MyFoundationsLab

CASE STUDY

School Name	Coppin State University, Baltimore, MD
Course Names	Developmental Math; Elementary Algebra
Course Format	Lab-based

Key Results A full 92% of students increased their ACCUPLACER scores up to 56 points using MyFoundationsLab, enabling them to accelerate rapidly through the developmental math sequence.

Submitted by
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Course materials
Introductory Algebra and *Intermediate Algebra* by Lial, Hornsby, McGinnis with MyFoundationsLab

Coppin State University's Summer Academic Success Academy (SASA) is a comprehensive, four-week, summer residential program designed to help incoming first-year students make the transition from high school to college while earning college credits. The state of Maryland requires that students take the College Board's ACCUPLACER test to establish their placement in college math courses.[1] The majority of SASA students test into Elementary Algebra. However, many students come with gaps in their knowledge. Courses differ greatly at the high school level, and students' exposure to math concepts varies, so when they arrive at college they're often not ready for college-level work. We adopted MyFoundationsLab for this course because we wanted a computer-based instructional tool that could be customized to target each student's specific needs.

Implementation

Students work in MyFoundationsLab in a computer lab three hours a day for four weeks. A teacher and teaching assistant are available in the computer lab to provide extra help or tutoring as needed. Students begin by taking the MyFoundationsLab Path Builder assessment, which creates a Learning Path tailored to each student's needs and level of knowledge. Students complete the designated modules in the Learning Path to demonstrate mastery of the material. I facilitate the classroom, and when I see a need for additional instruction, I teach targeted lessons to the group. Students today are digital natives. I find that they prefer doing their work in MyFoundationsLab to watching me teach on the whiteboard.

Benefits

MyFoundationsLab supports students with a variety of resources. The program thoroughly scaffolds their learning, guiding students through problems step-by-step, delivering carefully targeted help as needed, presenting related examples for additional practice, and providing instructional videos for greater understanding. The math modules in MyFoundationsLab are excellent. If a student graduates from high school with mastery of those 24 modules, that student is ready for college.

I encourage students to work in MyFoundationsLab outside of class time. Students know these developmental courses do not count towards their degrees, and they want to work through them as quickly as possible. MyFoundationsLab helps students develop self-discipline and a personal commitment to improve their skills by working diligently every day of the course. Many students are pleasantly surprised at the significant progress they make in such a short time.

Assessment

100 percent	Departmental exam (paper-and-pencil)

Results and data

- Students who used MyFoundationsLab achieved greater success when retaking their ACCUPLACER test compared to students in the traditional section. An impressive 93 percent of students in the MyFoundationsLab pilot section increased their ACCUPLACER scores, by up to 56 points. Only 80 percent of students in the section without MyFoundationsLab saw improved ACCUPLACER scores with a 43 point increase at most.
- Students using MyFoundationsLab increased their ACCUPLACER scores by more than twice as much as those in the sections without MyFoundationsLab.

[1] In order to place into a college-level course, a student must earn a score of at least 109 on the ACCUPLACER exam.

"Every student in the MyFoundationsLab pilot passed Elementary Algebra, which, of course, is always our main goal."

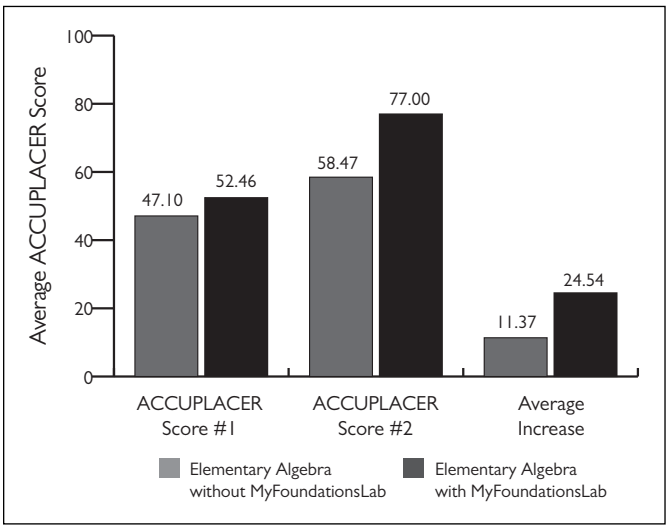

Figure 1. Average First and Second ACCUPLACER Scores, Average Score Increase, Summer 2013 (without MyFoundationsLab n=49, with MyFoundationsLab n=24)

The student experience

Students appreciate the instructional support provided by MyFoundationsLab.

- "I'm not very good at math, so to have made such substantial progress in a matter of four weeks is amazing. I think what helped me most were the instructor and the easy-to-understand online help in MyFoundationsLab."

  —Student *(improved 42 points on ACCUPLACER retest)*

- "MyFoundationsLab showed me my areas of strength and of weakness and gave me problems targeted to where I lacked skills. It helped me understand problems that I was unable to understand in my previous math classes. I would definitely say that MyFoundationsLab is a good way to help students improve their skills."

  —Student *(improved 26 points on ACCUPLACER retest)*

Conclusion

Every student in the MyFoundationsLab pilot passed Elementary Algebra, which, of course, is always our main goal. Six of those students tested into College Math for the fall, and the remaining students progressed to Intermediate Algebra. MyFoundationsLab plays a valuable role in the university's effort to help students stay on track toward credit courses and graduation. These students made great strides in only four weeks. Also, once they see that they really can improve their skills, they gain confidence and the desire to do better.