MyITLab

School Name	University of Hawai'i, Maui College, Kahului, HI
Course Name	Digital Tools for the Information World
Course Format	Flipped, lab-based lecture

Key Results   Data show a very strong positive correlation between MyITLab assignment scores and average exam scores, indicating that students who successfully complete MyITLab assignments perform better in the course. In addition, students who complete all or most MyITLab assignments earn higher average exam and final course grades than do students who more routinely skip assignments.

Submitted by
Laureen Kodani, Lecturer

Course materials
MyITLab and *Exploring MS Office 2013,* Vol. 1, Grauer, et al.

Setting

University of Hawai'i Maui College, one of ten branches of the University of Hawai'i system, is a public commuter college in small-town Kahului, on the island of Maui. Primarily a degree-granting, two-year school, the college also offers three four-year degree programs in business, engineering, and science. It enrolls approximately 4,000 students a year: 80 percent are non-Caucasian (including 32 percent Hawaiian, as well as Filipino and Asian), 61 percent are female, and the mean age is 28.[1]

Digital Tools for the Information World is a one-semester, three-credit course enrolling approximately 200 computer science students per semester. Upon successful completion of the course, students will be able to produce professional-quality documents in a variety of formats, using formulas and functions, and create electronic slides and Web pages; use operating system interfaces to effectively manage computer resources; find and discern Internet research; and describe the ethical issues related to computer technology.

Challenges and Goals

After teaching Digital Tools for a semester, Lecturer Laureen Kodani's department adopted MyITLab to promote increased student participation and help students master the Web tools they'll encounter in the real world. She spent the summer learning the tool and working through most of the grader projects and simulations, and she and the rest of the department's faculty and lecturers implemented MyITLab in fall 2013.

Implementation

Before students start working, they are required to take a syllabus quiz to ensure they are aware of the workload, time commitment, and priorities of the course. They must also read the MyITLab Student Guide and pass a quiz on it before beginning any course assignments. Because this is an entry-level course, Kodani sees her role as both an instructor and as a guide to healthy study habits and disciplined time and organization skills. Her standardization of assignments and due dates creates a routine and removes guesswork, so students can focus on learning. Kodani expects students to commit to at least two hours outside of class for every hour in class and a minimum of six hours per week on reading, MyITLab assignments, and other projects.

Class is held in a computer lab setting. Before each class, students are required to:

- Read assigned pages in the textbook

- Watch a module video

- View a PowerPoint presentation

- Complete a Skill-Based Training

- Complete Key Terms Matching and multiple-choice questions at the end of the textbook chapter (10 questions)

None of this work is graded, but Kodani uses this multimodal approach so students have a variety of learning options and can focus on what works best for them to master the material. The MyITLab gradebook does capture this work, however, so Kodani can identify students who may be at risk before taking the application exam.

Lab time (lecture) is spent on Skill Based Trainings—hands-on assignments in MyITLab. Kodani uses this time to walk around the lab and work individually with students. She reports that it is obvious when students have not done their prep work, as they struggle to keep up and may not be able to complete the

[1] https://www.hawaii.edu/campuses/maui.html

Data show that those students who completed the extra-credit assignment [MyITLab Grader Project] earned higher average exam scores than those who did not.

assignment. More-prepared students, on the other hand, jump right into the day's assignment and get ahead.

Homework assignments are MyITLab Grader Projects. Students are allowed seven attempts at completion and must score at least 70 percent to receive credit for the assignment. Kodani believes interaction with fellow students is an integral part of the learning process. As such, she encourages students to form study groups and work with others on exercises, but they must personally create all keystrokes and mouse actions to complete the assignments. Homework has firm due dates/times; late assignments are not accepted except under unusual circumstances.

Before exams, Kodani creates a study guide that list the skills necessary for exam success and then reviews those same skills in lab sessions. Exams take the form of a MyITLab Grader Project and remain open for 24 hours. Students are given the option for extra credit (up to 10 points added to their exam score) by completing a Grader Project as part of their exam preparation. An average of 68 percent of students completed the Grader Projects for all four exams and received the extra credit. Data show that those students who completed the extra-credit assignment earned higher average exam scores than those who did not.

The final project is an Introduction to Web Page Design. Students work in groups and present their work to the class during the final week of the semester.

To further promote student success, Kodani completes all homework assignments herself, so she can see beforehand what challenges her students might encounter. She takes notes as she works through the Grader Projects and addresses any potential stumbling blocks in lecture. She reports that this helps her create more-guided lectures and limit lecture time so that students have more time for hands-on work in the applications on the Grader Project assignments.

Assessments

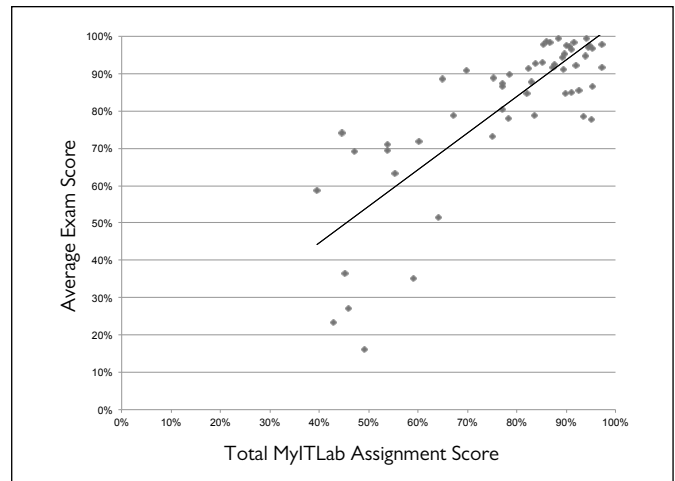|	
40 percent	Exams (four)
40 percent	MyITLab assignments (18)
20 percent	Final project

