

School Name **Honolulu Community College, Honolulu, HI**
Course Name **Compass Boot Camp**
Course Format **Hybrid**

Key Results After Boot Camp with MyFoundationsLab, 35.6 percent of students tested out of the lowest level of developmental math; 75 percent of students tested out of developmental writing; and 82.8 percent of students tested out of developmental reading. In subsequent courses, Boot Camp students who were promoted achieved an average 63 percent success rate.

Program director

Kristi Teruya, Academic Coach

Course materials

MyFoundationsLab, some custom worksheets

Background

Honolulu Community College (HCC) is an integral part of the University of Hawai'i and offers an affordable, flexible, open-door education to residents of the city, state, and region it serves.

Challenges and goals

Recognizing a need for personalized, just-in-time remediation among incoming students with low Compass exam scores, Honolulu Community College obtained grant funding to help create a Compass Boot Camp program. The program launched in summer 2014.

Incoming students with low scores on the Compass exam met with HCC Academic Counselors during New Student Orientation; a few students were referred by HCC's C.A.R.E. (College Achievement and Retention Experience) Center. In both cases, counselors explained the Boot Camp opportunity and encouraged students to apply. Participation in the three-week Boot Camp qualified students for a free Compass exam re-take. The goal was to increase scores on the Compass exam, enabling students to place out of developmental reading, writing, and/or math—saving both time and money.

Students in the summer 2014 Boot Camp sessions were almost all new, incoming students to HCC. Approximately half of the students were traditionally-aged students enrolling after completing high school. Many of the returning students had been away from a campus environment for decades.

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—Kristi Teruya, Academic Coach

Implementation

Three Boot Camp sessions, each three weeks long, were held in June and July 2014. Students exercised the option to work on one, two, or all three subjects (reading, writing, and math) during the Boot Camp session. Students choosing all three subjects (51 percent of students) were limited to working on each subject for one week at a time. Attendance was mandatory, and missed classes had to be made up.

Boot Camp was offered in a hybrid format—a combination of self-paced online work and direct instruction or collaborative learning projects. For each subject area, students completed the PathBuilder in a Compass-aligned MyFoundationsLab to generate a personalized Learning Path. During independent work in the lab, math and English faculty were available to assist students one-on-one as needed. Faculty conducted mini-lessons, covering topics that all or most students needed to review. Counselors from the C.A.R.E. Center also conducted College Skills workshops with students.

Students meeting the attendance requirement earned a free Compass exam retake at the end of the session, and those focusing on reading and writing submitted a writing sample as a secondary assessment. The writing sample was evaluated by English department faculty together with the Compass exam score to determine placement out of developmental reading and writing. Students who did not show improvement on the

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—Honolulu Community College student

| Subject | Increased Compass Test Scores | Average Score Increase (Points) | Tested Out of Developmental Courses* | Average Amount of Money Saved ^{d**} | Average Number of Semesters Saved |
|------------------|-------------------------------|---------------------------------|--------------------------------------|--|-----------------------------------|
| Reading (n = 29) | 57% | 6.2 | 82.8% | \$342 | 1.0 |
| Writing (n = 32) | 84% | 15.5 | 75.0% | \$492 | 1.5 |
| Math (n = 45) | 83% | 12.2 | 35.6%*** | \$580 | 1.0 |

Table 1. Summer 2014 Boot Camp Results for Students who Earned a Baseline Compass Score, Completed Boot Camp, and Retested on a Compass Exam, (n = 52)

| Total Number of Students | Students Promoted | Took Classes Related to Promotion | Total Promotion Success (Earned an A, B, or C) | Math Promotion Success (Earned an A, B, or C) | English Promotion Success (Earned an A, B, or C) |
|--------------------------|-------------------|-----------------------------------|--|---|--|
| 52 | 38 (73%) | 27 (71%) | 17 (63%) | 50% | 68% |

Table 2. Fall 2014 English and Math Performance of Students who Participated in Summer 2014 Boot Camp

Compass retest were contacted to discuss their test performance and asked to provide suggestions on how Boot Camp may be improved. Students who scored very close (within 1–5 points) to placing out of Math 9 were offered additional math services to prepare for another retake of the Compass exam (with the understanding that they would be responsible for the exam fee.)

Academic Coach Kristi Teruya stated, “MyFoundationsLab offers each student a personalized learning path, focusing study time and enabling students to see progress from the very first day. Students appreciate the immediate feedback and respond positively to the videos and step-by-step explanations. With MyFoundationsLab, students quickly take learning into their own hands, gaining skills and confidence that will serve them well in their academic careers.”

Results and data

Coach Teruya commented, “I am pleasantly surprised and impressed with the success rates for Boot Camp students. I believe that Boot Camp prepares students for their college coursework while easing the transition to college by engaging students with campus resources and staff prior to starting their first semester. It seems clear that offering students

opportunities to better themselves will always have a return on investment.”

Coach Teruya summarized what worked well...

