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Highline Community College Mathematics Department Engages in Mentoring Initiative with Developmental Mathematics Students

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The mathematics department at Highline Community College is in its second year of an Achieving-the-Dream student mentoring intervention that connects students in developmental mathematics courses with faculty mentors in a structured relationship. Achieving the Dream is a multiyear national initiative to help more community college students earn degrees and certificates or transfer to other institutions to continue their studies, with a focus on students who face significant barriers in higher education, particularly students of color or of low income. The mentoring intervention is a two quarter program that focuses on (1) developing habits that help students succeed in classes and (2) facilitating a commitment to a college education.



Helen Burn



Erik Scott

To develop the initiative, the team drew from student engagement research (Tinto and others) and the American Mathematical Association of Two-Year Colleges' (AMATYC) *Crossroads* and *Beyond Crossroads* documents to design a four-year plan. The department chose to focus on students enrolled in beginning and intermediate algebra (Math 91 and 97) because these courses are among the highest enrollment

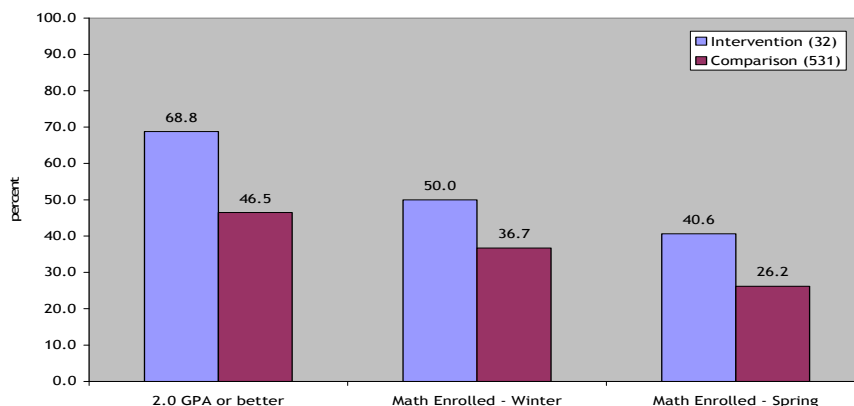
courses on campus yet rank fourth, and fifth in students who receive grades below 2.0 (Math 91: 39.5%; Math 97: 32.8%). In addition, usage data indicated that these two courses place the highest demand on the Tutoring Center and are "gatekeepers" in that nearly all college programs and transfer degrees have proficiency in algebra as a prerequisite.



Jason Ramirez

The year one results of the intervention are promising. Of the 32 students who participated during the 2007-08 academic year, 68.8% completed Math 91 or 97 successfully (2.0 or better) in fall quarter 2007 compared to 46.5% of students in a comparison, an increase of 22.3 percentage points. Persistence was also suggestive of the benefits of the mentoring relationship, as 50% of the intervention students enrolled in a follow-on math course during winter of 2008 compared to 36.7% of the comparison group—an increase of 13.1 percentage points. In addition, 40.6% enrolled in a follow-on math course in spring quarter of 2008 compared to 26.2% of the comparison group.

Achieving the Dream 2007-2008
Developmental Math Intervention



Responding to mentor comments, we revised the mentoring manual. Among the changes are clearer definitions of the mentor's role and a presentation of the curriculum at several levels of detail. The latter change accommodates the different needs for structure among the mentors while still providing a coherent vision. Consistency across mentors is also being addressed through regular, structured meetings with the mentors. These meetings address one other weakness of the first year, namely inconsistent data reporting, by providing time for mentors to complete their data forms at the meetings.

For a more detailed article and a project poster, please visit http://www.highline.edu/ia/atd/docs/PNW_MAA_Newsletter_fall2008.pdf and <http://www.highline.edu/ia/atd/docs/AtDPofter2008.pdf>