

ALEKS[®] Case Study

Hillsborough Community College, Brandon Campus | Tampa, FL

Course Name: MAT-1033 Intermediate Algebra

Implementation: Lecture-based/Traditional

Course Setup: ALEKS 360 with Miller/O'Neill/
Hyde Developmental Mathematics, 1e

Average Enrollment: Fall 2017 = 715;
Spring 2018 = 449

Introduction

In 2013, the Florida state legislature passed SB 1720, which mandated that students enrolling in a community college be able to self-place up to intermediate algebra, even if a placement exam (which they can opt out of) places them into, or they take and fail, a lower-level course. As a result, Hillsborough Community College (HCC) saw a dramatic decrease in student readiness in the Intermediate Algebra course, and performance stagnated below the 50% mark.

Students in Intermediate Algebra are often those who have been out of school for awhile or those who describe themselves as having “low math confidence.” Additionally students who should be placed in pre-algebra or beginning algebra were self-placing into intermediate algebra, causing a 40% drop in developmental math course enrollment.

ALEKS Experience

The math faculty at HCC ran a joint ALEKS pilot for Intermediate Algebra from spring of 2016 to spring of 2017 and was very encouraged by decreased withdrawal rates and increased passing rates occurring against a backdrop of declining success in the course. ALEKS was then adopted campus-wide for the fall of 2017. After the campus-wide implementation, faculty continued to see exceptional pass rates and lower withdrawal rates in the Intermediate Algebra course.

When ALEKS was first implemented, some students felt confused about where they were in terms of assignment and course progress, but a little help and demonstration helped them. The tutor lab supervisor reported student homework complaints were way down. Some students specifically sought out the College Algebra course with ALEKS once they completed Intermediate Algebra.

“The ALEKS Support team was of incalculable value. We appreciate that ALEKS allows first-week intervention for students, and instructors can tailor their starting point to the level of the class.”

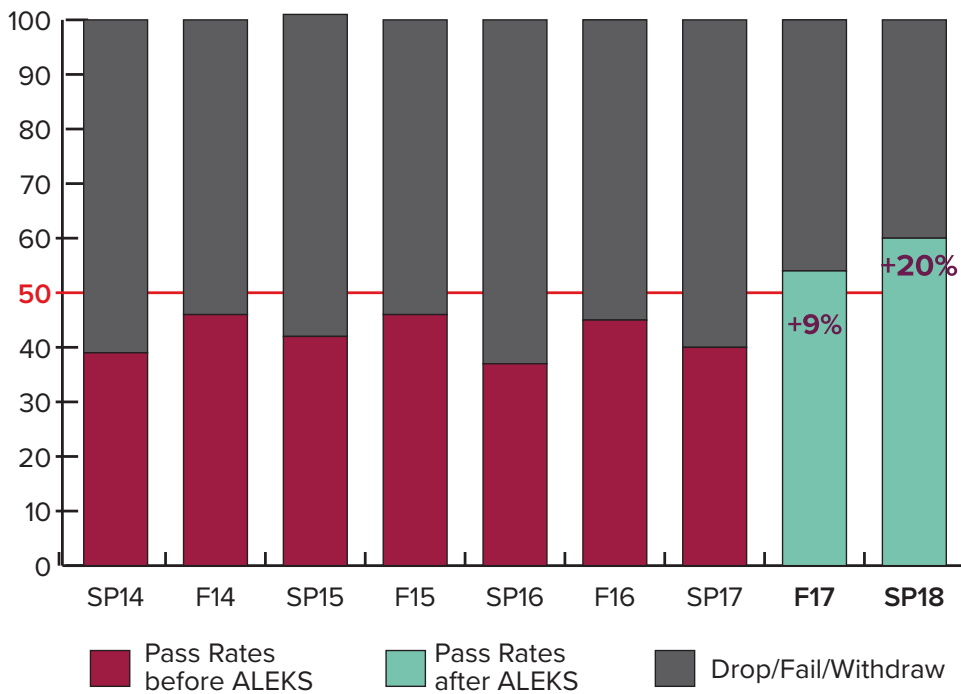
Implementation

Intermediate Algebra classes meet twice a week for 100 minutes each. Some sections are online or condensed. The grading system is as follows: 5% in-class group activities, 20% ALEKS homework, 65% tests, and 10% final exam. The ALEKS grade is determined by completion of ALEKS Objectives (20%) and mastery of the content (80%). All exams are paper/pencil.

Results Achieved

Before ALEKS, student performance in Intermediate Algebra had stagnated below 50 percent, meaning less than 50 percent of students were passing the course with a grade of A, B, or C. The drop/fail/withdraw rate remained consistently above 50 percent as well (see Figure 1). After implementing ALEKS in the fall of 2017, the pass rate for Intermediate Algebra increased 54 percent, while the drop/fail/withdraw rate dropped to 46 percent. The spring of 2018 saw student performance continue to rise with the pass rate increasing to 60 percent and the drop/fail/withdraw rate dropping to 40 percent.

(Figure 1) Outcomes for All Intermediate Algebra Students at Brandon Campus



HCC's institutional data unequivocally shows that successfully completing intermediate algebra significantly improves a student's success in subsequent algebra courses, yet the legislature is currently questioning the value of intermediate algebra as a prerequisite. The faculty feel that now is a critical time to increase success and retention in the intermediate algebra course, and the implementation of ALEKS has yielded improvement on both fronts. This has particularly motivated administration to show support for the course.



Institution Profile

Founded in 1968, Hillsborough Community College is a two-year community college located in Hillsborough County, Florida. It serves over 40,000 students across five campuses, who can earn degrees and certificates in 20 different fields.