

# Ensure Students Are Learning: Faculty Descriptions of Innovative Teaching Practices

## Online Homework: Using Knewton's Alta Software to Improve Homework Completion and Test Scores in Math Classes

### Innovative Teaching Practice Description:

Knewton's Alta online software platform provides access to interactive learning modules along with practice problems, quizzes, and tests. This adaptive learning software is used in lieu of a traditional textbook and is available online as well as through a mobile version, both of which students tend to prefer.

The instructor uses the software to assign homework that accompanies course lectures over specific topics. Unlike textbooks that have practice problems at the end of the chapter, students can jump right into the online practice problems. The software is adaptive in nature, recognizing student errors and directing students to resources within the software that will help them better understand their mistakes to complete the problems correctly. This is done through a series of video tutorials that walk students through the key elements of each problem.

Faculty reported that homework completion nearly doubled after introducing the Alta software in their math classes. Faculty also reported that test scores increased, even though tests were not administered online through the Alta software.

The use of this software is easily accessible and scalable campus-wide. It started with one faculty member who then trained other faculty on how to use the software. After approximately one year, the college decided to adopt this software in almost all of its math classes. The software company will be delivering a campus-wide professional development session for faculty to become familiar with the software.

### How to Ensure Participation in This Innovative Teaching Practice:

The instructor and the college can help ensure participation in this practice by maintaining open labs that students can use if they do not have a mobile device, home computer, or Internet access at home.

### Notes From the Instructor About This Innovative Teaching Practice:

"Become familiar with the software."