

MyAccountingLab

School Name NHTI, Concord's Community College, Concord, NH

Course Name Accounting I

Course Format Online, lecture

Key Results Data show that both online and face-to-face learners who exhibited mastery of course content by earning an A, B, or C average exam grade also had appreciably higher average MyAccountingLab homework scores than did students who earned a D or F average exam grade. In addition, data indicate strong positive correlations among MyAccountingLab homework, quiz, and exam grades.

Submitted by
Laura Morgan, Professor

Course materials
MyAccountingLab and *Horngrén's Accounting*, Nobles, Mattison, and Matsumura

Setting

NHTI, Concord's Community College is a two-year residential community college in an urban locale on the Merrimack River. The school serves more than 4,500 day, evening, and weekend, credit, and noncredit students. The average student age is 25 years, 10 percent of students live on campus, and nearly 5 percent of students identify as other than Caucasian.

Accounting I is a one-semester, three-credit course taken by a mix of students, as it is required for many majors and offered to both business and general education students. The course is an introduction to accounting procedures and principles; it covers the accounting cycle, accounting for a merchandising business, special journals, control over cash, and receivables. The main course objective is the ability to record, classify, summarize, and interpret financial information; emphasis is placed on recording information using the journal.

Challenges and Goals

In 2012, Morgan sought a new text and digital companion program for her online classes. She chose a Pearson textbook that was accompanied by MyAccountingLab and used it first in her face-to-face classes, so she could learn how to best implement it and get student feedback while doing so. During academic year 2012/13, she tried various ways to use MyAccountingLab for both homework and assessment. Morgan urges instructors to consider their first semester with the program as a time of trial and error, one that offers an opportunity to learn the program and gain critical student responses to the program's assignments and assessments. It's a Pearson

MyLab best practice that helps instructors build a better course for future learners.

Implementation

For both online and lecture sections, MyAccountingLab is required and used for all homework assignments and quizzes. In online sections, exams are given in MyAccountingLab; in lecture sections, exams are in class and pencil and paper. All assessments have firm due dates, no exceptions.

For each chapter, students complete one homework assignment that may include journal entries, general ledgers, numerical problems, and practical application problems. Most assignments should take 60–75 minutes; students are allowed unlimited attempts and the highest grade achieved is posted to the gradebook. For lecture sections, additional homework is assigned at the end of each class; solutions are supplied, it is not graded, and all learning aids are turned on. The majority (69 percent) of students who completed an end-of-semester survey reported that they always or usually used the learning aids when unable to start or complete a homework problem. The Help Me Solve This aid was students' most popular; one student commented, "It helped me better understand how to complete the problem. I could then directly apply that new information to the homework problem."

Quizzes comprise 20 multiple-choice and 20 true/false questions. They are not timed, students are allowed unlimited attempts, and the highest grade is posted to the gradebook. Quizzes are not given during the face-to-face meeting for lecture sections; lecture students take all quizzes online, outside of class.

Students in both lecture and online sections are allowed 75 minutes to complete exams. Questions differ between the two sections, but all are similar to those in MyAccountingLab homework and the example problems reviewed in lecture. Online students are allowed one attempt, and the exam must be completed once it has been started.

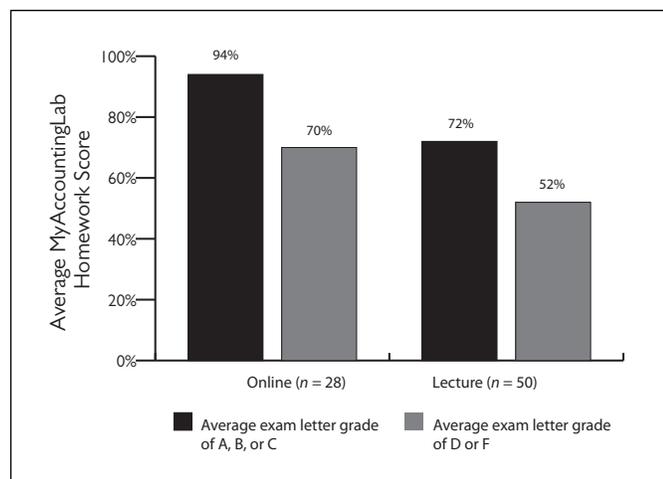


Figure 1. Average Exam Grades and Average MyAccountingLab Homework Scores, Online and Lecture, Spring 2015 (n = 78)

Once an exam is given on a chapter, quizzes and homework for that material become unavailable. Late assignments are not accepted except under extreme circumstances.

