

Product Used MyMathLab
Course Names Developmental Math Sequence

Laramie County 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

Laramie County Community College (LCCC) faculty turned to redesign to help mitigate unacceptable attrition and failure rates across the developmental math sequence. During academic year (AY) 2007/08, the failure and attrition rates was 49 percent for Prealgebra, 58 percent for Elementary Algebra, and 52 percent for Intermediate Algebra.

LCCC implemented the NCAT's Emporium Model, modeled in part after Cleveland State Community College's redesign program. The traditional three-course developmental math

sequence (12 credit hours total) was reorganized into 17 modules, which were split among three modular courses (9 credit hours total).

Redesign enabled students the opportunity to proceed through the developmental course sequence at their own pace, to test out of modules they already had mastered, and to progress to the next course in the sequence at any time during the semester.

Results and Data

Beginning in fall 2010, students in both traditional and redesigned sections were given common content exam questions. The average scores on these questions in traditional sections were compared with average scores from redesigned sections. Redesign students ultimately increased their scores on common content exam questions by 21 percentage points as shown below.

Other Impacts on Students

- Although some students did not successfully complete a course on their first attempt, many of these returned the next semester with much more motivation and determination to stay on track and complete the course.
- Many students completed a course before the end of the semester and immediately began working on the next course in the sequence. Several students successfully completed two courses in a single semester.

- By streamlining the developmental math sequence and reducing the total number of credit hours from 12 to 9, student costs were drastically decreased.

Course	Fall 2010 Traditional	Spring 2011 Traditional	Fall 2011 Redesign	Spring 2012 Redesign
Prealgebra	64%	63%	86%	85%
Elementary Algebra	61%	40%	82%	81%
Intermediate Algebra	44%	39%	84%	85%

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

Conclusions

Faculty looks forward to continued positive learning outcomes and to improving completion and retention rates.