 students taking college prep English and then taking English 1101, which is a college level course. In this group, 11% failed English 1101. An A or B was earned in English 1101 by 47% of the students, 33% made a C, and 9% received a D in English 1101 within two years. In both the first college level math course and college level English course taken by former developmental education students over the two years studied, almost 50% earned a grade of A or B.

**Graph VI**  
**Number and Percentage of Students**  
**Who Began in Developmental Education in 2002-2003 and Took ENC College Prep**  
**Then Took ENC 1101 within Two Years, by Grade Earned in ENC 1101**



A more detailed display of information for subsequent course success for developmental students can be accessed in Appendix B, in which several tables depict community college system-wide data for each of the topics displayed in Graphs IV, V, and VI of this program review report. An examination of these subsequent course success tables in Appendix B makes evident the importance for developmental education students to earn a grade of C or higher in a developmental education course in order to succeed in a higher level course. The trend is for a higher grade by college preparatory students in an initial course to result in a greater chance for success in a subsequent course. For example, twice as many students earned the grade of A in Math 1033, when compared to the total number of students making an A in Math 1033, if the students had previously made an A in College Prep. Students who earned an A in Math 1033 subsequently made an A in Math 1105 with approximately twice the rate of success as those who did not make an A in Math 1033. Further, approximately two times as many "A students" who moved from English Prep to the next course, English 1101, again earned the grade of A.

**Retention and Success Rates.** Retention rates are derived through a mathematical formula that includes the total number of students, in addition to the number of students who graduated, were still enrolled in good standing, and enrolled not in good standing. Success rates are calculated through a formula that includes total number of students, in addition to number of students who graduated, were still enrolled in good standing, and left in good standing.

Table II displays a cohort population derived from Part 1 of Accountability Outcome Measure 4, who **met all necessary college preparatory requirements** and who achieved 9 (PSVC, ATD) credit hours by summer 2001 or 18 (AA, AS, AAS) credit hours by winter/spring 2003 and were seeking an AA, AS, AAS, PSVC, or ATD award,<sup>8</sup> as reported on the Student Data Base. The tracking period is fall 1999 through winter/spring 2003. Further, this examination of retention and success rates is by ethnicity.

Table II also shows that graduation rates for the 1999 cohort ranged from a high of 35.94% for 281 Asian/Pacific Islanders to a low of 13.79% for 29 American Indian/Alaskan students. The graduation rate for 4,244 White students was 30.49%, followed by 1,473 Hispanic students at 25.12%. For 1,251 Black/Non-Hispanic students, 22.14% achieved graduation, as well as 21.79% of the 78 students in the Other category.

**Table II**  
**Retention and Success Rates by Ethnicity**  
**Fall 1999 Cohort of College Prep Students**  
**Who Met All Necessary College Prep Requirements**  
**Tracking Period Fall 1999 Through Winter/Spring 2003**

| Ethnicity                          | Total Cohort | Graduation Rate | Retention Rate | Success Rate |
|------------------------------------|--------------|-----------------|----------------|--------------|
| Asian/Pacific Islander             | 281          | 35.94%          | 71.89%         | 89.32%       |
| Black/Non-Hispanic                 | 1,251        | 22.14%          | 64.27%         | 77.06%       |
| Hispanic                           | 1,473        | 25.12%          | 72.10%         | 83.10%       |
| American Indian/<br>Alaskan Native | 29           | 13.79%          | 62.07%         | 86.21%       |
| White                              | 4,244        | 30.49%          | 65.62%         | 86.26%       |
| Other                              | 78           | 21.79%          | 57.69%         | 80.77%       |
| Total                              | 7,356        | 28.05%          | 66.83%         | 84.12%       |

<sup>8</sup>Associate in Arts Degree, Associate in Science Degree, Associate in Applied Science Degree, Postsecondary Vocational Certificate, or Applied Technology Diploma

