St. Petersburg College, Seminole Campus, Seminole, FL

**Course Name**
Computer Applications

**Course Format**
Online, eText

Submitted by
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**Course materials**
MyITLab and *MyITLab for GO! With Microsoft Office 2013, Volume 1 (eText)*, Gaskin and Graviett

**Setting**
St. Petersburg College, part of the Florida College System, is a community college that is designated as a state college because it offers a greater number of four-year bachelor’s degrees than traditional two-year community colleges. One of eleven campuses and centers, the suburban Seminole campus emphasizes the use of technology to improve teaching, learning, and the environment. The campus serves approximately 4,000 students, of which the majority (64 percent) are between the ages of 18 and 24 and 66 percent attend part time.

Computer Applications is an eight-week, three-credit gateway course that enrolls 1,600 to 1,800 students each semester. The course is required of all students before graduation in order to meet the school’s Computer and Information Literacy graduation requirement (depending on the degree requirement a similar one-credit course may be substituted). Students are introduced to fundamental computer concepts via projects using integrated applications software. Topics covered include the Internet, operating systems, and creating and evaluating documents, worksheets, databases, and presentations. Additional content includes conducting and assessing the value of Internet research, Internet ethics, and security.

**Challenges and Goals**
In 2007, Alan Shapiro, instructional technology specialist and coordinator course manager, had an online homework, grading, and assessment program fail, forcing him and his faculty to hand grade assignments. The hand grading continued until fall 2011, when the size and scope of the program—more than 60 sections per semester—plus student demand for support while practicing and instructor demand for automated, online grading prompted the creation of a committee to review other available digital products.

The committee chose MyITLab because its unique features fulfilled their key needs.

- Diagnosis and identification of integrity violations
- Faculty Advocates worked with professors to get up to speed on the program. Working with other faculty familiar with the program was critical to its immediate success.
- Coordinator courses facilitated the same teaching and learning experience across the large number of St. Petersburg’s sections and instructors.
- Grader Projects enabled students to move and interact directly within the application, facilitating faster learning and experience with the program.

**Implementation**
Shapiro noticed that some students struggled early in the semester to familiarize themselves with both the school’s LMS and MyITLab. To support a smoother learning curve, he created a MyITLab Orientation and Quiz that covers 1) setting up and launching the course, 2) navigating menus, and 3) using eText, audio PowerPoints, demonstration videos, and Skill Training Simulations. After a successful pilot in summer 2013, Shapiro added the MyITLab Orientation Assignment and Quiz to all sections in fall 2013. As a result, Shapiro reports a shift in student questions—from navigation oriented, how-to questions to content and strategic based questions. Students’ understanding of the program improved dramatically, enabling more complex learning to take place in less time.

**Key Results**
Data show that students who complete most or all of their MyITLab assignments earn higher exam and final course grades than students who skip two or more assignments. Data also reveal a strong positive correlation between Skill Training Simulations and Skill Training Exams and a very strong positive correlation between both Skill Training and Grader Project scores and final course grades.
To discourage his online students from falling behind in the first few weeks, Shapiro takes a form of attendance to determine if they have been actively participating in the course. Students must complete a MyITLab Orientation Quiz and a Syllabus Quiz during the first week of class, and all assignments from the first and second weeks of class are due by the end of the second week. Students who are identified by MyITLab as not actively participating receive a W (withdraw) and are denied further access to the course. This kind of attendance is taken again at the 60 percent point of the course, when students must have at least 70 percent of their assigned work to date completed in order to continue in the course. Students who do not have at least 70 percent of their work complete are withdrawn with a WF (unless they have officially withdrawn themselves).

MyITLab assignments follow the same format across the four core applications:

- View the chapter video
- Answer a five-question quiz
- Complete a Skill Training simulation
- Take a Skill Training simulation exam
- Complete a Grader Project homework assignment (five attempts, no score is recorded)
- Complete a Grader Project assessment (two attempts)

Assessments
20 percent MyITLab Excel assignments
20 percent MyITLab PowerPoint assignments
20 percent MyITLab Word assignments
13 percent MyITLab operating system quizzes
12 percent MyITLab Understanding Computers and Internet Literacy (concepts) quizzes
10 percent MyITLab Access assignments
5 percent MyITLab Orientation Assignment and Quiz

Results and Data
After evaluating Skill Training simulation and Skill Training exam scores, student performance identifies a strong positive correlation where $r = .54$, $p$ value $< .001$, indicating a positive relationship between success on the Simulation Trainings and success on Simulation exams (Figure 1). Figures 2 and 3 indicate a very strong positive correlation between Grader Project assessment scores and the final course grades, where $r = .96$ and $p$ value $< .001$, and Skill Training simulation scores and final course grades where $r = .95$ and $p$ value $< .001$. For students, each of these
scores—Skill Training simulation and Grader Project—may help them identify where they are in terms of overall course success; performance on these MyITLab assignments appears to be a gauge of final course achievement. For instructors, these MyITLab scores may help identify students who are at risk and in need of intervention.

Figure 4 indicates a very strong negative relationship between the number of skipped assignments and a student’s final course grade. The number of training assignments skipped and final grades show a very strong correlation \( r = -0.96, p \text{ value } < .001 \), as did the number of Skill Training exams skipped and final grades \( r = -0.95, p \text{ value } < .001 \), and Grader Projects skipped and final grades \( r = -0.95, p \text{ value } < .001 \). On average, students who missed more than two assignments received a failing grade in the course while, on average, students who missed two or fewer assignments received a passing grade. Not surprisingly, those students who completed all assignments scored an average final grade of 93 percent.

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

- **70%** Agree or strongly agree that their understanding of course material increased as a result of using MyITLab.
- **80%** Agree or strongly agree 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:

- “The Show an Example and Help Me Solve This learning aids and all the practice problems.”
- “Very in depth. I learned a lot!”
- “The video instruction in the simulation!”

Conclusion
Shapiro reports that the effort spent helping his online students prepare for and understand how to use MyITLab led to fewer start-up problems. In turn, the smoother transition helped students to get acclimated more quickly so they could focus on learning the course content. In addition, MyITLab enabled Shapiro to offer a more consistent program across sections and multiple instructors. The consistency in content covered, grading, and system stability have led to a more professional environment in which students can effectively practice and apply the computer skills they are learning.