

MyLab Accounting educator study examines student performance at University of St. Thomas

Key Findings

- Students completing most MyLab assignments earned exam scores 14 percentage points higher than students who skipped more than one assignment.
- 71% of students scoring above average on MyLab assignments earned an A or B for their final course grade, while just 11% of students scoring below average earned an A or B.
- 86% of respondents on an end-of-semester survey agreed that MyLab Accounting provided additional resources that helped them learn more than they would have from traditional pencil-and-paper homework.

Study Specifics

School: University of St. Thomas, St. Paul, MN
Course name: Introduction to Financial Accounting
Course format: Face to face
Course materials: MyLab Accounting for *Financial Accounting* by Harrison, Horngren, and Thomas

Timeframe: Spring 2018
Educator: Lawrence Chui, Associate Professor
Results reported by: Candace Cooney, Pearson Customer Outcomes Analytics Manager

Setting

- Locale: comprehensive, urban, Catholic university located just east of the Mississippi River in southeastern Minnesota
- Enrollment: approximately 10,000 students, more than 6,000 undergraduate
- Freshman retention rate: 88%
- Six-year graduation rate: 77%
- Students of color: 15% undergraduate; 22% graduate

About the Course

Lawrence Chui has been teaching for 17 years and has been at University of St. Thomas since 2010. Introduction to Financial Accounting is a one-semester, four-credit, entry-level course required of all business majors, enrolling approximately 600 students per year. The course introduces students to: the financial accounting cycle, the four primary financial statements for US corporations, basic accounting, valuation, financial statement analysis, and disclosure requirements for assets, liabilities, equities, revenues, and expenses.

Challenges and Goals

Having used another digital homework program in the past, Chui was again looking to hold his students accountable for their own learning outside of the classroom. He is a firm believer that homework completion and repetitive practice is important for students to gain a solid grasp of course concepts. Approximately six years ago, Chui adopted MyLab™ Accounting for his Financial Accounting classes. Online homework with support and feedback in MyLab offered Chui's students the ability to practice as much as they needed and immediately see what they understood and where they needed further preparation. Additionally, auto-graded homework in MyLab offered Chui the option to assign more practice opportunities to help students improve their understanding and exam scores.

Conscious of the fact that course materials can be expensive, Chui offers his students options. Students can purchase a value-priced package of the MyLab code and a loose-leaf text or can also purchase just the MyLab code with eText. On an end-of-semester survey of Chui's students (88% response rate), 58% of respondents purchased the code and loose-leaf text package, while 26% of respondents purchased the MyLab code with eText. Generally, students are satisfied when purchasing course materials that have both relevance and impact, a statement supported by this same survey where 88% of respondents agreed that the resources in MyLab made the program a good value for this course.

Implementation

Students use MyLab for understanding course content and homework assignments. Chui estimates that students will spend about 1–2 hours per week on MyLab assignments, more if they use the eText for reading, which many do. On the end-of-semester survey, 44% indicated they spent 1–2 hours, 30% spent 2–3 hours, and 26% spent more than three hours each week working in the program.

Chui views the MyLab assignments as formative — an opportunity for students to experiment and learn. Students have unlimited attempts at completion with firm due dates, and Chui expects students to earn high scores. MyLab assignments are completed weekly (13 total), but the lowest three scores are dropped, giving students some flexibility if issues arise. Each assignment is comprised of four or five multi-part, algorithmic, end-of-chapter problems along with some multiple-choice questions. Learning aids — just-in-time tutorials and student support — are turned on during homework assignments. On the end-of-semester survey, 56% of respondents said they always used learning aids when unable to start or complete a problem, and an additional 26% of respondents said they usually used the learning aids. Many students commented on the advantages of the learning aids on the student survey:

- *"To learn and really understand what's going on, I need to know why something is happening. To help with that, the ability to see step by step problem solving [learning aids] with explanations is really helpful."*
- *"Help Me Solve This feature was very helpful for when things got difficult."*
- *"I liked the homework better than doing it out of the textbook because the Help Me Solve This helped me work through the steps of the problems so that I better understood them."*

Using the reporting dashboard in the MyLab gradebook, Chui reviews student performance on homework at the class level to identify areas students found challenging and intervenes before moving on to new material.

Chui assigns three paper-and-pencil term exams covering three to four chapters each, along with a comprehensive final exam. Exams are comprised of multiple-choice, matching, and multi-part problems. Students have one full class period for completion. Exams are closed book/closed notes and no make-ups are allowed, except for documented medical reasons.

Students also complete an online Accounting Cycle project through [Solid Footing](#) and an annual report financial statement analysis project through [Red Company](#).

Assessments

- 69% Exams (4)
- 12% MyLab homework assignments
- 8% Solid Footing Accounting Cycle project
- 8% Red Company annual report project
- 3% Participation/attendance/essay

Results and Data

Grouping students based on completion of MyLab homework assignments identifies that students completing most MyLab assignments earned average exam scores more than one full letter grade, or 14 percentage points, higher than students who skipped more than one assignment (figure 1). For students, completion of the formative MyLab problem sets are intended to help them identify where they are in terms of successfully completing the summative course exams. Empirically, Chui agrees that the MyLab homework should have a positive impact on exam scores, as practice is a cornerstone for successfully completing his course.

