

# Active Learning Obtained:

DeVry University Streamlines IT Curriculum Nationwide with Online Labs

## Case Study



### The Need: Consistent Solution for Active Learning Online

Throughout its history, DeVry University has strived to prepare students for the challenges they'll face in the workplace by bringing the real world—with "active learning"—into the classroom. This emphasis on real-world training and career placement—and its proven success—has made DeVry University an ideal choice for adult learners who return to school for a career change or additional training.

DeVry University has more than 90 campuses across the United States and Canada, as well as online offerings and blended courses that combine both on-campus and online learning. Not surprisingly, keeping curriculum consistent across the board—a priority for DeVry University—hasn't always been easy, especially in the College of Engineering and Information Sciences. According to technology professor Kelly Adams Ward, who teaches IT courses both online and on campus in South Florida, "As we opened more campuses and made more of our courses available online, it became even more difficult to keep curriculum consistent, especially for courses related to computer hardware and software. These courses were also becoming increasingly theoretical because we didn't have a solution for hands-on, active learning that could be implemented consistently across all campuses and online courses."

DeVry University works to provide students with learning options for the level they are at, otherwise known as "active learning in a blended modality," Adams Ward added. "Reading a book and answering questions is not 'active.' Enabling students to actually work on the technologies we are teaching them is active and helps them actually learn what they will need to know in the real world."

This active, hands-on learning is particularly important in classes such as Adams Ward's, which maps to parts of CompTIA's A+ Essentials certification exam. The rapid changes in IT, though, make creating and maintaining computer labs a difficult and expensive process—and one nearly impossible to offer online learners. So, how do these students receive the active, hands-on experience that is so critical to building their technical skills and confidence?



### The Solution: LabSim Provides the Active, Hands-on Learning We've Been Searching For

Several DeVry University locations, including Adams Ward's Mirimar, Florida, campus, began implementing the TestOut PC Pro training course in its entry-level computer maintenance courses, a pre-requisite for its technology programs.



The LabSim software offers a blended modality for teaching with online lab simulations, instructor-led videos, and interactive practice exams. The online labs allow students to actively practice real-world tasks associated with hardware and software, such as configuring software or building a router. And they can use the software wherever they're taking their course—online, on campus, or in a blended environment.

For instance, if a student is taking one of DeVry University's computer maintenance courses online, it isn't practical to expect them to build a computer out of spare parts. And written true/false or multiple choice homework questions are basically inadequate for teaching how to troubleshoot a PC. Instead, DeVry University uses LabSim online labs to enable the students to virtually do the tasks they need to know. Adam Ward's students complete two to four LabSim hands-on labs per week.

"LabSim was the solution we'd been searching for," Adams Ward said. "It helps students understand new concepts that would be even harder to simulate in a physical classroom. Whatever concept they're working on in LabSim, from the classroom or at home, they can actually see and experience it. In LabSim, they can try everything, which is wonderful. We also love the flexibility the program offers, since students start with different backgrounds and different levels of technology experience. If they feel like they need to redo a lab multiple times before they get it, they can whenever they want to."

DeVry University tasked Adams Ward and a consortium of other IT instructors across the country with streamlining the TestOut PC Pro course across all 90+ campuses and online. "With LabSim, everyone across the board is now doing the same quizzes and the same homework," she said. "Some on-campus classes are able to incorporate additional material in the classroom, but all use TestOut's LabSim consistently."

"TestOut's PC Pro course does a great job to prepare our students to advance through our programs," Adams Ward added, "and we plan to add the second class in the future."

### The Results: Hands-On Labs Prepare Students in Computer Maintenance

According to Adams Ward, the result of incorporating LabSim into the technology curriculum at DeVry University has been very positive, both for the faculty and the students. "Students really like LabSim because they can see exactly what they're doing in the labs, and it's easy to use from both the classroom and at home," she said. "We like that we can keep track of how our students are doing in the labs and what other features they've used, so we can give them more one-on-one help when they need it."

Bill Massey, DeVry University professor at the Fremont, California, campus, has enjoyed his first experiences teaching with LabSim. And so have his students. "Our students like it so much that they want to do all of their lab work at home," Massey said. "And for our strictly online students, LabSim is simply fantastic. How else would our online students get the active, hands-on learning if we didn't have LabSim? They wouldn't."

Although the college doesn't require students to complete their A+ certification after taking the computer maintenance course, they certainly encourage it, and Massey thinks LabSim is a great way for students to prepare for A+ certification even after they graduate.

"Sometimes students don't want to pay for certification right away, but then they graduate and their boss tells them to get certified, so they have to," Massey said. "With LabSim, they can go back and review the course material for quite a while even after they graduate."