- By providing a personalized, self-paced learning path with immediate feedback and explanation, MyFoundationsLab helped students to reinforce skills and concepts.
- The writing sample proved a valuable secondary assessment to promote many students out of developmental reading/writing.
- New, incoming students reported that Boot Camp provided a great introduction to HCC’s resources and campus community.

*Based on Compass score and, for Reading/Writing, writing sample assessment.

**Based on the fall 2014 resident rate of \$114/credit. Math 9 (5 credits): \$570, Math 24/25 (3 credits): \$342, English 19/21/22/60 (3 credits): \$342

***35.6% of students tested out of Math 9, the lowest level developmental math course. While the ultimate goal is to accelerate students’ progress out of developmental math altogether and into 100-level math courses, the immediate goal is to advance students out of the lowest level course, Math 9. Many students initially score lower in math than in reading and writing and thus have a steeper deficit to overcome in math. Some students needed to raise their math score by 20+ points to meet the cutoff to place out of Math 9; the average score increase was 12.2 points, meaning that many students missed the cutoff.

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—Kristi Teruya, Academic Coach

- Students appreciated that HCC offered a free program to assist them in potentially placing into a higher course.
- Even students who did not place out of developmental studies altogether noted that they felt better prepared for their coursework after participating in Boot Camp.

... and where there is room for improvement

- Students who opted to focus on all three subjects felt that one week was insufficient to fully refresh skills in each subject. One solution is to restrict student choice to Reading/Writing or Math for each Boot Camp session.
- In Math, a very large class size and wide range of skill needs made it challenging for a single math instructor to adequately address all students’ instructional needs. Plans are in place to offer two levels of math and to recruit additional math instructors and tutors to meet student needs.
- Additional College Skills Workshops targeting basic computer literacy and test-taking skills are under consideration to meet clear student needs.
- Student motivation and commitment varied. Program staff will set clear and definite expectations for student behavior and conduct at Orientation.

The learner experience

Forty-eight of the participating students voluntarily completed all or part of a survey at the end of the boot camp.

- 100%** Rated Boot Camp good or great
- 94%** Would recommend Boot Camp to friends
- 89%** Felt better prepared for the Compass exam
- 100%** Rated the mini-lessons taught by instructors helpful
- 89%** Rated the College Skills Workshops (goal-setting, time management, etc.) helpful
- 83%** Of new, incoming students reported that Boot Camp eased anxiety about starting school

53% Said a single, three-week session was insufficient to work on all three skills (reading, writing, and math)

Selected student comments

- *“Boot Camp is a great program for students to increase their learning momentum.”*
- *“I liked everything about Boot Camp—one-on-one assistance with the teacher if I needed it, and extra time at the lab really helped.”*
- *“I liked the review of math and writing because it helped refresh my memory. I stayed out of school for a year, and I needed something to get me back into the school lifestyle and to score better on the Compass test.”*

Best practices

Advising support

Students whose Compass scores indicated a need for basic skills remediation were recruited to the Boot Camp program by HCC counselors and C.A.R.E. center staff and faculty. During the final week of Boot Camp, a representative from counseling visited with Boot Camp students, encouraging them to meet with a counselor to alter their schedules following their retake of the Compass exam.

Personalization

The MyFoundationsLab PathBuilder diagnostic generated a personalized learning path for each student in each skill area selected for study: reading, writing, and math. Students likely maximized learning time by working just on the skill areas not previously mastered.

Hybrid course format

The self-paced, online learning in MyFoundationsLab combined with direct, one-on-one or group instruction from faculty kept students engaged, motivated, and on pace.

Whole student focus

Evidence suggests that advising support, team-building exercises, and College Skills Workshops administered by C.A.R.E. center staff worked to diminish students’ anxiety, orient students to campus life, and prepare students to engage fully in both academic and nonacademic opportunities at HCC.

Conclusion

Evidence from the summer 2014 Boot Camp and subsequent fall 2014 performance of student participants suggests that Boot Camp is an effective remediation and acceleration intervention. Boot Camp also serves to connect students to campus life in ways that may impact achievement and persistence.

Based on an analysis of student outcomes and on interviews with participating students, instructors, and staff, a number of refinements are planned for summer 2015 Boot Camp. Math will be segmented into two levels to address basic and more advanced skills needs, staff levels will be increased, and the program will receive earlier, more comprehensive marketing to attract more eligible students.

HCC will continue to track Boot Camp participants' progress to gather additional evidence about the impact of Boot Camp on students' long-term achievement and persistence.

This user-report case study documents implementation practices and evaluates possible relationships between program implementation and student performance. These findings are not meant to imply causality or generalizability beyond this specific instance. Rather, findings from this study demonstrate associations that are potentially useful for further theory testing in future experimental studies. For this case study, a mixed-methods design was applied, and the data collected included qualitative data from interviews, quantitative program usage analytics, and student performance data. An open-ended interview protocol was used to guide data collection.