Figure 1. Correlation Between Average MyITLab Homework Scores and Average Exam Scores, Fall 2014 (*n* = 76)

Results and Data

Figure 1 shows the correlation between total MyITLab scores and average exam scores (including only students who attempted all four exams), where $r = .84$ and $p < .001$, indicating a very strong positive relationship between the two variables. For students, MyITLab scores help them identify where they stand in terms of exam preparation. For instructors, MyITLab scores may help identify students who are struggling and at risk of poor course performance.

Figure 2 shows the final course letter grade distribution per average total MyITLab score. As expected, students who earned higher MyITLab scores overall also earned higher final course grades. Data show that students who put the effort into their MyITLab work are generally rewarded with higher exam scores and final course grades.

- Students who earned a final course grade of A scored an average of 94 percent on their MyITLab assignments.

- Students who earned final course letter grades of D or F scored an average of 50 percent on their MyITLab assignments.

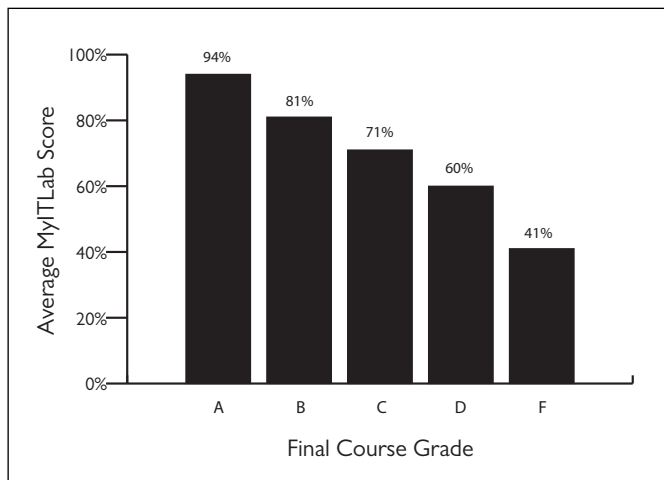In addition, MyITLab homework completion rates were assessed to determine if a relationship exists between

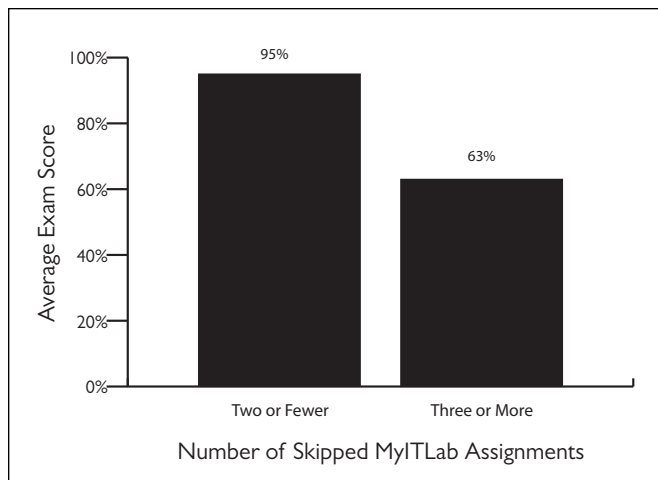Figure 2. Comparison of Average Total MyITLab Grades and Final Course Letter Grades, Fall 2014 (*n* = 79)

Figure 3. Relationship Between MyITLab Homework Completion and Average Exam Scores, Fall 2014 (*n* = 76)

completion and average exam scores (Figure 3). Results show that students who completed most assignments scored considerably higher on both exams and course grades. This analysis included only students who attempted all four exams.

- Students who skipped two or fewer assignments had average exam grades 50 percent higher than those of students who skipped three or more assignments.

2.3 Average number of skipped MyITLab assignments

54% Percentage of students who completed all assignments

97% Average exam grade for students who completed all assignments

2 Average number of assignments skipped

The Student Experience

Responses from a fall 2014 student survey indicate that the majority of students surveyed recognize the value of MyITLab.

96% Agreed or strongly agreed that their understanding of the course material increased as a result of using MyITLab.

88% Agreed or strongly agreed that use of MyITLab positively impacted their exam scores.

84% Agreed or strongly agreed that MyITLab provided additional resources that helped them learn more than they would have from traditional pencil-and-paper homework.

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

"Everything!"

"What I liked best about MyITLab was that when I got stuck, I could get help right then and there instead of being stuck."

"All of it. From the eText to the student examples. I realy liked that the exams were graded instantly and that I could go back to further better my scores."

"What I liked best was the wide variety of ways to find help. If I did not understand, I could go to the textbook or have a virtual teaching of the exercise with Help Me Solve This."

Conclusion

Kodani reports that MyITLab has empowered her students and made them more willing to voice their fears. She observes that because MyITLab is there to help them in exactly the moment they need assistance—whether in class or at home alone, they exhibit more and more self-confidence as they work through the assignments throughout the semester. Student survey comments back her up. "[MyITLab] helps me understand more of the class," said one survey participant. Another concurred, "MyITlab helps me… know what I got wrong."