Oakton Community College

Product Used MyMathLab

Course Names Developmental Math Sequence

Oakton Community College used MyMathlab in its Developmental Math course redesign as part of the Changing the Equation (CTE) National Center for Academic Transformation/Gates Foundation grant. All CTE participants implemented the Emporium Model at their two-year institutions. This white paper documents the best practices drawn from these CTE schools.

Course Implementation

In the traditional format, developmental mathematics students at Oakton Community College (OCC) who placed at the lowest academic levels had to complete up to 11 credit hours before they could take a college-level math course. Data showed that 60 percent of the developmental math students in AY 2009/10 passed their courses.

The goals of the redesign were to decrease the amount of time needed to reach the Intermediate Algebra level and to increase the pass rates of Intermediate Algebra students.

The department replaced all existing developmental courses with a sequence of four, four-credit courses. The redesign enabled students to proceed more quickly through the courses whenever possible, and to work on modules from future course(s) during the current semester.

The redesigned courses used MyMathLab posttests to assess knowledge gained within each completed module. Immediate feedback on work and grade position helped students to see the relationship between their efforts and their results.

Results and Data

Student learning significantly improved in Prealgebra, Elementary Algebra, Elementary Plane Geometry, and Intermediate Algebra as shown by final common exam scores (table 1).

Other Impacts on Students

Students who completed a course before the semester
was over could work on modules in a future course for
no additional tuition. Twenty-one students completed
two or more developmental math courses in one
semester, another nine students completed one or more
modules beyond the course they registered for.

Course	Fall 2010 Traditional	Fall 2011 Redesign
Prealgebra	49%	77%
Elementary Algebra	42%	68%
Elementary Plane Geometry	60%	82%
Intermediate Algebra	33%	64%

Table 1. Average Final Common Exam Scores, Fall 2010 and 2011

Conclusions

OCC plans to redesign College Algebra and Precalculus so calculus-bound students can continue their work in a given semester once they've completed Intermediate Algebra.