Case study examines the impact of MyLab IT Excel practice on MOS exam results and use of MyLab Accounting in Financial Accounting course at University of Idaho

**Key Findings**
- Data show that 63% of students who completed all MyLab IT assignments passed the Microsoft Office Specialist (MOS) Excel certification exam, while just 25% of students who skipped one or more assignments passed.
- 78% of respondents on an end-of-semester survey agreed that the assignments in MyLab IT prepared them for the MOS Excel certification exam.
- Students with higher average MyLab Accounting scores also earned higher average exam scores.

**Study Specifics**

**School name:** University of Idaho, Moscow, ID  
**Course name:** Introduction to Financial Accounting  
**Course format:** Face to face  
**Course materials:** MyLab Accounting for *Horngren's Financial and Managerial Accounting* by Miller-Nobles, Mattison, and Matsumura; MyLab IT for *Skills for Success for Office 2016* by Adkins  
**Timeframe:** Spring 2019  
**Educator:** KD Hatheway-Dial, Senior Instructor  
**Results reported by:** Candace Cooney, Pearson Results Manager

**Setting**
- Locale: large, rural, public, four-year, land-grant, research university near the border of Idaho and Washington  
- Enrollment: more than 12,000 students  
- Freshman retention rate: 82%  
- Six-year graduation rate: 54%  
- Ethnicity: 70% Caucasian, 18% Minority, 12% Other

**About the Course**
Introduction to Financial Accounting is a three-credit service course for business and other majors, enrolling approximately 550–600 students per year. In this course, students learn to:
- Apply the accounting equation to simple transactions;
- Understand debits and credits;
- Prepare and read basic financial statements;
- Understand internal controls;
- Use basic financial statement analysis for decision-making purposes; and
- Explore ethical dilemmas that arise during business decisions.
Challenges and Goals

In Fall 2018, the Accounting Department reached a decision to use MyLab™ Accounting as their digital assignment program. Additionally, Senior Instructor KD Hatheway-Dial saw the need to include Excel proficiency in her introductory course for two main reasons: employers were asking for graduates with Excel skills, and a working knowledge of Excel would help students in their subsequent business courses. To encourage student participation and increase motivation for learning Excel, Hatheway-Dial used MyLab IT for Excel practice and assessment, and offered an incentive for students to sit for the Microsoft Office Specialist (MOS) Excel certification exam as well.

Implementation

MyLab IT is only used during the first five weeks of the course, to prepare students for the Certiport MOS Excel certification exam. Weekly assignments include both the Simulation Trainings and Grader Projects for each of the four Excel chapters. Simulation Trainings provide an authentic learning experience with realistic skill-based guidance and assessment. Learning aids include Read (instructions), Watch (video), and Practice, offering students help when needed. The simulations prepare students for the Grader Projects, which are assessment-oriented and completed live in the Microsoft application. Prior to Spring break, students are required to register for the certification exam; the MOS fee allows for two attempts. Those students who pass the exam have the option to drop the online final exam. On the end-of-semester survey, shared the following:

- 89% of respondents agreed that their understanding of Excel increased as a result of using MyLab IT.
- 87% of respondents agreed that the Simulation Trainings helped them get familiar with and practice Excel skills before attempting the Grader Projects.
- 71% of respondents agreed that the Excel assignments in MyLab IT helped prepare them for the MOS Excel certification exam.

“Every assignment went over specific tasks that were required for the MOS exam, and therefore, prepared me for the exam and the real world.”
—Student, University of Idaho

MyLab Accounting assignments consist of approximately 10 end-of-chapter problems along with a one Excel project per chapter. These problems are live in Excel, not a simulation, so students experience using Excel to solve real-world business challenges while receiving personalized feedback to check their understanding. “Once students graduate, they will use Excel in their work, so it is an important skill to learn,” Hatheway-Dial explains. Students practice statistical skills and gain proficiency with Excel, but Hatheway-Dial is not tasked with manual grading of the assignments. On the student survey, respondents shared the following:

- 78% of respondents agreed that using Excel to answer homework exercises in MyLab allowed them to practice solving accounting problems in a real world environment, similar to what might be expected of them in their future career.
- 97% of respondents agreed that learning Excel basics in this course will help them in subsequent Accounting and other business courses.
- “The [Excel projects] were very helpful and made Excel a lot easier to understand. I am very glad I did this because I am much more efficient in Excel than I was and this will help me throughout college and my career.” —Student
- “I thought that the Excel exercises were super helpful and gave me a larger understanding of the topics being discussed.” —Student
Because her goal in assigning homework is to give students practice, Hatheway-Dial allows for unlimited attempts at completion with flexible due dates. However, students are encouraged to complete homework prior to the associated exam and are incentivized with two bonus points per chapter if an 80% or higher is achieved on the MyLab assignment prior to the due date (typically the date of the exam). She finds that offering a flexible due date teaches students about time management and other important decision-making skills, as well as avoids excuses and requests for extensions throughout the semester. On the end-of-semester survey of her students, 52% of respondents said they always or usually completed MyLab assignments prior to the bonus point due date, while just 27% indicated that they rarely did.

