

MyLab Intermediate Accounting educator study examines exam scores at University of Tampa

<p>School Name University of Tampa, Tampa, FL</p> <p>Course name Intermediate Accounting</p> <p>Course format Face to face</p> <p>Course materials MyLab Accounting with <i>Intermediate Accounting</i> by Gordon, Raedy and Sannella</p>	<p>Timeframe Spring 2017</p> <p>Submitted by Mary Keener, Associate Professor</p> <p>Results reported by Candace Cooney, Customer Outcomes Analytics Manager</p>
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Key Findings

Average exam, final exam, and final course scores improved after implementation of MyLab Accounting.

Students earning MyLab homework scores above the median earned higher average in-class assignment, exam, and final course grades than students who scored below the median on MyLab homework scores.

More than half of the students in the study utilized the optional Dynamic Study Modules to help them identify chapter material that was challenging or to review for exams.

Setting

- Locale: mid-sized, urban, private, four-year university located near downtown Tampa
- Enrollment: more than 8,000 students
- Four-year graduation rate: 47 percent
- Financial aid: 92 percent of students receive aid
- Faculty-student ratio: 17:1
- Average class size: 21 students
- Gender: 58 percent female
- Diversity: 40 percent total

About the Course

Mary Keener has been teaching Accounting for approximately, including the last eight years at the University of Tampa. Intermediate Accounting is a 400-level, four-credit course and is the first semester of a two-semester sequence. Required of junior and senior accounting majors, Intermediate Accounting expands the student's study of generally-accepted accounting principles covering the following topics: theory and methodology involved in accounting for investments, current liabilities, long-term debt, leases, deferred income taxes, pensions, stockholders' equity, earnings per share, and accounting changes, as well as the preparation of cash flows and differences between US GAAP and IFRS.

Upon completion of the course, students should be able to:

- Explain the concepts underlying the accounting for investments in debt and equity securities and properly account for those investments;
- Apply the concepts underlying the recognition and disclosure of contingent liabilities and properly account for current liabilities;
- Describe accounting and disclosure requirements for long-term liabilities and properly account for such liabilities including long-term bonds and long-term notes payable; and
- Use FASB Accounting Standards Codification to research and apply accounting treatments related to course topics.

Challenges and Goals

Keener changed her course textbook for Spring 2016 and this created an opportunity to implement online homework that would keep her students accountable for their own learning outside the classroom. Intermediate Accounting is a very challenging course, covering a significant amount of material in a short period of time; students cannot afford to fall behind. Homework completion and repetitive practice is important for success. A sound grasp of the accounting concepts and standards covered in the course are essential for understanding financial statements issued by corporations, and much of the content is tested on the Certified Public Accountant exam. Online homework with support and feedback offered Keener's students the ability to practice as much as they needed to while immediately seeing what they understand and where the need further preparation. Keener adopted MyLab™ Accounting for her Spring 2016 classes.

Implementation

MyLab Accounting is required; the program is used primarily by students working at home on a personal computer. Students use MyLab for understanding content, homework assignments, and additional practice. Keener's goals for assigning work in MyLab are to introduce new concepts, provide homework and practice opportunities, and to help students assess their own understanding of the course material and track their progress. She anticipates that students will spend approximately three hours per week working in MyLab. On an end-of-semester, voluntary, Spring

2016 survey (97 percent response rate), 43 percent of students said they spent 2--3 hours per week working in MyLab and 18 percent of students said they spent more than 3 hours each week working in the program.

Lecture

Keener uses the PowerPoint slides that accompany the textbook as an outline for lecture. She makes them interactive by removing the journal entries and leaving blank lines and spaces to fill in as she progresses through the lecture. The slides also incorporate multi-part problems that simulate what students can expect to complete as part of MyLab homework assignments. Students help fill in the blanks so that problem-solving takes place as Keener teaches. Before beginning a new topic in lecture, Keener uses the MyLab gradebook to help her identify concepts and problems students struggled on in homework. These topics and exercises are addressed at the beginning of class before covering new material. Additionally, Keener gives an open-notes quiz once a week after the MyLab homework assignment is due. Students may work individually or in small groups, and the quiz is intended to simulate for students what they can expect on the exam.