**CLAST Performance.** Accountability Measure 5 is related to performance on the College Level Academic Skills Test (CLAST) by prior developmental education students with 60 or more accumulated credit hours. Table III (a) and (b) demonstrate comparisons for 2001-2002 between these former college prep students and students who had not previously had college prep status. The differences in the percent of each group of students passing the individual sections of the CLAST did not vary greatly. A difference of 1.35% occurred in the essay portion of the CLAST between the college prep students (97.78% passing) and students who had not taken college prep courses (99.13% passing). The percent difference in the reading section was 2.21%, with prior college prep students passing at 97%, and the other group passing at 99.21%. A difference of 2.49% occurred between the college prep students (96.55%) and non-college prep students (99.04%) in the language section. The math portion of the CLAST resulted in a difference of 6.24%, with prior college prep students passing at 91.67% and other students passing at 97.91%.

**Table III (a)**  
**CLAST Performance for Students Who Have Accumulated 60 or More Credit Hours at a Particular Community College and Have Had or Have Not Had College Prep Status**

| College Prep | Essay            |                | Language         |                |
|--------------|------------------|----------------|------------------|----------------|
|              | Number Attempted | Percent Passed | Number Attempted | Percent Passed |
| Yes          | 25,275           | 97.78%         | 25,345           | 96.55%         |
| No           | 19,848           | 99.13%         | 19,879           | 99.04%         |
| Total        | 45,123           | 98.37%         | 45,224           | 97.65%         |

**Table III (b)**  
**CLAST Performance for Students Who Have Accumulated 60 or More Credit Hours at a Particular Community College and Have Had or Have Not Had College Prep Status**

| College Prep | Math             |                | Reading          |                | All Subtests     |                |
|--------------|------------------|----------------|------------------|----------------|------------------|----------------|
|              | Number Attempted | Percent Passed | Number Attempted | Percent Passed | Number Attempted | Percent Passed |
| Yes          | 21,188           | 91.67%         | 25,324           | 97.00%         | 20,033           | 88.50%         |
| No           | 18,826           | 97.91%         | 19,880           | 99.21%         | 18,086           | 96.56%         |
| Total        | 40,014           | 94.61%         | 45,204           | 97.97%         | 38,119           | 92.32%         |

Source: 2001-2002 Student Data Base and Historical CLAST File; includes Native Students with 60 or more hours at that institution who took the CLAST prior to September 2002, or had a CLAST alternative. College preparatory status was institutionally determined.

**Awards Earned and Transfers to the State University System (SUS).** A 1999 cohort of FTIC students was tracked through 2003-2004 in relation to several measures of success. Table IV provides the percentage of awards earned and transfers to the SUS for this cohort. College-ready students earned an award at the rate of 40.7%. The rate of awards earned is better for students needing only college prep reading (34.6%) or writing (30.9%) than needing only college prep math (21%). The percentage of awards earned is lower when math is an area of need, either singly or with other course areas. Students needing all three areas of remediation have the lowest rate for awards earned (9.9%).

Likewise, students needing all three areas have the lowest rate of transfer to the SUS (5.5%). College-ready students transferred to the SUS at a rate of 29.5%. Students needing only college prep reading have the next highest rate of transfer (23.1%) for the cohort. College preparatory students needing math, either singly or along with reading and/or writing, have lower rates of transfer to the SUS than those college prep students who did not have math as an area of need for remediation.

**Table IV**  
**Awards Earned and Transfers to the SUS by Areas Required**  
**Based upon Fall 1999 FTIC Students with**  
**Complete Placement Scores**

