CONTEXT:	General Psychology course, delivered face-to-face, to 21 students
PRODUCT USED:	Scientific American: Psychology; Coco Ballantyne, Deborah Licht, and Misty Hull (eBook) with ACHIEVE Read & Practice
STUDY DESIGN:	Mixed methods with descriptive and correlational analyses

How ACHIEVE Read & Practice enhanced a General Psychology course at Eastern Florida State College for an instructor with no previous experience using digital learning tools

Institutional and course context

Eastern Florida State College is a public institution with four campuses and about 16,000 enrolled students located in Brevard County, Florida. Students can earn Bachelor's Degrees, Associate Degrees, or career training certificates. This study was conducted in a General Psychology course that is taught face-to-face on campus and had 23 students enrolled. The instructor has more than 15 years of experience teaching Psychology but has not previously used digital technology and provided a rating of "uncomfortable" using technology in the classroom at the beginning of the semester.

Instructor implementation

This instructor replaced the digital learning tool they had been using with ACHIEVE Read & Practice. The instructor chose to assign regular activities and require that students complete them. Students were able to retake the quizzes but retaking quizzes did not count toward their performance score. Students' performance on all activities assigned made up a total

of 12% of a student's final grade. Some students completed the activities quickly (under 5 minutes) while others remarked that it took over an hour to complete a quiz. Some students elected to complete all of the assignments weeks in advance while other students completed them each week.

"I have been extremely reluctant to embrace online technology. This is my first experience utilizing such a program. My experience has been so positive that I actually listed teaching online as one of my faculty goals for this academic year. My experience with Quiz Plus has given me confidence and motivation to teach an online class", instructor

Course Goals and Challenges

The instructor in this study was hesitant to use digital technology in the classroom because they were concerned that using publisher-provided digital learning tools would be time consuming. They also observed that many of their colleagues have had difficulty implementing digital tools. However, they reported finding it very challenging to motivate students to stay on track with reading and develop better study habits and they thought that adaptive quizzing could be very effective, so decided to implement Read & Practice to support better student study behaviors and influence student academic success.

Study Design

This study examined the experience of an instructor with no previous experience using digital technology who was implementing a digital learning tool for the first time. The study sought to understand whether the instructor's experience

aligned with their expectations of it being challenging and time consuming. Student outcomes of engagement and academic performance we also examined. Surveys that were refined during pilot tests were deployed to instructors and students at the start and end of the course, instructors kept weekly logs of implementation and perceptions, a protocol for observing the classroom was used on site visits (adapted from Lane & Harris, 2005), an instructor interview protocol and student focus group protocol were implemented. Product usage data, self-reported prior academic performance data, and records of current academic performance data were collected. Data were matched across sources and descriptive and correlational analyses were conducted.

Results

ACHIEVE Read & Practice is easily implemented for instructors with no experience using digital learning tools. This instructor was very clear that, in the past, they used little to no technology in their course. However, the instructor reported being "comfortable" using Read & Practice and that "*once installed the program runs itself*"! They found the analytics dashboard very easy to use and an effective way to monitor their classes performance and identify areas where students needed extra support. They strongly agree that the product will be easy for all instructors to use, even those who are hesitate to adopt digital learning tools. And, on a scale of 1 = "not at all likely" to 10 = "extremely likely" they rated their likelihood of using Read & Practice again a 10. They also recommended that their colleagues who have commented about time spent on digital learning tools should switch to Read & Practice.
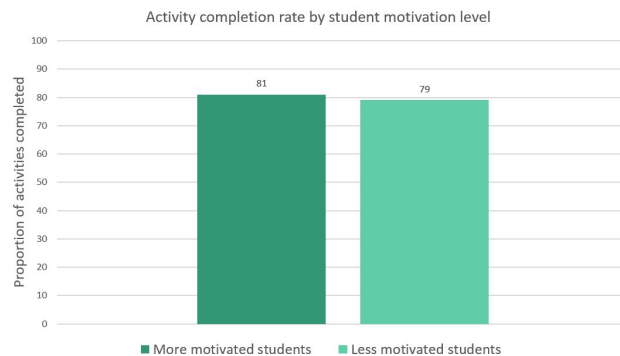
"Once installed, the program runs itself. ", instructor

ACHIEVE Read & Practice was not time consuming at all to implement for an instructor with no experience with digital learning tools. One of the reasons this instructor had not used technology in the past was their perception that it would take a great deal of time to use. However, they reported each week that they had to spend fewer than five minutes in the product and that the time spent was "not burdensome at all". The instructor also noted that they were surprised at how much less time it took than they were expecting.

ACHIEVE Read & Practice helped students stay on track with reading and reinforced concepts learned in class. Students reported that prior to using Read & Practice it was somewhat challenging for them to keep up with their reading (average rating of 2.5 on a scale of 1 = "very challenging through 4 = "not challenging at all". At the end of the semester students rated how much they agree that they remained on track with reading

and 85% of students reported that they remained on track this semester and that Read & Practice supported this. 95% of students reported that Read & Practice reinforced concepts that they had learned in class.

"Being able to have access to practice quizzes reinforced concepts and vocabulary that allowed me to recognize similar questions based off of those concepts and vocabulary when taking our exams.", student

Activity completion rate by student motivation level

ACHIEVE Read & Practice was highly engaging; there was very little difference between the engagement of motivated and unmotivated students. The class in this study has an overall average completion rate of 77%. Students who indicated that they were less motivated in the course had a completion rate of 79% while students who reported being highly motivated has a completion rate of 81%, suggesting that the product is engaging for all motivation levels. The instructor also remarked that students would refer to the quizzes during classroom discussion. For example, "*when discussing that a person's culture must be considered when determining whether or not they might have a psychological problem, several students mentioned "Koro" which they recalled from the quiz. I can guarantee that if they had not seen it in the quiz they would know nothing of the condition*."

Insights for Instructors

Read & Practice is a very simple and intuitive digital learning tool that is an appropriate tool for instructors who have little or no previous experience with technology. It is also a valuable tool for instructors who want to save time preparing for their course.

Insights for Optimization

The instructor suggested that Read & Practice integrate with their campus' LMSs. The product has an on-going plan of LMS integrations.