Key findings:

- After becoming a licensed Certiport Authorized Test Center in May 2018, 196 students have sat for an Excel or Access Microsoft Office Specialist (MOS) exam. As of December 2018, 81 students (41%) have passed and received certifications.
- 96% of student survey respondents agreed that their understanding of Excel and Access increased as a result of using MyLab™ IT.
- 89% of student survey respondents agreed that, "Having a Microsoft Office Specialist certification brings an advantage when applying to jobs."

Setting
San Francisco State University (SF State) is a public research university, part of the California State University (CSU) system, ranked one of the most diverse campuses in the nation. SF State awards bachelor’s degrees in 77 academic areas, master’s degrees in 63 academic areas, and three doctoral degrees. Fall 2018 student profile details were as follows:

- Enrolment: 29,586 (89.4% undergraduate / 10.6% graduate)
- Full-time students: 81%
- Percentage of first-generation, first-time freshmen: 37%
- College of Business enrolment: 20% of students

School name: San Francisco State University, San Francisco, CA
Course name: Information Systems for Management
Course format: Face to face
Course materials: The custom package contains MyLab IT with:
- Information Systems Today: Managing in the Digital World by Valacich and Schneider (primary eText)

Timeframe: Fall 2018

Educator: Daniel Ciomek, MBA
Results reported by: Sara Kasper, Pearson Results Manager
About the course
Information Systems for Management (ISYS 363) is a comprehensive study of the use of Information Systems for management decision making. Students examine traditional information systems development from the end-user's perspective and the use of application software to develop individual applications that solve business problems. It is a required core course for students in the AACSB-accredited College of Business and is taken by every business major, primarily juniors and seniors majoring in Accounting, Information Systems, and Business Administration.

Challenges and Goals
Daniel Ciomek has been teaching at SF State since 2012 and has been a MyLab IT user since 2016. Ciomek believes there is merit when students are able to demonstrate proficiency of Microsoft Office skills to future employers. Since Spring 2017, he has made MyLab IT Capstone Grader Projects a mandatory course component. When students achieve 90% or higher on a Capstone, they earn a digital badge through the Acclaim system, which they are then able to post on LinkedIn, social media, or include on a resume. Although badges are not official certifications, they are designed to recognize achievement and establish credibility.

Says Ciomek, “Many of our students are the first in their family to go to college. Many lack prior work experience, access to internships, and don’t have the personal network that would get them these opportunities. They need some additional assets to compete and stand out. Badges are ‘resume real-estate’ these days — it helps to differentiate them from their peers.”

To take things a step further from badging, Ciomek wanted to offer Microsoft Office Specialist (MOS) exams on campus to allow students to take the industry-standard official certification. Ciomek initiated the process to become a Certiport Authorized Test Center (CATC) and now runs the program as the administrator. Certiport is the exclusive partner for Microsoft Office testing and enables institutions of higher education to run their own on-site test center.

The Information Systems department purchased a campus license with 500 MOS exam codes, and the program launched in May 2018. MOS Access and Excel certification exams are offered — at no cost — for students currently taking ISYS 363 or for those who recently passed the course but are still enrolled at SF State. Test days on campus are offered during the Spring and Fall semester at specified dates and times.

To increase student participation in taking the MOS certification exam on campus, and to get more students certified, Ciomek decided to try including the MOS Excel and Access exams as a required component of his Information Systems for Management class in Fall 2018.

Implementation
Class is conducted in a lecture-style format and meets once a week for 2 hours and 45 minutes. Attendance is checked throughout the semester. While not a formal part of the grading, frequent participation in class discussions is appreciated and can help tip a borderline grade towards the next grading category.

All assignments and quizzes are scheduled with weekly deadlines. Students must read/watch/complete the designated course material prior to attending class and must be able to discuss the material during that time. Ciomek expects students to spend 5–8 hours per week on homework, readings, and assignments.