|           |                         | Original Cohort     |         | Awards Earned |         | Transfers to the SUS |         |
|-----------|-------------------------|---------------------|---------|---------------|---------|----------------------|---------|
|           |                         | Number              | Percent | Number        | Percent | Number               | Percent |
|           | College Ready           | 10,114              | 28.2%   | 4,119         | 40.7%   | 2,987                | 29.5%   |
| Need Only | Mathematics             | 7,726               | 21.6%   | 1,623         | 21.0%   | 835                  | 10.8%   |
|           | Reading                 | 1,346               | 3.8%    | 466           | 34.6%   | 311                  | 23.1%   |
|           | Writing                 | 541                 | 1.5%    | 167           | 30.9%   | 100                  | 18.5%   |
| Need      | Mathematics & Reading   | 4,114               | 11.5%   | 639           | 15.5%   | 351                  | 8.5%    |
|           | Mathematics & Writing   | 1,735               | 4.8%    | 274           | 15.8%   | 108                  | 6.2%    |
|           | Reading & Writing       | 1,318               | 3.7%    | 322           | 24.4%   | 238                  | 18.1%   |
|           | Need all three areas    | 8,930               | 24.9%   | 884           | 9.9%    | 490                  | 5.5%    |
|           | Needing any remediation | 25,710 <sup>a</sup> | 71.8%   | 4,375         | 17.0%   | 2,433                | 9.5%    |
|           | Total Cohort            | 35,824              | 100.0%  | 8,494         | 23.7%   | 5,420                | 15.1%   |

Note: Results based upon information contained in the Student Data Base for 1999-2000 through 2003-2004 and various PBPB files created from the SUS SDCF

<sup>a</sup>Number of students in original cohort needing any remediation is inclusive of students who met or did not meet all necessary college prep requirements. College prep students who met all necessary college prep requirements had a graduation rate of 28.05% (see Table II).

**Developmental Education Survey Results.** Results of the Developmental Education Survey are displayed in Charts I - XIV of Appendix C. Conclusions and recommendations based on the survey are included in the Conclusion and Recommendation sections directly below.

**Conclusion.** The rate of failure of at least one ELT was 65.53% for FTIC degree-seeking students as measured in the fall of 2000. While the highest failure rate by ethnicity was 84.11% for Black/Non-Hispanic students in 2000, the lowest failure rate of 58.66% for White students is representative of over half of this group.

Out of 40,201 total FTIC degree-seeking students taking an ELT, the greatest number of students failed the math ELT (22,289 students or 55%), while 15,949 (40%) failed reading and 12,378 (31%) failed writing (with some students failing more than one test). It is of note that the math ELT has continued over time to be the test that has the highest failure rate for FTIC students. For students enrolling in required college preparatory courses following testing, the lowest academic success rate is in math, with 53.10% passing the highest level of math within two years of taking an ELT. In writing, 67.85% passed the highest level, and 73.02% passed the highest level for reading. An analysis by ethnicity for "passed highest level" within two years of taking an ELT shows that the lowest pass rate overall for all ethnic groups is in the college preparatory math course.

For the students who progress in developmental education and subsequently take higher level English or math courses within two years, the percentages for success show much improvement. In both the first college level math course and college level English course taken by former developmental education students over the two years studied, almost 50% earned a grade of A or B. An F was received by 15% of the former developmental students taking the first college level math course and 11% taking the first college level English course. Additionally, individual developmental education students who earn a grade of C or higher in an initial course have a greater chance for success in a subsequent course. The developmental students who perform at a level of C or higher in college prep English are more successful in English 1101 when compared with students not performing as well. The students who earn a grade of C or above in College Prep Math 0020/Math 0024 are more successful in Math 1033. Likewise, those students who make a C or better in Math 1033 are more successful in Math 1105.

Former developmental education students compared favorably on most individual subtests of the CLAST with students who had not been required to take any college prep courses. **The college prep students scored only slightly lower than the non-college prep students on all subtests except math.** The percentages for passing a subtest varied from a difference of 1.35% on the essay subtest to 2.49% on language. On the math subtest, the college prep students scored somewhat lower (6.24%) than those who had not had college prep status.

College-ready students earned an award at the rate of 40.7%. The rate of awards earned is better for students needing only college prep reading (34.6%) or writing (30.9%) than needing only college prep math (21%). The percentage of awards earned is lower when math is an area of need, either singly or with other course areas. Students needing all three areas of remediation have a still lower rate for awards earned (9.9%).

