

Product Used **MyMathLab**
 Course Names **Developmental Math Sequence**

Stark State 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

Stark State College (SSC) is an open-enrollment institution. As such, completion rates in each course were below the national average. Completion rates in College Math were 32–36%; rates in Introduction to Algebra and Intermediate Algebra were usually in the mid 40s. In the traditional format, SSC’s three developmental math courses—College Math, Introduction to Algebra, and Intermediate Algebra—were offered as traditional, lecture-style classes. College-wide enrollment has increased by 30% for the past three years and is expected to continue to do so. Developmental math has seen an even bigger annual increase.

Implementation

There were two goals for the redesign: 1) to better prepare students for College Algebra and Statistics, and 2) to increase the number of students exiting developmental math and entering college-level courses.

In the redesign, the three courses were split into 18 modules, and then again into three sets with six modules in each course. The redesigned courses required 80% mastery on homework, quizzes, and tests; which essentially made all three courses A/B courses.

Results and Data

The math department measured learning outcomes using common content items on departmental midterms and finals in traditional courses with similar questions on module posttests in the redesign (table 1).

Other Impacts on Students

- Students who completed the redesigned courses completed College Algebra at a rate of over 90%.
- Students who accelerated and finished their developmental math sequence early saw a substantial cost and time savings.
- SSC combined all three courses’ books into one book. The cost of that book stayed the same as any one of the previous books, so the students saw a 66% savings in textbooks over three semesters.

- When a life event caused a student to miss class in a traditional course, they got left behind and frequently did not pass. In the redesign, a student who missed time was able to pick up where he left off, saving the money and time of having to repeat the entire course.

Course	Fall 2010 Traditional	Fall 2011 Redesign
College Math, Midterm Exam	66.8	87.7
College Math, Final Exam	63.7	87.6
Introduction to Algebra, Midterm Exam	61.3	85.2
Introduction to Algebra, Final Exam	67.6	88.9
Intermediate Algebra, Midterm Exam	48.0	84.5
Intermediate Algebra, Final Exam	55.6	84.9

Table 1. Mean Common Exam Scores before and after Redesign, Fall 2010 and Fall 2011

Conclusions

Stark State is committed to redesign using MyMathLab in the Emporium Model for the foreseeable future.