MyLab Accounting Problem Sets

Keener creates her MyLab homework assignments using end-of-chapter problems. There is one assignment per week with a firm due date, comprised of five multi-part, algorithmic questions so all students have the same exercises but with different numbers. Students have three attempts at completion and learning aids (Help Me Solve This, Ask My Instructor, etc.) are turned on. On the student survey, 96 percent of students indicated that they always or usually utilized the learning aids when unable to start or complete a homework problem. Many student survey comments acknowledge how beneficial 'Help Me Solve This' is: *"Help Me Solve This' is a great tool that gives an in-depth analysis and explanation of the material"* and *"Help Me Solve This' helped me on my assignments when I was confused or stuck."*

Keener encourages her students to use the optional study aids in MyLab including the [Dynamic Study Modules](#) (DSM) as preparation for class or review before exams. Although voluntary, students on the end-of-semester survey found the DSM very helpful:

- 54 percent of students used the Dynamic Study Modules on their own for practice or to help identify chapter material they were struggling with.

Students shared the following comments about the DSM on the fall survey:

- *"[The DSM] helped me solidify my understanding of certain topics before moving on to others."*
- *"The DSM helped me determine what areas of the material I was weakest on and thus needed to review more."*
- *"They [DSM] were great in piecing together the steps for certain questions as they went a little more in detail than 'Help Me Solve This'."*

Keener assigns three paper-and-pencil exams comprised of two parts: 28 multiple-choice questions worth two points each and several exercises that include calculation and journal entries. Exam questions are relatively similar to MyLab homework exercises in format and difficulty. Students

complete the exam over two days, taking one part of the exam each day, and they have 70 minutes for completion. Make-up exams are not given without a valid university excuse.

Assessments

60%	Exams (two mid-terms and a final)
10%	MyLab homework
10%	Writing assignments
6%	In-class exercises
6%	Codification assignment
4%	IFRS case
4%	Participation

Results and Data

Students were divided into two groups based on the median MyLab homework score. Students who earned MyLab homework scores above or equal to the median also earned higher in-class assignment, exam, and final course scores than students who scored below the median on MyLab homework (figure 1).

- Students scoring above the median on MyLab homework earned average in-class assignment scores 14 percentage points higher than students who scored below the median.
- Students scoring above the median on MyLab homework earned average exam scores 13 percentage points higher than students who scored below the median.
- Students scoring above the median on MyLab homework earned average final course scores 12 percentage points higher than students who scored below the median.
- 46 percent of students scored above the median MyLab homework score.

Relationship between MyLab homework score and assignment, exam, and final course score

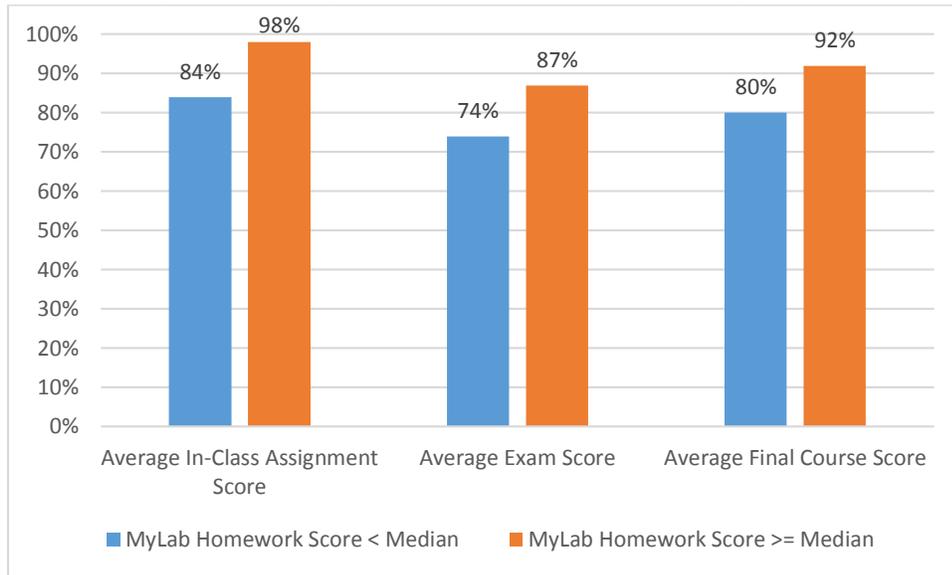


Figure 1. Relationship between MyLab Homework Score and Average In-Class Assignment, Exam, and Final Course Scores, Fall 2016 ($n=28$)

After incorporating MyLab assignments in Fall 2016, data indicate that average exam, average final exam, and average final course scores increased over Fall 2015 scores.