Likewise, students needing all three areas have the lowest rate of transfer to the SUS (5.5%). College-ready students transferred to the SUS at a rate of 29.5%. Students needing only college prep reading have a rate of transfer of 23.1%. College preparatory students needing math, either singly or along with reading and/or writing, have lower rates of transfer to the SUS than those college prep students who did not have math as an area of need for remediation.

In the current study, math presents an interesting pattern.

- The greatest number of FTIC students fail the math ELT than other ELTs.
- Former college preparatory students score lower on the math subtest of the CLAST than on other subtests.
- The percentage of awards earned is lower when math is an area of need in remediation, either singly or with another course area.
- College preparatory students needing math, either singly or along with another area of remediation, have lower rates of transfer to the SUS than those who do not.

Another pattern is that student success rates are lowest for students needing all three areas of remediation in terms of awards earned and transfers to the SUS.

Responses to the Division of Community Colleges and Workforce Education Developmental Education Survey demonstrated the following:

- There is not a standardized assessment and placement process for English as a Second Language (ESL) students at institutions across the community college system.
- CPT retesting practices are not standard across the state.
- Almost 50% of the community colleges offer the Student Life Skills (SLS) course as an elective or do not require SLS. It is of interest that three of the respondents to the survey commented on their internal institutional research that indicates a link between the SLS course and student success. Their results included a finding that students who take and pass the SLS intervention courses at their institution during their first term have a retention rate equal to or better than college-ready students. Internal institutional research also found that developmental education students who do not take the SLS courses performed at about 10 percentage points lower in retention rate than those who do take the courses. Hunter Boylan, a leading researcher in the developmental education field, includes “study strategies courses or workshops” as a necessary support service to be provided to developmental students on a systematic rather than a random basis (Boylan et al., 1996). Information from research raises the question of whether a requirement for the SLS course for developmental education students can enhance student success.
- Advising and counseling practices for developmental education students are widespread within the FCCS, with variations in intensity and frequency.
- Attendance policies vary greatly across the community college system, and local standards stated in the survey range from 3 absences to 10 absences. Fifteen of the colleges allow instructors to set attendance policy, but there may be departmental or institutional policies that are to be considered. There is no institutional attendance policy for seven of the colleges.
- Most developmental education programs in Florida’s community colleges are integrated into the relevant departments.
- Administration practices for the college preparatory exit exam and passing scores are not standard across the state.

**Recommendations:**

- Continued emphasis on the need for more rigorous preparation of students in middle school and high school, particularly in math and reading;
- Continued articulation agreements between community colleges and public high schools to decrease the need for developmental education in community colleges;
- Consideration of a standard attendance policy for developmental education programs across the community college system;
- Consideration for providing the SLS course to all developmental education students;
- Consideration by the Council of Instructional Affairs (CIA) Subgroup on College Readiness to examine and discuss current practices in assessment and placement of ESL students in community colleges, revealed through the broader responses on the Developmental Education Survey, and determine a recommendation for a best practice in assessment and placement of these students;
- A requirement of advising for developmental education students which addresses the full range of educational support services available at a community college;
- Advisement and counseling as tools to encourage additional former college preparatory students who successfully complete college level math and English to work toward degree completion;
- Consideration of a standard placement test/retest policy;
- Further study of the appropriateness of current placement test scores;
- Consideration of common exit test scores.

This study relates to the Florida Department of Education's *Strategic Imperative 2: Set, Align and Apply Academic Curricular and Testing Standards* and to *Strategic Imperative 3: Improve Student Rates of Learning*.

For more information on performance tracking of FCCS students and SUS students between 1999-2000 and 2002-2003, please contact Dr. Pat Windham via telephone at (850) 245-9482 or via e-mail at [Pat.Windham@fldoe.org](mailto:Pat.Windham@fldoe.org).