Assessments

- 80 percent MyAccountingLab exams (eight online, four lecture)
- 10 percent MyAccountingLab quizzes (eight)
- 10 percent MyAccountingLab homework (eight)

Results and Data

Success on course assessments is generally measured by earning an A, B, or C. Figure 1 shows the average MyAccountingLab homework score for students who demonstrated mastery by earning an average exam grade of A, B, or C, compared to the average MyAccountingLab homework score for students who earned an average exam grade of D or F.

- In online sections, students who earned an average exam grade of A, B, or C had average MyAccountingLab homework scores 34 percent higher than students who earned an average exam grade of D or F.
- In traditional (lecture) sections, students who earned an average exam grade of A, B, or C had average MyAccountingLab homework scores 38 percent higher than students who earned an average exam grade of D or F.

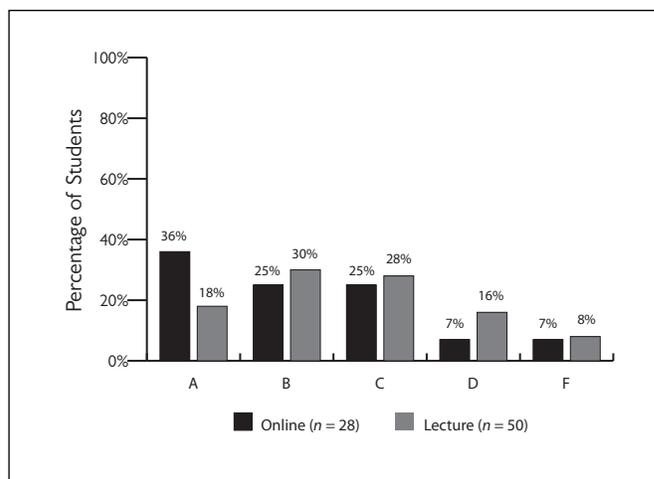


Figure 2. Final Grade Distribution, Online and Lecture, Spring 2015 (n = 78)

Figure 2 shows the final course letter grade distribution for both online and lecture sections:

- More online learners earned an overall A than students in the traditional section – 36% vs 18%
- More traditional learners earned an overall D/F than students in the online section – 24% vs 14%

The only difference in course assessments between the online and traditional lecture sections was the number of exams offered; online students had eight exams while lecture students took only four exams. A possible reason for the higher exam averages for the online section is that the nine exams broke the material into shorter, more manageable chunks for studying; as noted by Geoff Richman in his Edutopia blog, students may score better when the summative assessment covers less material.¹

Figures 3 and 4 (on the following page) are correlation graphs that measure the strength of the relationship between average MyAccountingLab homework grades and MyAccountingLab quiz and exam grades. The corresponding *p* values measure the statistical significance, or strength, of this evidence; $< .01$ is considered strong evidence. A very strong positive correlation exists between MyAccountingLab homework and quizzes in Morgan's online section, where $r = .9$ and $p < .001$. Similarly, a strong positive correlation exists between MyAccountingLab quiz and exam grades in Morgan's lecture section, where $r = .68$ and $p < .001$. For students, MyAccountingLab quiz scores may help them identify where they stand in terms of successfully

¹<http://www.edutopia.org/blog/assessment-lower-stakes-raise-retention-geoff-richman>

