

Wilbur Wright College, City Colleges of Chicago Chicago, IL

Products Used MyMathLab, MyMathTest
Course Names Prealgebra, Introductory Algebra, Intermediate Algebra
Credit Hours Six/Six/Five



KEY TAKE-AWAY

Redesigning developmental courses with MyMathLab and MyMathTest ensures that Wilbur Wright College students are accurately placed and receive the support they need to quickly and successfully progress to college- and workforce-level courses.

Textbook in Use

Prealgebra and Introductory Algebra, 3e, Martin-Gay, *Intermediate Algebra*, 5e, Martin-Gay

Course Implementation

Course Design

Starting in 2009, Kevin Li, dean of instruction at Wilbur Wright College, one of the City Colleges of Chicago, redesigned the college's developmental math lecture classes using a Changing the Equation grant from the the National Center for Academic Transformation and employing MyMathLab and MyMathTest.

The new program, Math On Demand: A Modularized, Accelerated Developmental Math Program, comprises a modularized, student-centered curriculum designed to shorten students' developmental path—helping them quickly and successfully progress from high school to both college and the workforce.

The use of MyMathTest enables more accurate placement, which leads to more success with MyMathLab. As a result, students are able to not only pass the levels they are placed in, but may finish up to three levels in one semester if they are capable of doing so.

The school uses MyMathTest in its refresher programs, as well as the Summer Bridge program. For assessments, Li uses a combination of MyMathTest practice tests, Pearson-imported prepared tests, and tests that he creates himself. Students use the program's study tests before and between test attempts.

Assessments

40 percent	Tests/exam
30 percent	Module completion
15 percent	Note taking
15 percent	Participation

Use of MyMathLab

Li and his students use MyMathLab's eText, videos, glossary, and Help Me Solve This feature.

Use of MyMathLab contributes 100 percent to a student's final course grade.

Results and Data

Li's redesign was immediately successful.

- In Fall 2010, the program generated an 8.75 percent increase in retention and a 19.25 percent increase in course success compared to the school's traditional classes.
- The Summer Intermediate Algebra student success rate increased 24.5 percent—from 65.5 percent in 2010 using the traditional course to 81.6 percent in 2011 using MyMathLab and the Math on Demand program. Retention rates also increased.

- Some students have been able to skip one or two developmental math levels.

The higher retention rate reported in the redesigned courses suggests that by providing students with real-time assessment data and class standing information, students are armed with exactly what they need to learn to succeed and are more likely to persevere—and less likely to withdraw.

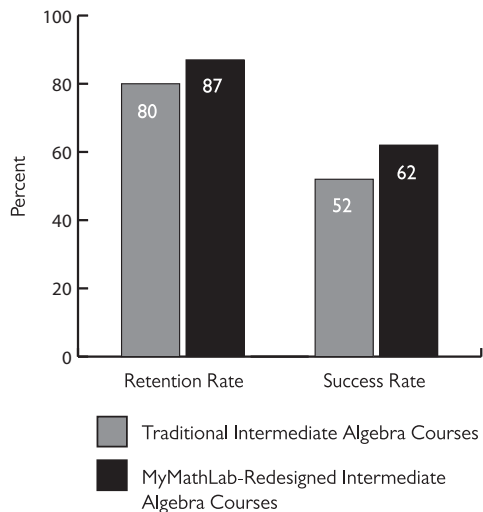


Figure 1. Retention and Success Rates from MyMathLab-Redesigned and Traditional Fall 2010 Intermediate Algebra Courses

	Traditional	MyMathLab Redesign	Percent Change
Retention Rate	80%	87%	+8.75%
Success Rate	52%	62%	+19.25%

Table 1. Retention and Success Rates from MyMathLab-Redesigned and Traditional Fall 2010 Intermediate Algebra Courses

	Traditional	MyMathLab Redesign	Percent Change
Success Rate	65.5%	81.6%	+24.5%

Table 2. Success Rates from Traditional and MyMathLab-Redesigned Summer Intermediate Algebra Courses, 2010–2011

The Student Experience

Integrating MyMathTest and MyMathLab into the program has facilitated more one-on-one assistance from instructors and increased student/faculty collaboration.

Li’s students are some of the biggest advocates of the redesigned program and offer positive feedback about its impact on their learning.

- “I learned more math during these past few weeks than during all my years in high school.”

- “I like that the online textbook walks me through the materials. By clicking a button, I get step-by-step instructions. I prefer it over traditional courses.”
- “This format is great! The course helped me to increase my understanding of math. I’ve been getting As and Bs on all my assignments. Previously, in my traditional lecture math course, I struggled. The redesigned program both increased my grades and increased my motivation and self-confidence around math.”

Conclusions

Both qualitative and quantitative data support the potential of Li’s redesigned program for students, faculty, and the college. Key benefits include:

- Instructors are able to work one-on-one with students based upon individual student strengths, weaknesses, needs, and goals.
- Real-time assessment is possible.
- 4–5 hours per week is spent in the math lab performing hands-on tasks.
- Students can identify their academic and career tracks early in their academic journey.
- Students make a connection between math skills and their future career aspirations.

Li anticipates that the program will ultimately reap the following outcomes:

- Increased enrollments in math courses
- Increased persistence rates
- Increased success in subsequent math courses
- Increased number of developmental education levels that students can skip
- Increased institutional productivity via increased class sizes resulting in reduced institutional costs over time

*Submitted by Kevin Li, Dean of Instruction
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