- Average exam scores (average score of two mid-terms) increased one percentage point.
- Average final exam scores increased eight percentage points.
- Average final course scores increased four percentage points.

Average exam, final exam, and final course scores before and after implementation of MyLab Accounting

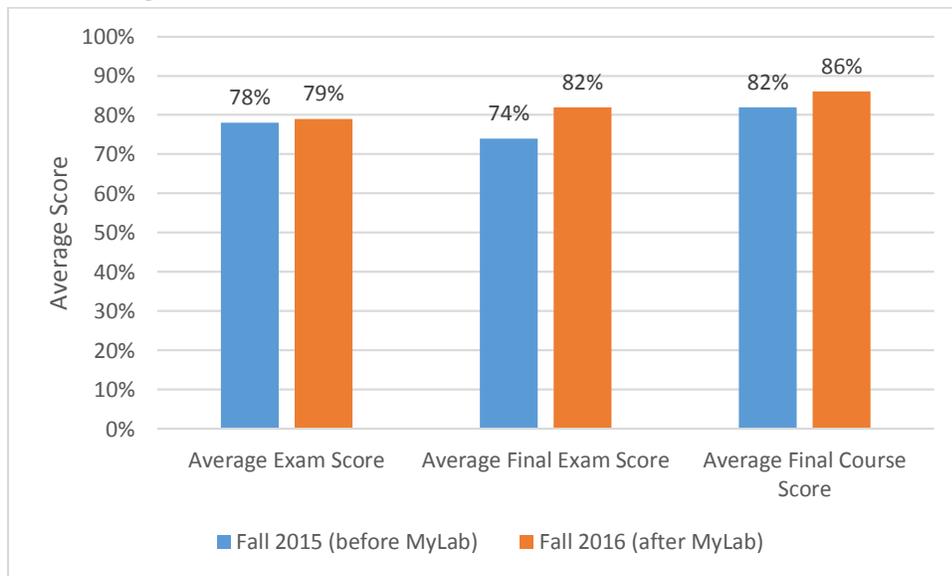


Figure 2. Average Exam, Final Exam, and Final Course Score Before and After Implementation of MyLab, Fall 2015 ($n=62$) and 2016 ($n=28$)

The Student Experience

Responses from the Fall 2016 end-of-semester, voluntary survey of Keener's students indicate that the majority of responding students recognize the value of MyLab Accounting.

- 89 percent of students strongly agree or agree that their understanding of the course material increased as a result of using MyLab.
- 82 percent of students strongly agree or agree that MyLab provided additional resources that helped them learn more than they would have from traditional pencil-and-paper homework.
- 79 percent of students strongly agree or agree that the use of MyLab positively impacted their exam scores.
- 89 percent of students strongly agree or agree that they would recommend MyLab to another student.

Student survey responses to the question, "What did you like most about MyLab Accounting?" include:

- *"[I liked] the Help Me Solve This because it helped me figure out what I did wrong on problems that I did not fully understand how to complete."*
- *"The help [learning] aids and practice study questions really broke down the problems from every angle and gave me a way to understand rather than just memorize."*
- *"MyLab has alternative ways of doing problems other than what my professor has shown, and I like that you can try a problem multiple times until you master it."*

Conclusion

Providing practice opportunities outside the classroom was Keener's main goal in adopting MyLab Accounting. The hints and feedback enabled her students to work through problems while helping them identify the chapter material where they needed more practice. Unlike paper-and-pencil homework, MyLab gives students immediate feedback important to their progress. As a student on the survey said, *"MyLab gave me immediate response to [homework] questions. I knew if I was doing things right or wrong."* Empirically, Keener sees a positive impact after assigning MyLab, especially compared to previous years when students were not required to complete homework. Students have more options for practice with challenging course content, and the specific feedback and hints provide an additional layer of support.

Keener advises, however, that students may lean too heavily on the learning aids in MyLab, like 'Help Me Solve This', leading to inflated homework scores. However, assigning an in-class quiz that simulates exam problems helps both instructor and students identify potential areas of confusion prior to summative assessments.