

|              |  |
|--------------|--|
| Product Used | MyLabPlus  |
| Course Names | Fundamentals of Arithmetic, Elementary Algebra, Intermediate Algebra |
| Credit Hours | Three (each)   |

## KEY TAKE-AWAY

Moving to a MyLabPlus-supported, hybrid model produced dramatic increases in pass rates, including a 129.9 percent boost for Intermediate Algebra.

### Materials in Use

*Basic College Mathematics*, by Bittinger; *Elementary and Intermediate Algebra*, by Bittinger, Ellenbogen, and Johnson

### Course Implementation

#### Course Design

Approximately 70 percent of incoming freshmen at South Arkansas Community College require remediation in math. For them, the college offers three course levels: Fundamentals of Arithmetic, Elementary Algebra, and Intermediate Algebra. For approximately six years, SouthArk offered developmental math classes using the emporium (self-paced) model without significant success. Low pass rates adversely affected student morale and retention rates, students complained as they were forced to repeat courses, and instructors struggled to make the model work.

In fall 2011, the school moved from the self-paced model to a hybrid model. The new approach requires students to attend class four days a week—two in lecture/discussion and two in computer labs with qualified tutors and instructors. Assignments are developed with prerequisites for progression and due dates. Students are allowed unlimited attempts on homework before the due date and penalized for late assignments. In addition, students are allowed ten attempts on quizzes, but only one attempt on tests and the comprehensive final.

#### Assessments

|            |                        |
|------------|------------------------|
| 55 percent | MyLabPlus tests (five) |
| 25 percent | MyLabPlus final        |
| 10 percent | MyLabPlus quiz         |
| 10 percent | MyLabPlus homework     |

#### Use of MyLabPlus

Students use MyLabPlus for homework, quizzes, tests, and the final exam. They also use its Study Plan and interactive learning features. Instructors use a variety of MyLabPlus diagnostics and features to evaluate student strengths and weaknesses, including the Study Plan and Item Analysis feature in the Gradebook.

*The most gratifying aspect of the whole experience has been the dramatic change in student success rates and student feedback.*

— Joseph Agbeko  
South Arkansas Community College

## Results and Data

After implementing MyLabPlus in the new hybrid system, students' course grades have made impressive gains. Figure 1 shows significant increases in pass rates since fall 2011, most notably a jump in Intermediate Algebra pass rates from 30.5 percent in fall 2010 to 73.9 percent in fall 2011.

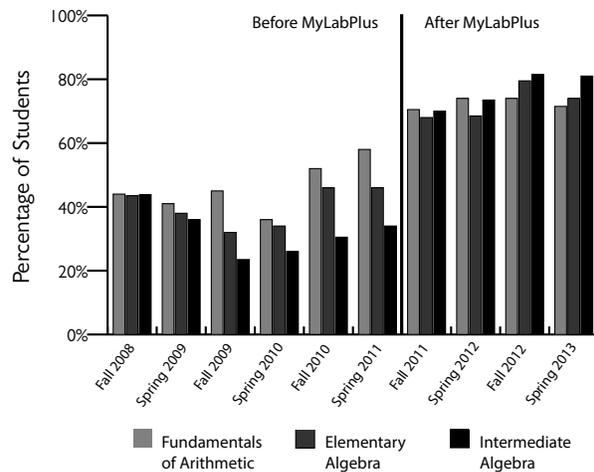


Figure 1. Pass Rates for Developmental Math Sequence before and after MyLabPlus Implementation and Program Redesign

## The Student Experience

The school has a widely varied student population, from students who graduated very recently to those who haven't taken a math class since 1971. Many students worry that they will continue to fail at math as they did in prior math courses. One student said, "Everything about math is frightening... it scares me." When asked to what he attributed his success in the new math course, that same student replied, "Without MyLabPlus I wouldn't be sitting right where I am right now."

Other students also had positive feedback about the program and MyLabPlus:

- "With MyLabPlus I didn't have to find a tutor because I already had a personal tutor in it. I also liked Help Me Solve This—it took me through all the steps and made me solve another problem, so I had to learn it."
- "MyLabPlus provided help when I didn't understand something, but it challenged me to figure out the answer."
- "I live 30 miles from school, so it's not convenient for me to use the computers at school—MyLabPlus makes it convenient for me to do my homework at home."

## Conclusions

Faculty attribute the success of the redesigned developmental math program to three main factors: (1) the teamwork of dedicated instructors, (2) the new model's use of both classroom instruction and individualized lab work, and (3) the support of Pearson's software and textbooks.

"We were initially concerned about implementing our new developmental math program, but we have experienced very positive results. The most gratifying aspect of the whole experience has been the dramatic change in student success

rates and in student feedback," says Assistant Professor and Developmental Math Coordinator, Joseph Agbeko.

With the success of the redesigned developmental math courses, the school plans to apply a similar model to its college-level math courses during the 2014-15 academic year.

Submitted by Joseph Agbeko, Assistant Professor  
and Developmental Math Coordinator  
South Arkansas Community College