



# Research Brief

## Academic Success



Department of Planning, Research, and Effectiveness  
(<http://www.accd.edu/spc>)

### Achieving the Dream (AtD) Initiative

July 2008

"Achieving the Dream: Community Colleges Count" is a multi-year initiative funded by the Lumina Foundation for Education that addresses the challenge of providing low income students and students of color with opportunities for academic success. The AtD student outcome indicators are the following: (1) Successful completion of developmental (remedial) courses and progression to college-level courses; (2) Enrollment and successful completion of college-level "gatekeeper" courses; (3) Productive grades (C or higher) in all courses; (4) Semester to semester persistence; (5) Graduation; and (6) Transfer (a PAC-specific goal). All colleges of the Alamo Community College District participate in this initiative to cultivate and promote a culture of evidence, accountability, equity, and excellence in support of the student outcomes. Feedback? Questions? Contact Mecca Salahuddin, [msalahuddin1@mail.accd.edu](mailto:msalahuddin1@mail.accd.edu), (210) 531-4897.

### Introduction

At SPC, there has been specific focus on tutoring. The focus of this research brief is to analyze the impact of ethnicity and Pell grant status on successful course completion for students enrolled in a developmental course requiring co-enrollment in a computer math lab for one hour per week per semester.

### Methodology

The math faculty revised the developmental math sequence requiring each student to register for a standard 3-hr lecture course and for a co-requisite 1-hr math lab. The math department developed a prescriptive set of computer laboratory exercises that each student must complete in each math course. The lab component accounted for 20% of the course grade. The computer lab component was developed as an online component; students would be able to complete the lab assignments from school, home, or work. Students were able to ask the instructional support staff for assistance with any of the mathematical content. Data are collected on students enrolled in Math 0300 and 0303 in Fall 2007 compared to students enrolled in these courses Fall 2005. Expected is an increase in successful course completion rates for students enrolled in the courses with a required lab.

### Results

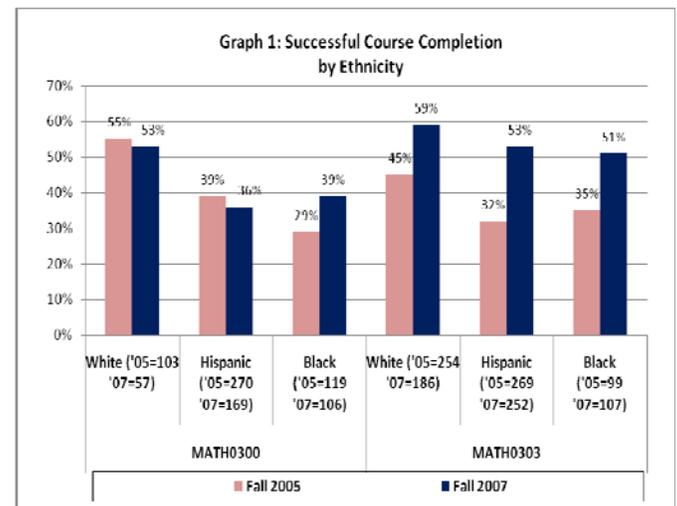
#### 1) Successful Course Completion by Course and Ethnicity

Successful course completion is defined as the percentage of students who complete the course with a grade of A, B, or C.

Data in Graph 1 indicates differences in successful course completion. African-American students at SPC enrolled in MATH 0300 had a higher successful course

completion in Fall 2007 than students in the Fall 2005 cohort, 39% & 29% respectively. For the other groups, the successful course completion was lower. Overall, there was a slight decrease in successful course completion for students enrolled Fall 2007 compared to Fall 2005 cohort (39% and 40%).

For MATH 0303, Fall 2007 students consistently had higher rates of successful course completion than those student enrolled in the Fall 2005 cohort. Hispanic students had a twenty-one percentage increase from Fall 2005 to Fall 2007, 32% and 53%, respectively. African-American students increased by 16 percentage points, 35% to 51%. White students increased from 45% to 59%. Overall, there was a 17% increase from Fall 2005 to Fall 2007 cohorts (38% and 55%).



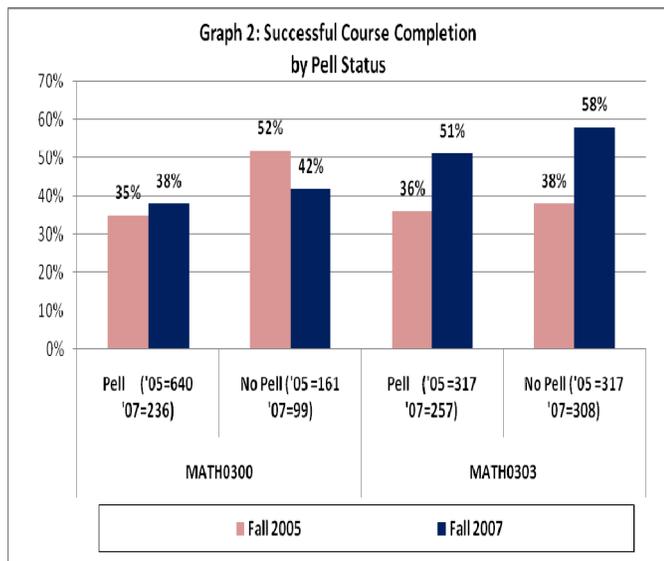
#### 2) Successful Course Completion by Course and Pell Status

Graph 2 indicates that Pell students enrolled in MATH0303 Fall 2007 had a 15% increase in successful course completion rates over Pell students in the Fall

2005 baseline year (51% and 36%, respectively). For non-Pell students the increase was 20% (38% to 58%). MATH 0300 showed a slight increase for students receiving Pell and a decrease for those with a No Pell status.

students potentially negating the effects of the math lab, further data will be analyzed. Other developmental math courses (MATH0302 and MATH0301) will have a required lab beginning Spring 2008 and Summer 2008. It is anticipated that with the required additional one-hour lab for all developmental students, there should be an even higher increase in successful course completion rates for students in all levels of developmental math.

***Stay tuned for further information on Achieve the Dream outcome indicators in future research briefs.***



**Summary**

Overall, Fall 2007 students enrolled in MATH 0303 had a 17% increase in successful course completion compared to Fall 2005 cohort (38% to 55%). Successful course completion rates are still low for MATH0300. However, between Fall 2005 and Fall 2007 a new course was developed for Applied Science