MyLab assignment completion and average exam scores

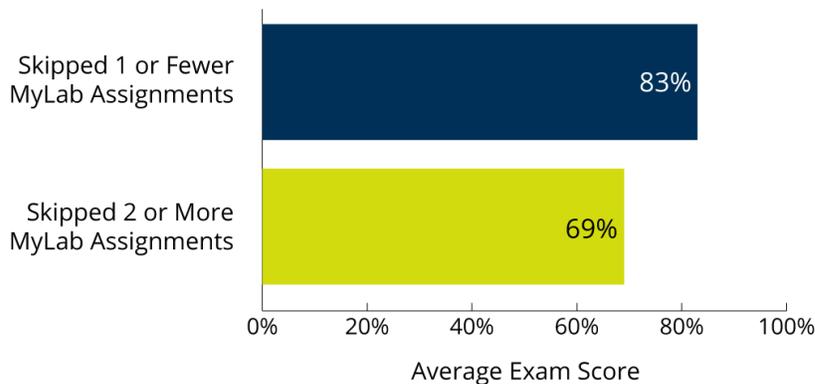


Figure 1. MyLab Homework Completion and Average Exam Scores, Spring 2018 ($n=49$)

Similarly, the average MyLab assignment score is used to examine final course grades (figure 2):

- 33% of students scoring above average on MyLab assignments earned an A as their final course grade, while no students scoring below average on MyLab earned an A.
- 95% of students scoring above average on MyLab assignments showed mastery of course content by earning an A, B, or C as their final grade, yet only 33% of students scoring below average on MyLab showed mastery.
- No student scoring above average on MyLab assignments failed the course, while 33% of students scoring below average on MyLab earned an F as their final course grade.

Final course grades based on MyLab assignment score

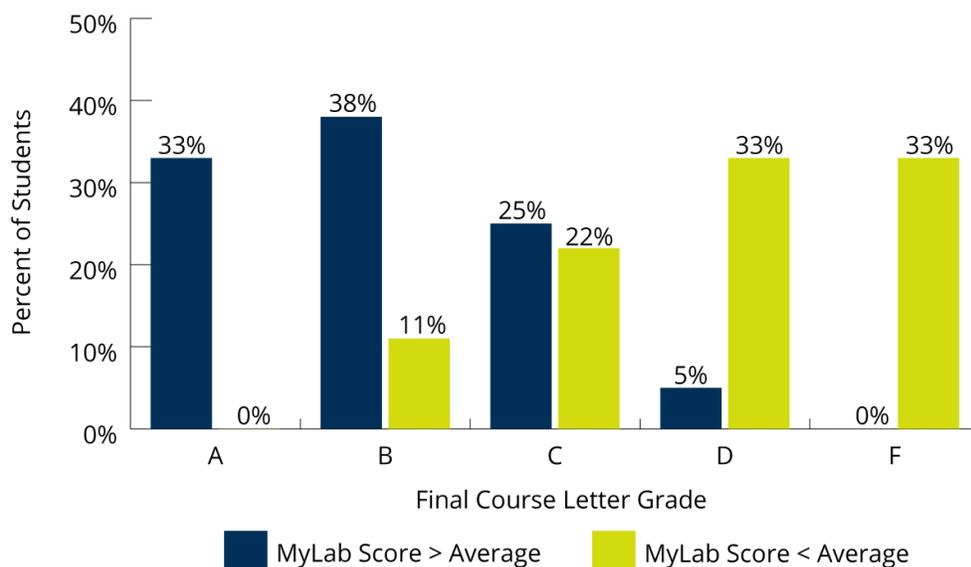


Figure 2. Final Course Letter Grades Based on MyLab Assignment Score, Spring 2018 ($n=49$)

The Student Experience

Responses from the voluntary, Spring 2018, end-of-semester survey of Chui's students indicate that the majority of responding students recognize the value of MyLab Accounting.

- 95% of respondents agreed that their understanding of the course material increased as a result of using MyLab.
- 91% of respondents agreed that they would recommend MyLab to another student.
- 88% of respondents agreed that the study and help resources in MyLab were a good value for this course.
- 86% of respondents agreed that use of MyLab provided additional resources that helped them learn more than they would have from traditional paper-and-pencil homework.
- 86% of respondents agreed that use of MyLab positively impacted their exam scores.

Student responses to the question, "What were the benefits of MyLab?" include:

- *"I liked that I got to see when I got the answer wrong or right. That way I knew if I had mastered that part or if I needed to work on it more."*
- *"It gave me more practice problems to try out as well as giving me a walk-through of similar problems which helped me understand it better."*
- *"I liked the homework better than doing it out of the textbook because the Help Me Solve This helped me work through the steps of the problems so that I better understood them."*
- *"There were many ways to help learn and comprehend the material (ebook, Help Me Solve This, Practice Problems)."*
- *"I learned a lot from completing the homework as well as I learned a lot from the practice tests, section quizzes and the MC practice tests."*

Conclusion

Highlighting one of Chui's primary goals in assigning MyLab homework, a student on the end-of-semester survey said, "The feature saying whether my answer was right or wrong helped me greatly! Seeing this allowed me to correct my mistakes on homework assignments rather than the exams." Since homework is formative, students have the opportunity to try, review, and try again, learning from mistakes and practicing concepts until they are confident. The immediate feedback in MyLab offers Chui's students something paper-and-pencil homework cannot, helping them quickly identify areas of both strength and weakness, leading to more focused practice opportunities.

From his instructor perspective, Chui indicates that the MyLab course is easy to set up and manage, particularly once it has been created. The gradebook functionality that alerts him to struggling students and challenging assignments makes MyLab a worthwhile endeavor.