Math “Boot Camp” Increases Student Success

Fall semester 2006 found the West Valley Math Department faculty struggling with the too-familiar dilemma of low student success rates in the beginning and intermediate algebra courses (Math 103 and 106). These courses are the building blocks of collegiate-level mathematics, but success rates persistently hovered in the high 40’s. Their brainstorming led to, as Professor Stan Benkoski put it, a “crazy idea” - math “Boot Camp.” Benkoski and fellow Professor Rebecca Wong devised a one-week prep class to be offered the week prior to the start of the semester; (continued below)

the intensive session would be a 50/50 split between algebra concepts and general math study skills. The professors chose to utilize ALEKS, a National Science Foundation-funded software program that focuses on 336 key algebra skills. Through preliminary and regular assessment, ALEKS customizes to each user, identifying what s/he knows as well as what s/he is ready to learn. The ALEKS Instructor function enables the instructor to watch each student’s progress and counsel the student to enroll in the algebra class that is appropriate for his or her needs.

Students attend the prep class 5 hours a day for a week, with more work required outside of class. The intensive instruction pays off; students who complete the “Boot Camp” have posted success rates an average of 43% higher than those who have not.

Students currently self-select into the course, but faculty are looking into the possibility of including EOP&S students next summer.

Students seem satisfied with the course, with 91.5% of those enrolling retained in the course and receiving credit. Benkoski summed it up for all involved, “It’s a delight.”