

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

Northwest–Shoals 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 2009, NWSCC redesigned its transitional math courses using the Emporium Model; however, the redesign did not generate the desired results. In reaction, the college sought further improvements. NCAT's Changing the Equation program offered the math faculty the opportunity to reevaluate its initial redesign of the transitional mathematics courses and make needed adjustments.

Prior to implementing the Emporium Model, student success rates (grades of C or better) in Basic Mathematics, Elementary Algebra and Intermediate Algebra were 58%, 52% and 54% respectively. Data also showed that students who began their education in transitional math had a small chance of completing the mathematics course required for a certificate or degree. After implementing the Emporium Model in 2009, success rates in fall 2010 were 46%, 44% and 33% respectively. The college was confident in the changes made in the

initial redesign but recognized that necessary improvements were needed to ensure positive results.

During Changing the Equation, math instructors replaced the five large modules with eight to 10 mini-modules per course. Homework assignments had 10 to 15 questions per assignment, and quizzes had of 10 questions composed from the material of approximately three homework sections. Redesign also included a midterm and a comprehensive final exam. Students could retest on all quizzes and exams if needed.

The redesign ensured the consistency of all courses by standardizing syllabi and content, thereby eliminating discrepancies among instructors, the smaller modules assisted in student intervention, and the math lab with MyMathLab provided students with individual assistance, on-going assessment, and prompt feedback.

Results and Data

Student performance significantly improved in Basic Math, Elementary Algebra and Intermediate Algebra. In fall 2011, NWSCC analyzed fall 2011 course grades by considering a what-if "Making Progress" (MP) grade. Students receiving an MP grade must have completed the midterm exam, earned a minimum of 70% participation grade and enrolled in spring 2012 semester. When taking into account the MP grades, completion rates improved in the redesign (table 1).

In addition, the percentage of developmental math students successfully completing a college-level math course increased from 42% before the redesign to 76% in 2011.

Course	Fall 2002–06 Traditional A, B, C	Fall 2011 Redesign A, B, C + MP
Basic Math	58%	62%
Elementary Algebra	52%	64%
Intermediate Algebra	51%	61%

Table 1. Average Final Course Grades before and after Redesign with MP Grades, Fall 2002–06 and Fall 2011

Conclusions

Due to the success of the redesign, the math department is considering the redesign of Pre-Calculus with Algebra, Introduction to Technical Mathematics, and Mathematical

Applications. This commitment to redesign now extends throughout the transitional studies division to include redesigns of English and reading courses.