Bowling Green Technical College

Product Used MyMathLab

Course Names Developmental Math Sequence

Bowling Green 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

Bowling Green Technical College (BGTC) redesigned its developmental math sequence in fall 2011. In addition to improving student retention and success in college-level courses, BGTC's redesign was motivated by consistent enrollment growth—enrollment in developmental math increased by 20 percent between fall 2009 and fall 2010. Faculty sought a way to leverage their resources in order to serve more students, while still providing a highly effective learning experience.

Each redesigned course includes six modules delivered via MyMathLab. All students begin with the first module of their

respective course and complete each module in sequential order. At the start of each module, students take a module exam. Students who score of 70 or more on the exam may move to the next module; those who score less than 70 are required to complete module coursework—interactive lessons, homework and quizzes—and must earn a score of 70 or more before retaking the module exam. Upon successful completion of all six modules, students must pass a common final exam to complete the course.

Results and Data

Student common final exam scores improved in both Prealgebra and Basic Algebra (table 1).

Students receive an MP grade if, by the end of the semester, they have completed at least three of six modules with a mastery of 70 percent or more. In the traditional course,

Course	Fall 2010 Traditional	Spring 2011 Redesign	Fall 2011 Redesign	Spring 2012 Redesign
Prealgebra	79.5	78.2	84.6	83.8
Basic Algebra	70.5	69.7	73.6	72.2

Table 1. Common Final Exam Scores, Fall 2010–Spring 2012

not completing all course content required the student to retake the entire course. In the redesigned course, students receive the MP grade and pick up where they left off in a subsequent semester. When taking into account MP grades, completion rates improved in the redesign (table 2).

Course	Spring 2010 Traditional A,B,C	Fall 2010 Redesign A,B,C	Fall 2011 Redesign A,B,C + MP	Spring 2012 Redesign A,B,C + MP
Prealgebra	53%	60%	65%	56%
Basic Algebra	38%	56%	69%	52%

Table 2. Completion Rates, Spring 2010–Spring 2012

Conclusions

BGTC is very pleased with the redesign, which helps students focus only on the areas where they need remediation. The math department will continue to improve the redesign each semester and anticipates seeing even higher gains.