

Product Used **MyMathLab**
 Course Name **Essential Math Concepts**
 Credit Hours **Four**



KEY TAKE-AWAY

By requiring MyMathLab homework, creating consistent assessments across its 10-campus system, and requiring concept competency at every stage of the learning process, Baker College has increased its Essential Math Concepts pass rate by 16 percent.

Textbook in Use

Basic College Mathematics, custom edition, John Tobey, Jeffrey Slater, Jamie Blair

Course Implementation

Course Design

After initial piloting of MyMathLab in several sections, Baker College System implemented the program—combined with a new delivery method—in all sections for five campuses across its 10-campus system in fall 2008 and in all sections for all 10 campuses in fall 2009.

Classes generally meet either once or twice a week for a total of four hours per week for 10 weeks. Some campuses employ an all-computer-lab format, others have a 50 percent lab/50 percent classroom format, and others have an all-classroom format supplemented with MyMathLab outside the classroom. In all cases, students are required to complete MyMathLab assignments. Trained tutors are available to help. All assignments (both off line and online) and including the exit exam are standard systemwide.

Assessments

All students complete six MyMathLab quizzes, two MyMathLab tests, and one paper-and-pencil exit exam. Students must score at least 85 percent on practice quizzes and practice tests in order to take the corresponding quizzes and tests. Students must pass the cumulative exit exam in order to pass the course.

Use of MyMathLab

Students use MyMathLab for homework, preassessments, quizzes, and tests. All MyMathLab features are turned on for homework assignments, as well as after students submit both practice and actual quizzes and tests. All courses are copied from a coordinator course.

Use of MyMathLab contributes 15 percent to a student's final course grade.

Results and Data

Table 1 compares Essential Math Concepts pass rates before MyMathLab implementation, during sporadic use, and after full and consistent use across Baker College System's 10 campuses. Faculty are pleased with the consistent gains: a seven-percentage-point—or 16 percent— increase over preimplementation rates.

Term	Total Number of Students	Level of MyMathLab Implementation	Pass Rate
Fall 2006	3,965	MyMathLab pilot in a handful of sections only.	44%
Fall 2007*	5,062	MyMathLab in some sections. Tracking error resulted in all sections' being reported together.	33%
Fall 2008	3,796	MyMathLab sections: some use new delivery model.	47%
Fall 2008	1,098	Traditional sections: no MyMathLab use.	37%
Fall 2009	6,376	All sections use MyMathLab in new delivery model.	51%

Table 1. Essential Math Concepts Pass Rates before and after MyMathLab and New Delivery Model Implementation ($n=20,297$)

*Students had the option to continue the course in the next quarter.

Most students appreciate the tools that MyMathLab provides. The instant feedback and help features often lessen the anxiety level that many students in a remedial math class experience.

—Mark Chapman, System Math Coordinator
Baker College System

In addition, System Math Coordinator Mark Chapman reports an increase in subsequent success since adopting MyMathLab. Of those students who passed Essential Math Concepts in fall 2009 and took Prealgebra in winter 2010, 70 percent passed

Prealgebra. Similarly, over the past two academic years, of those students who passed Prealgebra in a given quarter and took Introductory Algebra in the following quarter, 76 percent passed Introductory Algebra.

The Student Experience

Essential Math Concepts students at Baker College System benefit from the proven pedagogy behind MyMathLab.

- Students are also encouraged to explore all of MyMathLab's multimedia features to learn which resources best suit their learning styles.
- Students communicate with each other through the discussion board and with the instructor through MyMathLab's Ask My Instructor feature.
- MyMathLab's Gradebook enables instructors to identify and quickly intervene at the first sign that

a student is struggling. As a result, fewer students fall through the cracks.

- MyMathLab's item analysis feature enables instructors to identify common mistakes made within the class or by individual students and then tailor their teaching so as to globally or individually address any confusion.
- Enrollment in Essential Math Concepts continues to increase. MyMathLab is critical in enabling the college to logistically handle the influx.

Conclusions

MyMathLab is one of a variety of factors that have contributed to the significant gains experienced in Essential Math Concepts since 2006. Chapman notes that MyMathLab has facilitated these gains in several ways.

- By enabling the course to be consistent across the system
- By enabling instructors to focus individual attention on those who need it, while not holding back those capable of moving ahead
- By providing instructors with multiple ways to reach students

- By providing students with instant feedback
- By providing students with unlimited practice

"As we continue to improve the quality of Essential Math Concepts," says Chapman, "we will continue drawing from the resources of MyMathLab to support increased student learning and more-effective teaching."

Submitted by Mark Chapman, System Math Coordinator
formerly of Baker College System