

Mathematics Success Project

Data Analysis

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As far as our College is concerned, the following generalizations are noteworthy:

A. Comparisons among types of math courses

1. In all math courses combined, less than half the students (48% of those who start the course) pass.
2. In all math courses, 81% of the starters complete the courses, and 18% get a "W."
3. By type of math course, the best performance at the College in terms of completion rates is in Holomua (84% of the starters), and the worst is in pre-calculus (Math 104, 135, 140, 75% of the starters).
4. By type of course, the best performance at the College in terms of success rates is in Math 100 (58% of starters) and the worst is again in pre-calculus (41% of starters).

B. Comparisons among colleges

Overall as well as in almost every single type of math course, the College has simultaneously a higher completion rate and a lower success rate than the rest of the UH colleges. On the surface, this could be interpreted as indicative that the college is able to retain more students than average only to have them not pass the course.

Limitations of this study

The major limitation of this study is the use of grades as the sole measurement criterion. First, instructors do not follow uniform grading practices: some use absolute cut-offs to delimit letter grades, and others use the "curve." Without control for this nuisance variable, grades will not accurately reflect the factor that is intended to be measured. The second reason for the volatility of grades is grade inflation. The fact is that, at Kapiolani CC, grades in all subjects, not only math, are usually lowest among UH colleges. Without control for grade inflation, this low distribution can be justified by two competing explanations: first is that KapCC students perform less well than other CC students, and second is that KapCC grades are less inflated than other CC grades.

These serious limitations lend little if any credibility to any conclusions that can be made from this study. A preferred method to conduct this study would be to use students' performances in subsequent courses as measures of their performance in the math courses desired.