Mountwest Community & Technical College Huntington, WV

Product Used MyMathLab

Course Names Developmental Math Sequence

Mountwest Community & Technical 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

The developmental math program at Mountwest Community & Technical College was identified as the gatekeeper that prevented students from completing their degree programs in a timely manner. Many students had to take some of these courses three or more times just to get to a college-level math course, which was costly for both students and MCTC.

By implementation of the full redesign in fall 2011, MCTC had converted the three-semester course sequence into one redesigned course, Algebra I.

Students met in a computer lab three hours a week with their instructor and one hour a week in small groups. Attendance was mandatory and accounted for 10% of their grade. Students completed all homework, quizzes, and exams using MyMathLab, which provided students video instruction, PowerPoint presentations, interactive worksheets, and immediate feedback on their work. They were also given the opportunity to move directly into college-level course whenever they completed their developmental requirements.

Results and Data

Students in the redesigned courses significantly outperformed those in the traditional format. To measure student learning outcomes, the number of correctly answered questions on common examination questions was compared (table 1).

To compare overall completion rates, the MCTC team looked at two-semester completion rates for cohorts from the past two academic years. The redesign showed a significant 58.8% increase in two-semester successful completion. In AY 2011/12, the redesigned course had a 38% successful completion rate (grade of C or better) whereas the rate during AY 2010/11 before the redesign was 24%.

Course	Fall 2010 Traditional	Fall 2011 Redesign	Spring 2012 Redesign
Basic Math	64.3%	78.7%	80.6%
Algebra I	71.7%	83.9%	83.7%

Table 1. Percentage of Correctly Answered Common Examination Questions before and after Redesign, Fall 2010–Spring 2012

Conclusions

Student learning has increased and there has been a significant increase in two-semester cohorts completing the developmental requirement.