Other course assessments include two 30-question, multiple-choice quizzes accessed online through the school’s LMS, Blackboard Learn. Quizzes are not timed, but students have just one attempt at completion. Two paper-and-pencil midterm exams are administered, consisting of approximately one-third multiple-choice questions and two-thirds problem-based exercises. Students have two hours for completion. The final exam is an online test consisting of both multiple-choice questions and numeric problems.

**Assessments**

- 500 points Exams (2)
- 240 points Excel and other assignments
- 130 points MyLab IT and Microsoft Office Specialist Excel certification exam
- 130 points MyLab Accounting assignments
- 120 points Financial statement analysis project
- 100 points Quizzes (2)
- 80 points Final exam (optional)

**Results and Data**

In Spring 2019, 122 students completed Hathaway-Dial’s Introduction to Financial Accounting course, and 91% (n=111) of her students sat for the MOS Excel certification exam. Overall results are posted in Table 1.

**Microsoft Office Specialist Excel certification exam results**

<table>
<thead>
<tr>
<th></th>
<th>n-count</th>
<th>Percent</th>
</tr>
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<tbody>
<tr>
<td>Passed MOS Exam</td>
<td>(n=61)</td>
<td>55%</td>
</tr>
<tr>
<td>Failed MOS Exam</td>
<td>(n=50)</td>
<td>45%</td>
</tr>
</tbody>
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Table 1. Microsoft Office Specialist Excel Certification Exam Results, Spring 2019 (n=111)

Students who took the MOS Excel certification exam (n=111) were divided into two groups based on their completion of MyLab IT Excel assignments (figure 1).

- 63% (55 out of 87 students) who completed all MyLab IT assignments passed the MOS exam, while just 25% (6 out of 24 students) of students who skipped one or more MyLab IT assignments passed the MOS exam.

Data suggest that if students are not successfully completing MyLab assignments, they may not be aware of potential gaps in their content knowledge until they complete summative assessments like the MOS certification exam.
MOS Excel certification exam pass rate based on MyLab IT assignment completion

Figure 1. MOS Excel Certification Exam Pass Rate Based on MyLab IT Assignment Completion, Spring 2019 (n=111)

In figure 2, average accounting exam letter grades are associated with average MyLab Accounting scores:

- Students earning higher average MyLab assignment scores also earned higher average exam letter grades, indicating that successful completion of MyLab assignments may be indicative of exam success.

MyLab Accounting assignment score and average exam grades

Figure 2. Average MyLab Accounting Assignment Score and Average Exam Letter Grades, Spring 2019 (n=122)

The Student Experience

Responses from the end-of-semester survey of Hatheway-Dial’s students indicate that the majority of responding students recognize the value of MyLab Accounting and MyLab IT:
● 80% of respondents agreed that their understanding of the course material increased as a result of using MyLab.
● 75% of respondents agreed that MyLab provided additional study resources that helped them learn more than they would have from traditional pencil-and-paper homework.
● 74% of respondents agreed that MyLab homework assignments positively impacted their quiz and exam scores.
● 89% of respondents agreed that their understanding of Excel increased as a result of using MyLab IT.
● 71% of respondents agreed that the Excel assignments in MyLab IT helped prepare them for the MOS Excel certification exam.

Student responses to the question “What were the benefits of MyLab?” include:

● “MyLab IT showed me more capabilities in Excel that I was able to use at work.”
● “MyLab Accounting furthered my knowledge in accounting and hopefully got me ready for the next class.”
● “The homework problems in MyLab Accounting definitely helped increase my understanding for the tests.”
● “MyLab IT was a great learning aid in helping me study for the MOS certification.”
● “I learned how to use the most useful functions of Excel and I can now navigate my way through the application.”
● “These two programs helped me with my overall understanding of accounting and gave me lots of help that I would not have received without them.”

Conclusion

In Hatheway-Dial’s Introduction to Financial Accounting class, homework is formative, and students have the opportunity to try, review, and try again, learning from their mistakes and practicing concepts until they are confident. The immediate feedback in MyLab offers her students something that paper-and-pencil homework cannot, helping them quickly identify areas of strength and weakness, leading to more focused practice opportunities. In addition, the use of MyLab IT to develop and improve Excel proficiency was very successful, with 55% of her students passing the MOS Excel certification exam. Students acknowledged that the addition of Excel in this course will help them both academically and professionally. As a student stated in the end-of-semester survey: “I am very glad I did this because I am much more efficient in Excel than I was and this will help me throughout college and my career.”