Key Results
After completion of a one-week boot camp comprising instructor-led lecture and exercises in MyFoundationsLab, 80 percent of participating students advanced at least one course level of developmental math.

About the Program
Harrisburg Area Community College (HACC) was established in 1964 and is the largest and oldest of Pennsylvania’s 14 community colleges. The college serves close to 22,000 degree-seeking students each term on campuses in Gettysburg, Harrisburg, Lancaster, Lebanon, and York, as well as a virtual campus.

HACC offers four levels of developmental math: Building Confidence and Skills in Math (covering arithmetic, whole numbers, decimals, and fractions), Pre-algebra, Beginning Algebra, and Intermediate Algebra. In 2011, HACC was given a strategic planning grant from our president to help speed up the developmental math pathway and accelerate students through developmental education. The Developmental Math Boot Camp was a direct result of this grant funding.

Implementation
We targeted students who were within five points of the ACCUPLACER cut score for testing into Pre-algebra or Beginning Algebra. After completing the online ACCUPLACER placement test, eligible students received a message that read, “You are eligible for a free, one-week boot camp program. Please see an advisor.” Other students heard about the program from their Pre-algebra or Beginning Algebra instructors.

We have offered the boot camp twice with MyFoundationsLab. The fall 2012 boot camp was offered before the start of the spring semester at three of five HACC campuses. We offered two levels: one for students who missed the ACCUPLACER cut score for pre-algebra by no more than five points and one for students who missed the ACCUPLACER cut score for beginning algebra by no more than five points. The summer 2013 boot camp was offered on all five campuses.

Students attended three hours of class for five days. Each day included both instructor lecture and time to work through the MyFoundationsLab Learning Path modules. The ratio of lecture time and time spent in MyFoundationsLab varied by campus. On the fifth day, students reviewed and retested on the ACCUPLACER placement test.

At our college, in order to place into Pre-algebra, a student’s ACCUPLACER Elementary Algebra score must be 43 or less; the Arithmetic score must be 34-73. We use both of the results.

To place into Beginning Algebra, the ACCUPLACER Elementary Algebra score must be 44-64. If the Elementary Algebra score is 43 or less, the Arithmetic score must be 74 or higher.

Benefits and best practices
We worked with our Pearson Learning Technology Specialist to select the content areas we wanted in MyFoundationsLab for the two levels of boot camp. We met with our department to determine the skills a student needs to place into those courses and tailored the program to match our goals. The flexibility of MyFoundationsLab enabled us to modify the learning modules to do exactly what we wanted them to do.

The success of the boot camps stems from face-to-face instruction combined with MyFoundationsLab activity. Students are challenged to be self-motivated, so the face-to-face time helps maximize the week’s effectiveness. We use MyMathLab for our developmental math sequence, so students are familiar with the technology—another benefit to using MyFoundationsLab.

In a few instances, students took the boot camp preparing them for Pre-algebra but ended up placing into Intermediate Algebra, thereby skipping over Beginning Algebra entirely. These students most likely had previous knowledge and simply needed to brush-up on their skills.

The Student Experience
I recently spoke with a student who completed the summer 2013 boot camp. She told me how beneficial she found the program and that it prepared her for the Beginning Algebra course she’s taking now. She is doing very well in her class.
**Results and Data**

- Arithmetic scores on the ACCUPLACER jumped 16.4 points in fall 2012 and 13 points in summer 2013 (figure 1).

- Elementary algebra scores on the ACCUPLACER increased 4.9 points in fall 2012 and 7.8 points in summer 2013 (figure 2).

- By retesting on the ACCUPLACER after boot camp, 80 percent of students advanced one or two levels of developmental math in fall 2012; 79 percent of students advanced one or two levels of developmental math in summer 2013 (figure 3).

Those students who did not advance did not attend one or more days of boot camp. Because the program was so short, 100 percent attendance was vital to student success.

**Conclusion**

We are committed to continuing to offer this option to our students and are considering ways to increase enrollment, including offering classes for four consecutive Mondays instead of for one week. We also need to determine how to fund the program moving forward.

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“SoMyFoundationsLab helped students practice what we went over in class. It reinforced and strengthened their skill sets with the repetition of practice. In addition, they could help themselves by using the learning aids and could fix an incorrectly answered problem by trying a similar one.”

—Boot Camp Instructor

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