

For five months during Fall 2016 and Winter 2017, Waipahu High School Early College offered an online program, EdReady, to high school freshmen who had not placed into college algebra as 8th graders or by fall of their 9th grade year. The goal was to prepare those students, by spring of 9th grade, to earn an Accuplacer Math placement score that met the pre-requisite for entry into college algebra in the fall semester of their sophomore year in high school.

INSTITUTIONAL PROFILE

Hawaii's Waipahu High School Early College program allows high school students to save time and money by taking courses for college credit while still enrolled in secondary school. In 2014-2015, the school offered 35 college classes with 401 unduplicated students earning college credits.

Students in the Waipahu program come from a variety of ethnic backgrounds, primarily Filipino, but also include Samoan, part-Hawaiian, and other ethnicities, with more than 68% non-native English speakers.

IMPLEMENTATION

In the summer of 2016, Waipahu High School partnered with the Leeward Community College's Pre-engineering Associate in Science/Natural Science (ASNS) program and the University of Hawai'i Manoa's College of Engineering to develop a vertically articulated STEM Early College Olympian Pathway. It was designed to promote STEM-oriented career pathways such as engineering, medicine, software development, data analysis, mathematics, and scientific research.

The goal was for participating students to complete college algebra, college trigonometry, college chemistry, college physics, and four semesters of college calculus before graduating from high school. Students would then enter either a pre-med program or the University of Hawaii's College of Engineering as juniors.



DETAILS

WHO WAS SERVED: High school freshmen in an Early College STEM program

WHEN: October 2016-March 2017

NUMBER OF STUDENTS: 30

IMPLEMENTATION: Optional two-hour weekly EdReady lab in the school library

RESULTS: 29 of 30 students (96.7%) who had not placed into college algebra by fall of freshman year improved their scores enough to place into college algebra or higher by the following spring: 9 placed into college algebra; 14 placed into college trigonometry; 4 placed into college pre-calculus; and 2 placed into college calculus

INSTRUCTIONAL APPLICATION:
Accuplacer Math prep

But what about the 30 students who weren't ready for college algebra when they entered high school as freshmen? The STEM Early College Olympian Pathway needed a way to help these freshmen improve their math skills within the time frame of November 2016 to March 2017 so that they could sit for the Accuplacer and be ready for college algebra in fall of their sophomore year.

To meet this need, the school offered EdReady through an independent study lab for two hours every Friday afternoon in the school library, starting in mid-October. Students were also able to access EdReady at home.



"The results are amazing."

—Dr. Mark Silliman, Waipahu High School Early College Program Director

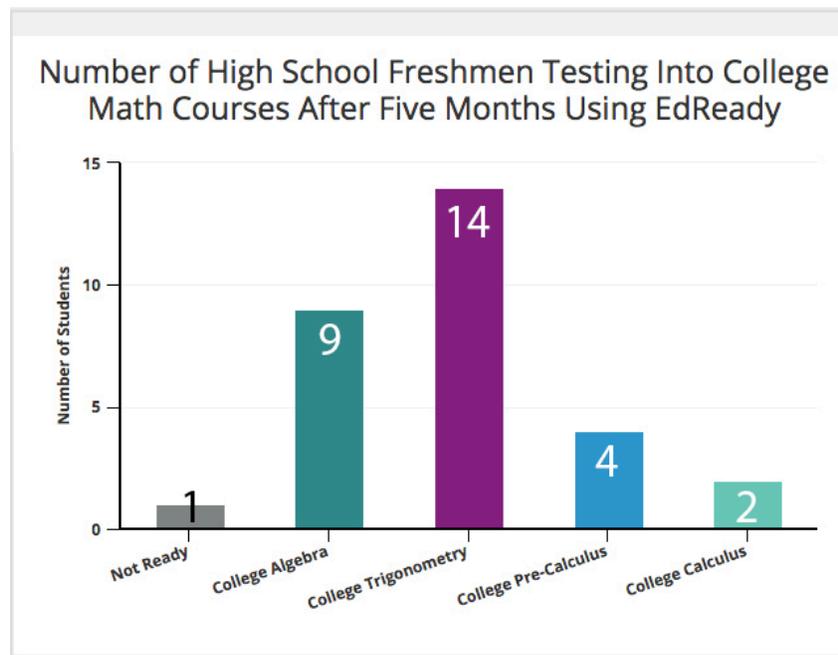
“Many people are familiar with the term ‘Early College,’ meaning high school students take credit-bearing college classes. However, Early College also includes strategies and means by which we help them get ready for college-level rigor,” explains Dr. Mark Silliman, Program Director of the Waipahu High School Early College Program.

The Friday lab was staffed by an undergraduate engineering student tutor from the University of Hawaii. The tutor monitored each student’s progress and moved around the room. The Assistant Director of the UH Manoa Online Learning Academy also monitored each student’s progress via the online EdReady reports. The tutor and Silliman were on hand to nudge students along and encourage them to keep making progress with their EdReady scores.

Even though the Waipahu High School Early College Program held an open EdReady lab nearly every Friday from mid-October 2016 to mid-March 2017, students did not attend the on-campus EdReady lab on every occasion. Some came to the Friday EdReady labs some of the time, but worked at home during other times. In brief, there was no uniformity among the students in terms of a regimen or the set number of hours using EdReady.

RESULTS

On March 20, 2017, the students were transported from Waipahu High School to Leeward Community College to sit for the Accuplacer math placement exam to determine whether they had developed the math skills to take college algebra in fall 2017. After only five months using EdReady, all but one student placed into or beyond college algebra. ■



For questions on this case study, please contact:

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