

Product Used **MyMathLab**

Course Names **Developmental Math Sequence**

Heartland 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

Heartland Community College (HCC) belongs to the National Community College Benchmarking Project, which gathers comparative data among community colleges. Benchmarking showed that HCC ranked very low in developmental math completion and retention rates: in the 42nd percentile for retention and 32nd percentile for completion. The goal of HCC's redesign was to help the college break this cycle of failure by offering developmental mathematics courses

in a format conducive to improving student success and persistence on to college-level courses.

HCC modularized all five developmental math courses into one course. Modules consisted of pretests, video lectures, homework, progress checks and posttests administered through MyMathLab to provide immediate feedback to students. Classes met in a computer classroom staffed with faculty, facilitators, tutors and testing assistants.

Results and Data

Faculty assessed student learning outcomes by comparing baseline data from sections offered in the traditional and the redesigned format. Common assessments and completion rates were compared. Success rates in subsequent courses will be tracked in the future with particular attention to success in college-level courses.

The analysis of core content items in the form of common exam questions given to all students before and after the redesign showed significant increases in student learning. Table 1 shows the mean scores for each course in the two semesters before and after the redesign occurred. Increases in learning ranged from about 20% to 50%.

Course	Fall 2010 Traditional	Spring 2011 Traditional	Fall 2011 Redesign	Spring 2012 Redesign
Prealgebra	46%	47%	81%	82%
Beginning Algebra	52%	59%	79%	80%
Intermediate Algebra I	64%	61%	92%	91%
Intermediate Algebra II	33%	50%	86%	80%

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

Conclusions

HCC has put the following into place to support its redesign:

1. The team will continue to work with HCC's marketing team to develop a campaign for the newly redesigned developmental math sequence. This will provide potential students with information about the program before they enroll and give them an opportunity to hear testimonials from both students and faculty who are involved in the program with the goal of better preparing them for the new format.
2. Math administrators will hold a mandatory training each semester for anyone teaching/facilitating in the developmental math sequence. This will allow for faculty to acquaint themselves with the updates and give them time to provide feedback on the previous semester.
3. HCC's administration is dedicated to sending faculty and administrators to different conferences around the country to learn about best practices. The college also has had several opportunities to host representatives from other colleges at our campus and visit other campuses, which provided the team with the opportunity to gain more insight into other implementation methods, best practices and future plans.