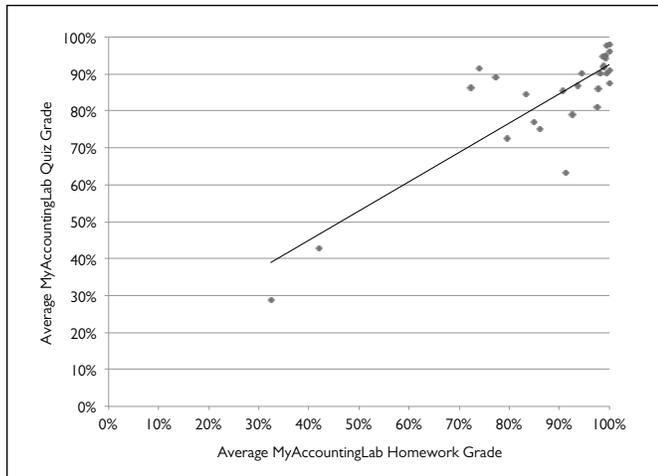


Figure 3. Correlation between Average MyAccountingLab Homework Grades and Average MyAccountingLab Quiz Grades, Online Section, Fall 2014 ($n = 28$)

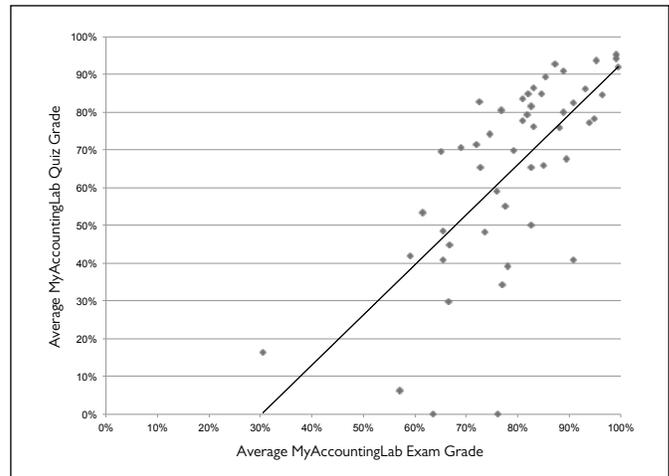


Figure 4. Correlation between Average MyAccountingLab Exam Grades and Average MyAccountingLab Quiz Grades, Lecture Section, Fall 2014 ($n = 50$)

completing exams; it appears that MyAccountingLab homework and quiz scores could be a leading indicator of exam and course success (a more rigorous study might develop and test this concept further). As a best practice, MyAccountingLab quiz scores may help instructors identify early on those students who are struggling and at risk of poor course performance. This analysis includes all students who finished the course with a letter grade and recorded a score for each of four exams.

The Student Experience

In fall 2014, Morgan administered a voluntary student survey. Responses from the students who participated, indicate that the majority of students surveyed recognize the value of using MyAccountingLab.

- 94%** Agree or strongly agree that the learning aids in MyAccountingLab helped them with homework completion and comprehension; 84 percent said that Help Me Solve This was the most helpful learning aid.
- 94%** Agree or strongly agree that the use of MyAccountingLab positively impacted their quiz and exam scores.
- 81%** Agree or strongly agree that they would recommend MyAccountingLab for future use by their instructor.

On the same survey, when asked what they liked best about MyAccountingLab, student answers included the following:

“Super easy to understand with great resources available when I get stuck on a problem. This program eliminates the difficult aspects of online learning.”

“It helped me learn more about the material we learned in class and helped me practice it even more so i can prepare for my exams.”

“I like how after a couple of attempts it gave me the homework solution. This helped me figure out what I was doing wrong, then I had an opportunity to go back and try a similar problem.”

Conclusion

Morgan reports that MyAccountingLab's gradebook offers her insight into the study habits and homework behavior of her online students, including who is keeping up with course work and how much time they are spending in the program. This kind of information enables her to confirm who is spending enough time on the course to be successful. This is particularly important in her online sections, where she has less contact with students. MyAccountingLab's gradebook provides physical evidence of students' efforts and progress and facilitates intervention when necessary. In her lecture sections, the gradebook helps her see what content the class might be struggling with, so she may address it when they next meet.

This user-report case study documents implementation practices and evaluates possible relationships between program implementation and student performance. These findings are not meant to imply causality or generalizability beyond this specific instance. Rather, findings from this study demonstrate associations that are potentially useful for further theory testing in future experimental studies. For this case study, a mixed-methods design was applied, and the data collected included qualitative data from interviews, quantitative program usage analytics, and student performance data. An open-ended interview protocol was used to guide data collection.