

Success Story: University of Central Florida

Dr. Tammy Muhs is leveraging personalized learning to improve student engagement and success rates in critical early math courses.



Having the tools to serve students with different learning backgrounds and styles while also providing them motivation, support and encouragement is crucial to Dr. Muhs' success.

The Problem

At the University of Central Florida (UCF), the curriculum for STEM majors starts with first-semester Calculus. Many students, however, must start in lower-level courses such as Intermediate or College Algebra and work their way up before they can begin their course of study. Enrollment is high in these courses, and students enter with varying levels of knowledge. What's more, says associate lecturer Dr. Tammy Muhs, "Math is not typically students' favorite subject, so there has to be some sort of motivation for them to engage in the course and be successful." Muhs' goal: Find a way to increase course pass rates to help students move forward in their courses of study.

The Solution

Dr. Muhs sought a solution that would address all the above challenges while providing a high-quality – and still affordable – learning experience for students. She selected and integrated Realizeit's digital teaching and learning tools. With Realizeit, each student starts by taking a pre-assessment that determines their optimal starting point in the course. The system then creates an individual learning path for each student based on what each student already knows and what gaps must be addressed. The adaptive system then continuously analyzes student actions and performance to deliver and adjust remediation and other learning content. Additionally, because the courses use Dr. Muhs' original learning content, students save money by not having to purchase a textbook.

The Results

"A student can remediate any prior knowledge that they are missing, get up to speed, and if they are able to, even accelerate and go beyond the typical course pacing," Dr. Muhs said. In-depth, real-time insights into each student's performance and activity further inform Dr. Muhs' instruction and interventions, and the regular feedback students receive helps provide encouragement and build their confidence.

Course results, too, are showing a positive impact: In College Algebra, for example, success rates have grown by 20%, from 48% in spring 2014 (the semester prior to implementing Realizeit) to 58% in spring 2017. In a survey, the majority of Dr. Muhs' students said they believed they learned better with Realizeit and if given a choice, they would take another course using the system.

In Online College Algebra, student success rates have grown by 20% in courses using Realizeit.