Ciomek uses the school’s Learning Management System (LMS), to distribute all course materials including the syllabus, getting started instructions, presentation slides, and links to online videos and outside resources. In addition, there are two forums hosted on the LMS: one where course announcements and general administrative information/updates are posted and one where students can form study groups, search for and discuss class-related topics, ask questions, and share relevant information.
**MyLab IT Information Systems Today reading homework**

On a weekly basis, students are assigned chapters to read in the Information Systems Today eText, accessed through MyLab IT (11 chapters in total). Questions verifying conceptual Management Information Systems learning outcomes must be completed and submitted by 11:59 p.m. on Sunday of the week due. Late submissions incur a daily 20-point penalty; the lowest score out of 11 assignments is dropped.

**MyLab IT Access and Excel assignments**

MyLab IT assignments focus on students learning basic concepts though readings and Simulation Trainings, then applying this knowledge and critical thinking to solve business problems through Grader Project assignments. These activities give students an opportunity to explore computer-based applications in varied areas of business and for different purposes.

**Simulation Trainings:** There are a combined 13 chapters to read in the Exploring Microsoft Access and Exploring Microsoft Excel eTexts. The corresponding Simulation Training tutorial assignments for these chapters (four for Access and nine for Excel) are assigned. Students have unlimited attempts; the lowest score of the 13 assignments is dropped. Simulation Trainings must be completed and submitted by 11:59 p.m. on Sunday of the week due or they will incur a daily 20-point penalty.

Students earning 90% or higher on a Capstone Grader Project are issued a digital badge through the Acclaim system. They may post this badge on LinkedIn, share it on social media, or include it on a resume. The badge represents specific competencies and skills that students have mastered as part of the course.

**Grader Projects:** These assignments correspond with the eText chapter reading and the Simulation Trainings. In total, students are assigned four Grader Projects for Access (Chapter 1–4) with one Access Capstone Grader Project and seven Grader Projects for Excel (Ch. 1–7) with one Excel Capstone Grader Project. Students may attempt the Ch. 9 Excel Grader Project for extra credit. The lowest score of the 13 assignments is dropped. Grader Projects must be completed and submitted by 11:59 p.m. on Sunday of the week due or they will incur a daily 20-point penalty.

To complete a Grader Project, students download an empty starter file with their embedded unique tracking information and a document with instructions. They then complete the tasks live in the application and upload the finished file for automated grading by MyLab IT. The system provides students with an instant report including their score and the steps marked as incorrect. Students can continue to work on their file and upload it again, up to a total of five uploads. Ciomek urges students to give themselves enough time so that they may correct any problems, improve their skills, and resubmit a corrected version. The highest score counts.

**Quizzes**

- One syllabus quiz, taken online in the LMS, counts for 1% of the course grade.
- Three closed-book, multiple-choice quizzes are taken during class time and focus on topics from Information Systems Today. Ciomek uses the Valacich test bank to select 30 questions for each quiz, covering content from three to four chapters of the text. Students have 30 minutes, two attempts, and the highest score counts. Typically, 10–20% of each quiz includes material not covered in the textbook or presentation slides, such as videos shown in class, articles posted on the LMS, or topics discussed during lecture.
Two quizzes are administered within MyLab IT (Simulation Exams in which learning aids are deactivated) and focus on content from Access Chapters 1–4 and Excel Chapters 2 and 4–7. Students have 30–45 minutes to complete these with two attempts; the highest score counts.

Microsoft Office Specialist (MOS) certification exams
As a mandatory class component in Ciomek’s Fall 2018 section, students were required to take the 50-minute Microsoft Office Specialist (MOS) certification exams for Access and Excel during class time in the campus testing lab, free of charge. A passing score on the exam is 700 points out of 1000, or 70%.

Final exam
A comprehensive closed-book final exam is administered in a proctored computer lab covering course content from the Information Systems Today textbook. It does not cover any Access or Excel material. Typically the exam includes 45 multiple-choice questions within a 45-minute time frame. One attempt is allowed.

Results and Data

Badging results: In Ciomek’s Spring 2018 and Fall 2018 sections, 72% of students submitting the Capstone Grader Projects for Access Chapter 1–4 received a badge and 66% of students received a badge for the Excel Chapter 1–4 Capstone Grader Project.

Overall MOS certification results: By the end of September 2018, 44 students at SF State had sat for an Microsoft Office Specialist exam. By the end of December 2018, that number grew to 196 students, of which 81 received certifications — a 41% pass rate. Ciomek is reaching his goal of increasing student participation in taking the exam.

