

Product Used **MyMathLab**
 Course Name **College Algebra**
 Credit Hours **Four**



KEY TAKE-AWAY

Motivating students to complete homework is the linchpin of a successful math program. MyMathLab's interactive features keep AIH students engaged and persevering when they might otherwise quit. As a result, students are more prepared and do better at test time.

Textbook in Use

Intermediate Algebra, 6e, John Tobey, Jeffrey Slater

Course Implementation

Course Design

Initially a traditional class that met for 4 hours and 20 minutes a week, College Algebra was redesigned in 2006 to comprise 2 hours and 10 minutes of lecture and 2 hours and 10 minutes of mandatory lab time using MyMathLab. The instructor monitors students in the lab and is available to assist them.

20 percent

Quizzes

Completed on MyMathLab.

30 percent

Tests

Completed on MyMathLab.

10 percent

Online final exam

10 percent

Departmental, paper-and-pencil final exam

Assessments

Seven quizzes and two tests are given using MyMathLab.

30 percent

Homework

Homework on MyMathLab is required. It covers problems from the sections taught in class and is due the next class period.

Use of MyMathLab

MyMathLab is used for homework, quizzes, tests, and a portion of the final exam. Students are encouraged to use all available help features.

Use of MyMathLab contributes 90 percent to a student's final course grade.

Results and Data

Figures 1–4 show significant improvement across a variety of metrics after the adoption of MyMathLab.

- The ABC rate increased from 69.6 percent to 90.3 percent.
- The drop/fail/withdrawal rate decreased from 13.9 percent to 5.6 percent.
- Final exam grades improved from an average of 69.8 percent to an average of 82 percent.

The Art Institute of Houston operates on a quarterly system. "Before" figures are from the summer and fall quarters of 2005; "After" figures are from the winter and spring quarters of 2009.

Dana Hagen, math instructor, attributes the improved metrics to MyMathLab's immediate feedback and other interactive features. Because students are more engaged with the material, they complete their homework and are more prepared for quizzes and tests. Students are earning higher grades and experiencing less frustration with math.

"Prior to adopting MyMathLab, students weren't always completing homework, most hated attending class, and most were performing poorly on tests," Hagen says. "Now, those students who arrive hating math leave feeling like it isn't so bad after all. They love that there are help features they can use from home. Knowing help is a click away helps increase their confidence and enables them to persevere through difficult problems."

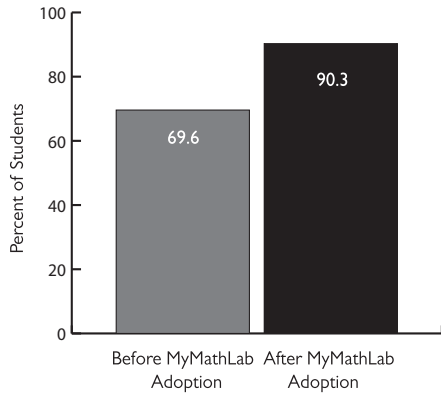


Figure 1. Comparison of ABC Rates before and after MyMathLab Adoption ($n=323$)

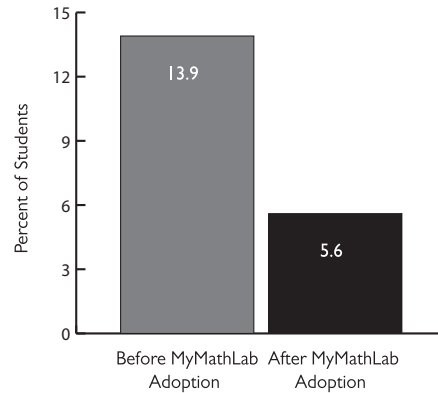


Figure 2. Comparison of D/F/W Rates before and after MyMathLab Adoption ($n=323$)

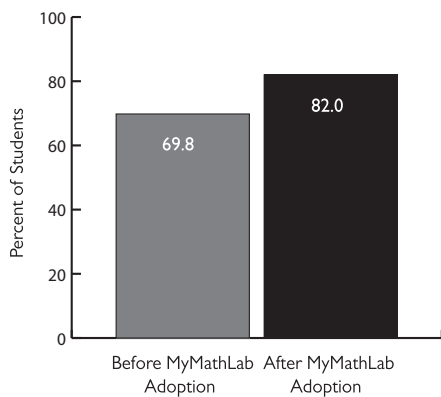


Figure 3. Comparison of Final Exam Grades before and after MyMathLab Adoption ($n=323$)

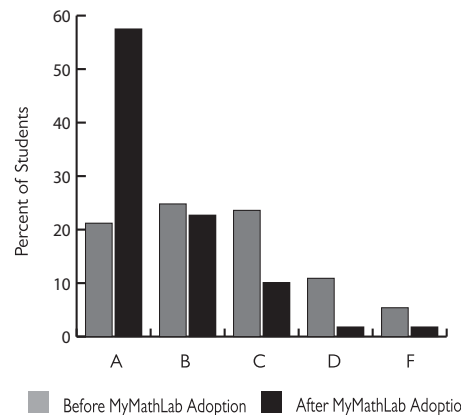


Figure 4. Comparison of Final Course Grades before and after MyMathLab Adoption ($n=323$)

The Student Experience

Hagen reports that use of MyMathLab has helped increase communication among her students and between her students and herself. “Students talk about their homework problems during lab time,” she says. “In addition, they use the Ask My Instructor button to contact me after and between classes. Prior to adopting MyMathLab, students would bolt to the door and not be heard from again until next class period.”

For Hagen’s learning-disabled students, MyMathLab provides the personalized modifications and extra help they need to succeed side-by-side with their peers.

Art Institute of Houston students not only do better using MyMathLab; they also enjoy using it.

- “Having access to the textbook, homework, and tests online is a great idea. It really made class fun and easy!”
- “This online program is the best!”
- “I really like this program. It’s like having an instructor by my side.”
- “I thought doing math on a computer would be difficult, but it turned out to be great.”

Conclusions

When asked about possible changes to her use of MyMathLab, Hagen was emphatic: “I have no plans to change my use of MyMathLab. I’m having better success with student learning and retention than ever before. Adopting MyMathLab

was one of the best decisions our math department has ever made.”

*Submitted by Dana Hagen, Instructor
Art Institute of Houston*