Microcomputer Applications is a required course for most majors and, as such, enrolls approximately 2,500 students a year. At course completion, successful students can proficiently use and integrate Microsoft Office applications: Word, Access, Excel, and PowerPoint.

In 2007, George Fiori, instructor, and his colleagues sought a reliable online homework and testing platform that could support both their large body of students and the significant number of faculty that administer and manage the program. Consistency across sections—in terms of content coverage and grading—was a key factor in their decision-making process. In fall 2007, MyITLab was implemented in all sections of the Microcomputer Applications course.

Implementation
Microcomputer Applications is offered in both traditional, face-to-face lecture and online formats, and course content is presented to both groups of students in the same way. Lecturing takes a back seat to practice; students proceed through the suggested course set-up, with instructors available to assist students one-on-one as needed.

All homework and course assessments are completed in MyITLab. To enable remediation between test attempts, students are allowed unlimited attempts to complete each chapter test by a specific due date. Exams are higher stakes—students are allowed just one attempt at completion within a specified time frame with a given due date.

Fiori encourages his students to use all of MyITLab’s features, including optional chapter trainings, presentations, videos, and quizzes.

Finally, MyITLab’s 24/7, online access means that students can complete the course at their own pace. While most take the entire semester, some students complete the course in just a few weeks.

Assessments
80 percent  MyITLab exams (4)
20 percent  MyITLab chapter tests (14)
Results and Data
An analysis of exam scores and final course grade distribution indicates improvement in student gains since requiring MyITLab. Average exam scores showed increases across applications, including the following (figure 1):

- Excel exam scores increased by an average of 12 percentage points.
- PowerPoint exam scores increased by an average of 15 percentage points.

Final course letter grades significantly improved: the percentage of As increased from 49 percent before implementation of MyITLab to 86 percent after (figure 2). Similarly, after implementation of MyITLab, the percentage of Fs dropped to 0.

Students using MyITLab developed stronger foundational skills, leading to improved performance and increased retention. The retention rate increased from 66 percent before implementation to 91 percent by fall 2013 (figure 3).

The Student Experience
Fiori’s students appreciate the learning aids in MyITLab, specifically the View Submissions and corresponding Methods to Complete features, which provide a road map for learning concepts they missed on the chapter test. As one student said, “To earn an A in this class, use the resources in MyITLab and spend time in the assignments. The rest will come easily.”

Conclusion
Fiori reports that the effort spent to implement MyITLab was worthwhile for both the structure the program offers students and the consistency it provides across multiple instructors. With MyITLab, exam scores, course letter grades, and retention rates have increased—students are learning the computer application skills they need to succeed in their future careers.