

Product Used MyMathLab
Course Names Developmental Math Sequence

Robeson 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

In the traditional format, Robeson Community College (RCC) offered a three-course developmental math sequence. Data from AY 2009/10 indicated that the success rate was 46 percent; the retention rate was 66 percent. RCC wanted to improve student success and increase retention so students could fulfill their educational goals.

RCC's redesign used the Emporium Model with modularization, mastery learning, and flexible pacing.

Results and Data

Student learning was assessed using common final examinations administered to both traditional and redesigned sections. Student success and retention rates in the traditional and the redesigned models were compared. The team also administered surveys to students regarding their perceptions of learning in the redesigned environment.

Student performance improved significantly in Essential Mathematics and Introductory Algebra as measured by mean common final exam scores (see table 1).

RCC analyzed fall 2011 course grades by considering Making Progress (MP) grades. Students receiving an MP grade must have completed 10 of 14 mini-modules in Essential Mathematics and 9 of 14 mini-modules in Introductory Algebra, both at an 85% mastery level. When taking into account MP grades, completion rates improved in the redesign (see table 2).

Other Impacts on Students

- A fall 2011 student survey indicated that 64.5% of students surveyed strongly agreed that over the course of the semester they had improved feelings toward the way the course worked; 63.3% strongly agreed they preferred going at their own pace; and 51.8% agreed they were learning in the new model.
- Fall 2011, 14 students completed two developmental math courses, one student completed all three, and 59 students completed one developmental math course and began working on the next developmental math course.

Course	Fall 2010 Traditional	Fall 2011 Redesign
Essential Mathematics	69.04	85.20
Introductory Algebra	69.28	79.18

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

Course	Fall 2010 Traditional A, B, C	Fall 2011 Redesign A, B, C + MP
Essentially Mathematics	48%	51%
Introductory Algebra	48%	65%

Table 2. Average Completion Rates before and after Redesign with MP Grades, Fall 2010 and Fall 2011

Conclusions

Redesign is spreading to other disciplines at RCC. The math/science chairperson is using the NCAT website to

ascertain the feasibility of a course redesign for both a nonmajors and majors introductory General Biology course.