

# Revel AIS educator study

A look at the impact on student performance at Wayne State University

## Key findings:

- All students scoring above average on Revel™ quizzes passed the course with an A, B, or C as their final course grade, demonstrating mastery of course content.
- Data show that completion of Revel quizzes with a passing grade of 70% or higher is indicative of overall course success.
- 74% of respondents on an end-of-semester survey agreed that Revel provided additional study resources such as Concept Checks and interactive media links that helped prepare them for exams.

## Setting

**Locale:** large, urban, four-year, public research university located in Midtown Detroit

**Enrollment:** more than 27,000 students

**Full-time retention rate:** 81%

**Six-year graduation rate:** 47%

**Ethnicity:** 58% Caucasian, 15% African American, 8% Asian, 4% Hispanic, 15% Other



**School name:** Wayne State University, Detroit, MI



**Course name:** Accounting Systems Design and Control



**Course format:** Face to face



**Course materials:** Revel for *Accounting Information Systems* by Romney and Steinbart



**Timeframe:** Spring 2018



**Educator:** Deborah Habel, Lecturer



**Results reported by:** Candace Cooney, Pearson Results Manager

## About the course

Deb Habel has been teaching for eight years and approximately three years at Wayne State University. Accounting Systems Design and Control is a one-semester, three-credit, senior-level course enrolling approximately 150 students per year, taken by accounting majors who intend to sit for the CPA exam. The course is an introduction to accounting information systems and their design, development, documentation, and implementation. Students study internal controls surrounding these systems and learn how to evaluate the integrity of internal controls, utilizing two widely used accounting software packages.

## Challenges and Goals

Because Accounting courses tend to be more quantitative in nature, students are often unprepared for the theory-oriented nature of the Accounting Information Systems (AIS) course. AIS is not practice driven, and students must read the textbook in order to understand the language and concepts. Habel notes that many students often try to get by in the course without reading their accounting text.

### **Searching for a way to engage students more in their course reading led her to the unique “read a little, do a little” interactive approach of Revel.**

Required quizzes at the end of each chapter could be implemented more as a homework assignment than an actual assessment, while still allowing students to identify the content they found unclear. Habel adopted Revel in Fall 2017.

As a fully digital program, Revel presents an affordable option to print textbooks, although students always have the option to purchase a print book as a companion for the online learning experience in Revel. Most students, however, choose to purchase access to Revel only. On an end-of-semester survey of Habel’s students (79% response rate), 87% (20 of 23 students) chose not to purchase

a print textbook to accompany Revel. Students who used only Revel in digital format indicated the following:

Initially, 50% (10 of 20 students) were apprehensive at the beginning of the semester using only Revel for reading assignments.

However, 60% of those students (6 of 10 students) agreed that they became comfortable using Revel for their reading assignments as the semester progressed.

Overall, 80% (16 out of 20 students) were comfortable using Revel for reading assignments either before the semester began or as the semester progressed.

## Implementation

Students use Revel for understanding content and quizzing. On the student survey, 43% of respondents said they spent 1–2 hours per week working in Revel, while 30% spent 2–3 hours in Revel, and 26% of students spent more than three hours each week working in Revel. Habel views the Revel assignments as formative — an opportunity for students to experiment and learn, with chapter reading taking place prior to lecture, and quizzing completed after lecture.

Revel integrates dynamic media such as videos, animations, and interactive graphing throughout the pre-built readings, helping students take an active role in their reading, as well as offering an alternative way of learning. Although these interactives are intended to be completed quickly, most students unfortunately do not take advantage of these media options: just 35% of respondents on the survey indicated that they usually or always viewed the media options as they were reading, although another 22% responded that they sometimes view the embedded media.

The unique Revel approach of reading chapter content followed by immediate assessment, however, was widely seen as beneficial by survey respondents:

61% agreed that the “read a little, do a little” interactive approach of Revel helped them learn and retain the material better than they would have with a traditional textbook.

70% said they preferred the interactivity of Revel to a traditional, print textbook.

74% concurred that Revel provided additional study resources such as Concept Checks and interactive media links that helped prepare them for their exams.

Habel assigns 10 end-of-chapter quizzes in Revel, covering material from two chapters in each. Students have two attempts to complete these 10-question, multiple-choice quizzes, with the higher of the two scores recorded in the gradebook. Students have an opportunity to test their comprehension of the chapter as a whole, as these quizzes are more of a formative assignment than assessment. Other resources like Concept Checks and end-of-chapter Excel problems are recommended by Habel, but are not required as part of the Revel grade.

Outside of Revel, students complete homework assignments using some end-of-chapter questions, Microsoft Access, Sage 100 ERP, and SAP softwares, as well as a team-based simulation project completed during one class period, and a separate team-based ERP research project. (Graduate students will complete an in-depth individual research project as well.)

Both the midterm and final exam are completed online in Canvas using the Respondus lockdown browser. Both exams are comprised of 50 multiple-choice questions chosen from the test bank, which are randomized and

paired, and students have 105 minutes for completion. The final exam is comprehensive, but focuses mainly on material from the second half of the course.



### Assessments

- 50% Exams (2)
- 20% Revel quizzes (10)
- 15% Homework assignments
- 10% Team ERP project
- 5% Simulation

## Results and Data

Students were placed into two groups based on their Revel quiz score, identifying the following:

- Average Revel quiz score: 86%
- All students (100%) scoring above average on Revel quizzes passed the course, earning an A, B, or C as their final course grade, showing mastery of course content.
- No students (0%) scoring below average on Revel quizzes earned an A as their final course grade, and 16% of students scoring below average earned a D or F.

Completion of 10 Revel quizzes with a passing grade (70% or higher) may be indicative of overall course success. Because Habel allows students two attempts at quiz completion, students have the ability to earn a higher score if their initial attempt is not successful. Data indicate the following:

Students earning an A as the final course grade passed 100% of the Revel quizzes.

Students earning an F as the final course grade were unsuccessful on 50% of the Revel quizzes.

For students, the formative Revel assignments are intended to help them identify where they are in terms of successfully completing the summative course exams. Data suggest that if students are not successfully completing the Revel quizzes, they may not be aware of potential gaps in their content knowledge until they complete the course exams.

## The Student Experience

Responses from the Spring 2018 end-of-semester survey of Habel's students indicate that the majority of responding students recognize the value of Revel.

61% of respondents agreed that the “read a little, do a little” interactive approach of Revel helped them learn and retain the material better than they would have with a traditional textbook.

74% of respondents agreed that Revel provided additional study resources such as Concept Checks and interactive media links that helped prepare them for their exams.

70% of respondents said they prefer the interactivity of Revel to a regular print textbook.

61% of respondents said the resources provided in Revel made the program a good value for this course.

## Conclusion

Reading the textbook prior to attending lecture is beneficial for a course like AIS where most accounting assignments are not quantitative and students require more of a conceptual understanding of the course material. To encourage more engagement with the course content, Habel implemented Revel instead of a traditional print text, and her students responded positively, with 70% of survey respondents indicating they preferred the interactivity of Revel to a more traditional print text. Data results show that strong student performance on the integrated Revel assignments also led to higher assessment scores, and Habel intends to use Revel again when she teaches the course.