

MyITLab

School Name Georgia Regents University, Augusta, GA
Course Name Microcomputer Applications
Course Format Online

Key Results Data indicate strong positive correlations between MyITLab Training assignments and MyITLab Grader Projects and between MyITLab Grader Projects and average exam grades, showing a building relationship of success among consecutive course components. In addition, students who earn higher Grader Project scores in this implementation earn higher exam and final course grades.

Submitted by
Buffie Schmidt, Lecturer

Course materials
MyITLab; *GO! With Office 2013*, Volume I, Gaskin, Vargas, and McLellan; and *Tech in Action*, Evans, Martin, and Poatsy

Setting

Georgia Regents University, one of four public research universities in Georgia, serves approximately 8,500 students across four local campuses. The average age of the school's full-time students is 23 years old, 49 percent are minorities (20 percent are African American), and 63 percent receive need-based financial aid.

Microcomputer Applications is a one-semester, three-credit course that enrolls approximately 700 students per year; it is an area F requirement for University System of Georgia schools and is required by students in 7–10 majors. The course is a hands-on introduction to microcomputer applications that support business functions: word processing, spreadsheets, and graphics. Course learning objectives include understanding the use of operating systems, electronic communication, basic computing concepts, and social networking.

Challenges and Goals

Buffie Schmidt, lecturer, first piloted MyITLab in 2013 as part of a course redesign aimed at increasing success rates. She chose MyITLab primarily for its simulation feature; it was important that her online students be able to work within the framework of a computer application while learning it. This type of hands-on experience with applications provides the richer learning environment necessary for distance education students. Having successfully used MyEconLab in previous classes, Schmidt was confident that she could replicate her success using MyITLab.

Implementation

Within the first five days of the semester (before attempting any work in MyITLab), students review an online Orientation document created by Schmidt to acclimate them to online resources, course policies, and other course material, including MyITLab. Students must then pass an Orientation quiz with a score of at least 90 percent to gain access to course content. This grade is not calculated into the final course grade. Pearson has identified this type of activity as a MyLab best practice—providing detailed instructions about the program, registration process, and general tools of working within the program sets students up for a positive and confident experience from the initial launch.

To ensure that students are familiar with the Windows environment and software they'll be using for the next three modules, students complete an Office Basics quiz immediately following the Orientation quiz. The quiz includes 16 questions, has a 30-minute time limit, and students are allowed two attempts.

Schmidt's course is divided into four modules: Word, Excel, PowerPoint, and Concepts. Each module has weekly required due dates based on the chapter content covered, either Tuesdays or Thursdays at 5 pm. Resource items are ungraded, but are available to students for review prior to homework and to assist students with various learning styles. They include videos, chapter PowerPoints, interactive video tutorials, and Skill Based Trainings.

Although Skill Training Simulations are optional, Schmidt strongly encourages students to complete them before the Skill Exam. Because frequent practice is critical to learning, she employs no time limit for Skill Trainings and students are allowed unlimited attempts.

Required graded assessments for the software modules are completed in the following order:

1. **Skill Based Training Exam.** Similar to optional Skill Training Simulations, one per chapter, students have 75 minutes for

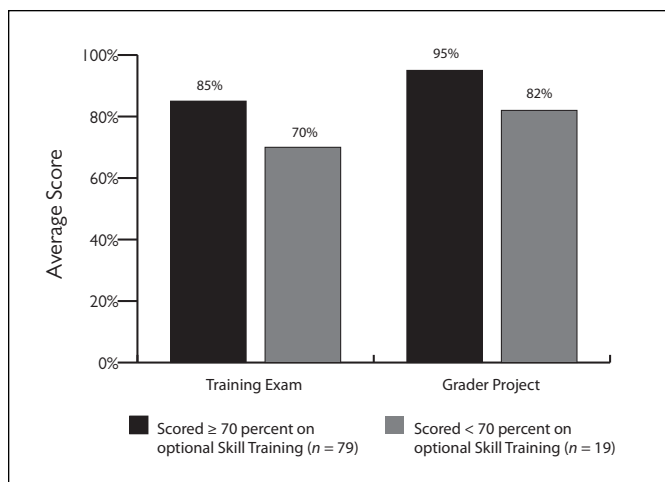


Figure 1. Average Training Exam and Grader Project Scores per Optional Skill Based Training Simulation Score, Fall 2014 (n = 98)

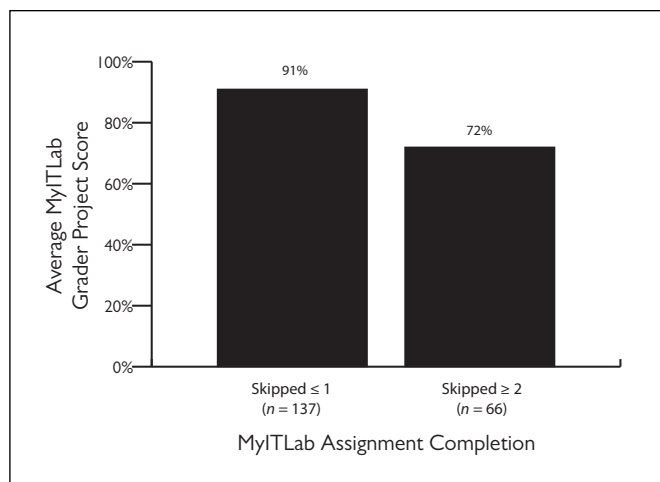


Figure 2. Relationship between the number of completed assignments and Average MyITLab Grader Project Score, Fall 2014 (n = 203)

completion and are allowed three attempts. The highest score is recorded.

