

Product Used **MyMathLab**
 Course Name **Beginning Algebra**
 Credit Hours **Four (earned in two two-credit classes)**



KEY TAKE-AWAY

By leveraging MyMathLab's item analysis and e-mail features to identify and reach out to at-risk students, RVC both increased its pass rate by nearly 50 percent and cut its withdrawal rate by more than half.

Textbook in Use

Algebra: A Combined Approach, 3e, Elayn Martin-Gay

Course Implementation

Course Design

Rock Valley College (RVC) redesigned its beginning algebra course from a traditional, one-semester, 5-credit course covering nine chapters to a 4-credit course divided into two 2-credit classes, each spanning eight weeks. The redesigned course is offered in both hybrid and traditional lecture formats.

Computer-assisted sections meet in a computer lab two days a week for 100 minutes at a time. Classes include 70–80 minutes of direct instruction (lecture) plus 20–30 minutes of hands-on, MyMathLab-enabled instruction facilitated by instructor support on a one-on-one basis.

Assessments

- In-class activities, participation, attendance 40 points
- ~20 MyMathLab homework assignments of 3 points each 60 points
- Three unit tests of 100 points each 300 points
- A department-wide final exam 100 points

Use of MyMathLab

A minimum of three MyMathLab homework assignments per week is required in all sections.

The developmental math coordinator creates MyMathLab coordinator courses for instructors to copy. Coordinator courses include a homework assignment for every section, a unit-test review assignment for each unit, and a final-exam practice assignment. In addition, each instructor receives a MyMathLab Gradebook preloaded with test and homework points in the appropriate amounts.

Instructors are encouraged to use the Item Analysis feature of the MyMathLab Gradebook to assess both individual and overall class mastery and needs.

Use of MyMathLab contributes approximately 12 percent to a student's final course grade.

Results and Data

Required use of MyMathLab was one of several transformations in RVC's developmental math sequence. Although not the only positive change, Kathleen Almy, associate professor at RVC, considers it a significant contributor to the success of the new two-part curriculum via a more than 50 percent increase in the percentage of students receiving As, Bs, or Cs and a more than 50 percent decrease in the overall course withdrawal/fail rate.

"The quality of the class experience has changed," says Almy. "Students come with constructive questions. I'm able to move forward instead of constantly back over old material. Class time is more productive."

MyMathLab has forever changed the way I teach. I have a more accurate picture of how individual students are doing and how the class as a whole is faring. Having a better idea of what they're having problems with helps me adjust my lessons to better support them—and helps me be a better teacher.

—Kathleen Almy, Associate Professor
Rock Valley College

Semester	Enrollment	Course Format	Percentage of Students Earning A, B, or C	Withdrawal/Fail Rate
Fall 2009 Beg. Algebra, Part 2	335*	Redesign using consistent MML homework	69.9	18.2%
Fall 2009 Beg. Algebra, Part I	568 (489 first time + 79 repeat)	Redesign using consistent MML homework	68.8	22.4%
Fall 2008	537	5-credit format + inconsistent use of MML	48.2	40.8%
Fall 2007	589	5-credit format	47.2	42.6%

Table 1. Comparison of Student Success and Withdrawal/Fail Rates before and after Redesign and Required MyMathLab Homework

*Students who take the first eight weeks usually also take the second eight weeks. The 335 students enrolled in the second eight-week class of fall 2009 are a subset of the 568, who started out in the first eight-week class of fall 2009.

The Student Experience

Almy reports that significantly more students are doing the homework. Because they can redo assignments until they earn 100 percent, students spend more time on task.

The engaging, interactive nature of MyMathLab encourages students to persevere. “They do better when they see success more often,” says Almy.

MyMathLab helps students who otherwise juggle school and work and who may miss a class to keep up with assignments. The online resource means that personal and employment stressors are less likely to result in students’ falling behind in their schoolwork and dropping out.

Conclusions

MyMathLab improves RVC’s two-day, computer-assisted sections by (1) keeping students focused and engaged during the 100-minute course period and (2) providing a tool for assessments between classes. Students therefore don’t lose momentum and the content remains fresh between classes.

From a departmental standpoint, MyMathLab has also enabled RVC’s mathematics department to establish content and assessment consistency across all of its sections.

Based on the results of the MyMathLab-enabled redesign, the department plans to convert the new curriculum to a format in which MyMathLab is required for homework in all sections and to make as many of the two-days-a-week courses into a hybrid format as lab space will allow.

Submitted by Kathleen Almy, Associate Professor
Rock Valley College