

Revel Accounting Information Systems educator study

Key findings:

- Students completing all Revel quizzes earned average exam scores 11 percentage points higher than students who skipped at least one Revel quiz.
- Data indicate a strong, positive correlation between Revel quizzes and exam scores.
- 78 percent of respondents on the student survey agreed that the “read a little, do a little” approach of Revel helped them learn and retain the course material better than they would have with a traditional textbook.

Setting

Locale: large, urban, four-year, research university located in Raleigh, considered North Carolina’s research capital and the largest four-year school in the state.

Enrolment: more than 33,000 students

Full-time retention rate: 76%

Six-year graduation rate: 93%

Student-faculty ratio: 13:1

Classes with fewer than 20 students: 38%

Average age: 21

Gender: 55% male, 54% female

Ethnicity of students: 73%, African-American – 6%, Asian – 5%, Hispanic – 5 %, Other – 11 %



School name: North Carolina State University, Raleigh, NC



Course name: Accounting Information Systems



Course format: Face to face



Course materials: Revel for Accounting Information Systems by Romney



Timeframe: Fall 2017



Educator: Eileen Taylor, Associate Professor



Results reported by: Candace Cooney, Pearson Customer Outcomes Analytics Manager

About the course

Eileen Taylor has been teaching for approximately 26 years and has been at North Carolina State University for 11 years.

Accounting Information Systems (AIS) is a one-semester, three-credit, junior-level course enrolling approximately 250 students per year and required of accounting majors. AIS covers transaction cycles, related threats and internal controls, and the use of computers as tools for the collection, organization, analysis, and reporting of accounting data.

Students also learn to model and design relational databases, culminating in the creation of a basic computerized accounting information system.

It also includes practical use of Microsoft Excel, Microsoft Access, and computerized accounting software packages.

Challenges and Goals

Taylor believes her students should be responsible for their own learning, which includes being prepared by reading the textbook prior to lecture, participating during class, and contributing to class discussions. Seeking a better course solution, Taylor engaged in a class test of Revel using content from one chapter in Spring 2017.

Initial student response was positive, so **Revel was adopted for Fall 2017 to hold students accountable for reading and understanding basic course concepts, leading to a more interactive lecture.**

An instructor may have other external considerations before deciding to adopt educational technology, including cost. Taylor believed that Revel could replace her more expensive, traditional text with an affordable and seamless blend of digital text, media, and assessment, providing more resources for diverse learners. In fact, on an end-of-semester survey of

Taylor's students, 68 percent of respondents strongly agreed or agreed that the resources in Revel made the program [Revel] a good value for the course.

Taylor also had some concerns about adopting an eText-only option, but trusted that her students would value this learning opportunity and find the use of Revel to be an important part of their course success. Initially, 58 percent of survey respondents reported that they were apprehensive about using an eText and all digital course materials. However, at the end of the semester, 75 percent of respondents reported that they became comfortable using the eText for reading assignments as the semester progressed.

Implementation

Revel was designed to help every student come to class ready to learn. To keep students engaged as they read through each chapter, Revel integrates videos, interactives, and assessments directly into the narrative. Because of the interactive presentation of content, students are more likely to complete their assigned reading and retain what they've read and are better prepared to participate and learn in lecture. On the end-of-semester student survey:

- 60 percent of respondents reported that the required Revel quizzes encouraged them to read the textbook more than they otherwise would have; and
- 75 percent of respondents agreed that Revel practice questions and quizzes helped prepare them to participate in class.

Taylor teaches in a lab, so students have access to the internet and acquire hands-on computer application experience. Generally, class is a combination of lecture, discussion, demonstration and completion of SAP modules on Excel and Access, other experiential assignments, as well as in-class assessments.

Taylor takes advantage of the flexible coverage of each major approach to teaching AIS in Revel and reorganizes the chapters to suit her specific course needs. Students read the eText chapter and complete the pre-built practice assignment at the end of each section. Students have three attempts at each of six questions, ensuring they understand the concepts before reading further. Practice assignments are not scored or recorded in the gradebook. End-of-chapter quizzes comprise the Revel grade, with each quiz consisting of ten questions. Students have three attempts per question but are penalized one point per attempt. Quizzes have firm due dates and must be completed prior to lecture.