As indicated by the difficulty students had in passing the Access exam, Ciomek is strategizing ways to increase student success. Ciomek cites a few key factors for the low pass rate: 1) It was the first time that any students at SF State took the MOS certification exam; 2) Access (and Excel) are not the focus of the Information Systems for Management course; 3) because the exams were taken at no cost, preparation might not have been as thorough than if students had paid; and 4) students are more familiar with Excel due to prior classes and job experience, while Access is a completely new experience for most. Ciomek would like to first see scores for Access improve and is offering the MOS Access certification exam as optional in his Spring 2019 course.

Assessments

- 24% Quizzes (5) and MOS certification exams (2)*
- 24% MyLab IT Grader Project assignments (best 12 of 13)
- 18% MyLab IT Simulation Trainings (best 12 of 13)
- 18% Final exam
- 15% Information Systems Today eText reading homework assignments (best 10 of 11)
- 1% Syllabus quiz

*In Fall 2018, the lowest three quiz scores out of seven were dropped to accommodate for poor performance on the MOS certification exams and also to reward students for being part of the pilot test.
The Student Experience

Students in Ciomek's Fall 2018 section were surveyed at the end of the semester to gather their feedback on MyLab IT, badging, and the MOS certification exam. Out of 35 students, 26 took the survey, a 74% response rate.

On MyLab IT

- 96% of respondents agreed that, "My understanding of Excel and Access increased as a result of using MyLab IT."
- 85% of respondents agreed that, "MyLab IT was a good value for the course."

Open-ended responses to the question, "What are the benefits of MyLab IT?" included the following:

- "Simulated assignments provided help when I was having trouble with a function. The guidance was very helpful in retaining the information and seeing the functions in action."
- "MyLab IT guides you through the basic fundamentals of Excel and Access software. The program increases the user’s comfort and familiarity with the software on a basic level."
- "Provides trainings to be able to understand how to do the projects successfully."

On badging

- 84% of respondents agreed that, "MyLab IT badges give me an advantage when applying to jobs."
- 69% of respondents agreed that, "Badges add value."

Confirmed one student, "[Badges] show that you are at a proficient level of having experience using Microsoft Access and Excel." Another student cautioned, "They add value, but unless you are practicing Excel or Access all the time, it is rather shallow to think a badge reflects your consistent ability."

On MOS certification

- 89% of respondents agreed that "Having a Microsoft Office Specialist (MOS) certification brings an advantage when applying to jobs."

Student responses to the question, "How do you think having the MOS certification would benefit you?" included:

- "It will benefit me as an information systems major when looking for jobs because it shows I am proficient at those Microsoft Office applications."
Conclusion

Although there have been some bumps along the way, Ciomek will continue to offer MOS certification to current and former Information Systems for Management students and will be tweaking the course to better prepare students for the exam experience and promote additional study resources.

As indicated by student survey responses, a majority of students agree that having a Microsoft Office Specialist (MOS) certification brings an advantage when applying to jobs. Encouragingly, Ciomek has already received anecdotal evidence that the MOS certification is proving useful for students who have passed the exam. One student shared: “I have had several interviews in the last month or so, and my MOS certification has definitely been a point of conversation at almost every one. Most of my interviewers have been very impressed and have told me they’ve never seen it before on a resume.”

Ciomek hopes more students will take advantage of being able to sit for the MOS exam at no cost and will be able to pass and use the certification to facilitate career opportunities. He concludes, “It’s one thing for students to hear the instructor say, ‘This could be beneficial for you.’ It’s another when a student shares their success, say, after a job interview. We had one student who received the State Championship Microsoft Office Specialist 1st place award with a perfect score of 1000/1000, encouraging a lot of new test takers. The fear is gone. Now some students who passed the Excel Specialist exam want to tackle the Expert exam. Those who failed want to come back and try again, now that their friends have passed. With informational events and posters around campus, word is spreading. Students about to graduate want to get certified before they leave. While it took a bit to gain some momentum, overall, I think we are heading in the right direction.”

“I think it would be beneficial to be able to put on my resume because it is a skill set that is needed for most jobs in the business industry.”

“Employers could see the certification as a step-up from other potential candidates.”