- Grader Project.** One per chapter, there is no time limit, and students are allowed two attempts. Students download and complete their own files or receive a zero (0) for the assignment; the MyITLab Integrity Violations report determines that students are doing their own work.
- Capstone Grader Project.** A comprehensive Grader Project, one per module/application, there is no time limit, and students are allowed two attempts. The highest score is recorded for a grade.

The Concepts module of the course covers hardware, software, the Internet, email, and ethics. MyITLab resources, including videos, simulations, multimedia lessons, and games are available for review prior to completion of chapter Check Your Understanding quizzes. Each chapter includes two quizzes of seven or eight questions each. Students have 15 minutes and are allowed two attempts; the highest score is recorded.

Assessments

60 percent	MyITLab Grader Projects
16 percent	MyITLab Grader Project Capstones
14 percent	Skill Training exams
8 percent	MyITLab Check Your Understanding quizzes (Concepts)
2 percent	Office Basics quiz

Results and Data

Figure 1 shows the scores on the first Grader Project due for Word, Chapter 1, only. Schmidt encourages her students to complete optional Skill Based Training Simulations before taking the Training Simulation Exam or starting the chapter Grader Project. Fifty-seven percent of students skipped the simulation and jumped right to the Grader Project assessment (n = 105).

- Students who completed the optional Skill Training Simulation with a score greater than 70 percent scored an average of 21 percent higher on the Skill Training Exam than did students who scored less than 70 percent on the simulation.
- Students who completed the optional Skill Training Simulation with a score greater than 70 percent scored an average of 16 percent higher on the Grader Project than did students who scored less than 70 percent on the simulation.

Schmidt shared the data in Figure 1 with her students after they had completed the first Grader Project. By the end of the semester, the percentage of students who completed the Skill Training Simulation for each chapter prior to attempting the Grader Project increased from an average of 43 percent to 70 percent.

Students were grouped according to MyITLab homework completion rates (the number of MyITLab assignments that were skipped). Grader Project scores were an average of 26 percent (two letter grades) higher for those students who completed most MyITLab assignments (skipped 1 or fewer). This analysis included only students who completed at least one Grader Project (Figure 2).

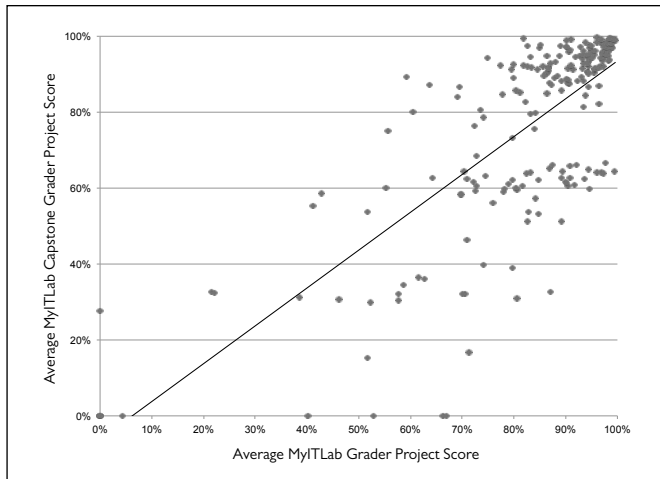


Figure 3. Correlation between Average MyITLab Grader Project Scores and Average MyITLab Grader Project Capstone Scores, Fall 2014 ($n = 221$)

1.4 Average number of skipped assignments

46% Percentage of students who completed all assignments ($n = 93$)

33% Percentage of students who skipped more than one assignment

Correlations do not imply causation but instead measure the strength of a relationship between two variables. P value measures the statistical significance/strength of this evidence (the correlation); p value $< .01$ is considered strong evidence. An evaluation of student performance on average Grader Project scores and average Capstone Grader Projects identifies a very strong positive correlation, where $r = .74$, $p < .001$ (Figure 3), indicating a positive relationship between success on the Grader Projects and the Capstone Graders. Similarly, there is a very strong positive correlation ($r = .87$) between average Skill Training Exam scores and average Grader Project scores. Students can self-identify if they are at risk of failure based on their MyITLab scores and create interventions with their instructors. This analysis included all students who completed the course for a grade.

The Student Experience

Responses from a voluntary fall 2014 student survey indicate that students make the connection between use of MyITLab and increased learning gains.

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

88% Agree or strongly agree that the use of MyITLab positively impacted their quiz and exam scores.

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

“The different learning resources that were available for each chapter section. I had the option to take a more in depth resource when the material became complicated.”

“Being able to do the assignments anytime—at my convenience as long as it was before the due date. Going to both work and school full time can be stressful, so this was very helpful.”

“I really like the hands-on activities that came with the course, along with the videos. They really helped me understand the material and how to use the software.”

“It was simple to use. I am now using the things I learned in MyITLab in real world presentations to stand out.”

Conclusion

Schmidt believes that students gain the most from a course when its material relates to real life and that in order for a course to be a life-impacting experience, it cannot simply be a series of tests in which students recount memorized material. To that end, Schmidt’s class comprises a range of participatory learning activities that promote valuable, retainable learning: interaction, discussion, raising questions, and engaging the instructor and other students in lively debate and discourse. MyITLab supports her vision by offering live simulation activity in each application and by driving students to become more active participants in their learning. MyITLab offers multiple ways for students to learn and engage with course content. Student comments on the fall 2014 survey reflect their appreciation of the program’s ability to help them in their unique styles. “MyLab provided many different resources for help when I needed it,” responded one student. “I could choose what resource was best for me to help with my problems.”

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.