Embedded assessments like practice and concept checks afford students opportunities to check their understanding at regular intervals before moving on. Assessments in Revel enable Taylor to gauge student comprehension frequently, provide timely feedback, and address learning gaps along the way. Additionally, Taylor has observed that her students are more prepared and willing to participate in lecture.

Additional course assessments

Students complete a 90-minute midterm and three-hour final exam consisting of multiple-choice, matching, short-answer, and written problems. The final exam also includes an Excel assessment.

Additionally, students complete in-lab skill assessments for Excel and Access, complete a digital accounting practice set for a fictional business, and contribute to a group business challenge that requires them to create an Access database, develop queries and reports, and identify control issues.



Assessments

- 20% Midterm exam
- 20% Practice set project and assessment
- 15% Final exam
- 10% AIS Business challenge/group project
- 10% Excel assessment
- 10% Access assessment
- 10% Participation/in-class assignments
- 5% Revel quizzes

Results and Data

Correlations do not imply causation but instead measure the strength of a relationship between two variables, where r is the correlation coefficient. The closer the r -value is to 1.0, the stronger the correlation. The corresponding p -value measures the statistical significance/strength of this evidence (the correlation), where a p -value less than 0.05 shows the existence of a positive correlation between these two variables.

A strong positive correlation exists between average Revel quiz scores and average exam scores where $r=.61$ and p is less than 0.1.

For students, the formative Revel assignments are intended to help them identify where they are in terms of successfully completing the summative quizzes and exams. Empirically, Taylor agrees that the Revel assets do have a positive impact on quiz and exam scores, noting that exam scores seem consistent with those from previous semesters.

Taylor transitioned from a traditional print textbook to Revel to hold students accountable for reading the chapter material prior to lecture, uncertain how this might impact course scores. After moving to Revel in

Fall 2017, data indicate that more students earned an A as their final course grade, with just one student earning a grade below C.

Students were divided into two groups based on their completion of Revel assignments. Data show that students who completed all Revel quizzes earned average exam scores 11 percentage points higher than students who skipped at least one quiz. These results are statistically significant, where $t(53)=-2.77$ and $p<.001$.

The Student Experience

Responses from the Fall 2017 end-of-semester survey of Taylor's students indicate that the majority of responding students recognize the value of Revel.

78 percent of respondents strongly agreed or agreed that the "read a little, do a little" approach of Revel helped them learn and retain the course material better than they would have with a traditional textbook.

58 percent of respondents strongly agreed or agreed that Revel provided additional study resources that helped prepare them for quizzes and exams.

71 percent of respondents strongly agreed or agreed that they would recommend Revel to another student.

Student responses to the question "What were the benefits of Revel?" included:

"I liked that you could highlight important points in the text, and that you didn't have to worry about having a physical textbook."

"Revel forced me to read the chapter."

"I was familiar with the material before class!"

"[Revel] allowed you to quiz yourself on each section of the chapter before having to take one big quiz at the end of the chapter."

Conclusion

Revel is certainly helping Taylor achieve her goal of holding her students accountable for their own learning, which includes being prepared by reading the textbook prior to lecture, participating during class, and contributing to class discussions. Students grew comfortable with the eText as the semester progressed, a possible concern upon adoption, and 78 percent of survey respondents agreed that Revel helped them learn and retain the course material better than they would have with a traditional textbook. Revel has also offered cost savings to her students, a value they acknowledged in the student survey as well. "Our textbook was very expensive in the bookstore, so I saw the move to Revel as a positive in terms of student cost," shared Taylor.

Data from Green's course also confirms that Revel was an improvement, as both chapter test and final course scores improved significantly over the previous semester.

Learn more about Revel

Accounting Information Systems

Learn more about how Revel Accounting Information Systems could benefit your course by visiting:

<https://www.pearsonhighered.com/revel/educators/browse-products/disciplines/accounting.html>