



### The Need: IT Certification Training in a Title I High School

Holmes High School, a Title I school in inner city San Antonio, Texas, has a thriving Career and Technology Department (CATE) offering courses in computer maintenance and networking. Each course maps to the objectives of industry certifications, and juniors and seniors can take advantage of IT training to jumpstart their career preparation and certify in A+, Network+, CCNA, or Security+.

According to John Carrera, CATE teacher at Holmes, most Holmes students need extra support to rise above difficult circumstances, and Carrera is committed to finding resources that will train and prepare them to find jobs. “Many of our students are transient,” Carrera said, “and most don’t have computers at home, so we have lots of computers on campus for students to use.” IT certifications are a goal of many of Carrera’s students who see value in certifying. Carrera said, “At the beginning of the year, I make sure they understand that certification is not a cure-all, but A+ gets you into the field. Then I ask them, ‘Do you have what it takes to enter the field?’ Many of them want to prove they can do it.”

To give his students the best possible training and support to prepare for certification, Carrera utilizes funding from Perkins grants to purchase training resources. Perkins grants are federal funds made available through the Carl D. Perkins Career and Technical Education Act of 2006. The funds are given to states to distribute to school districts with the purpose of strengthening vocational programs and linking academic learning to practical career experiences. Perkins funds allow Carrera to purchase high-quality curriculum materials to train his students and prepare them for certification exams.



### The Solution: LabSim Training Prepares Students for Certifications and Jobs

Four years ago, Carrera discovered he could use Perkins funds to purchase LabSim IT certification training—the same training courses he had used for his own certification preparation—and incorporate LabSim into his IT classes. “I used to create all my lesson plans and assignments from scratch,” Carrera said. Relying on LabSim to give his students expert instruction and hands-on experience, Carrera now designs his courses around LabSim training and uses LabSim to support his own lectures.

Carrera has developed a weekly plan for how students use class time. On Mondays, he gives students an outline of the week’s subject matter and uses LabSim to introduce topics. “Before I lecture, I like students to have a base of what I’m talking about,” Carrera explained. “LabSim is a great way to deliver content initially. They have over an hour in class, so they sit down at a computer and watch the videos, read the written lessons, and take the quizzes.” After students

spend two days working in LabSim during class, Carrera spends a day lecturing. “Students take Cornell notes while they use LabSim, so they come to lecture prepared with questions,” Carrera said. Next, students spend a day completing hands-on labs in LabSim, where they gain practical experience using concepts they just learned. “I love LabSim because it’s hard to keep physical equipment on hand. LabSim gives students the ability to do hands-on labs,” said Carrera. Finally, students finish the week by testing what they learned. Because students already took LabSim quizzes earlier in the week, Carrera builds his own exam for each chapter.

“There are two things I especially like about LabSim: delivery of content in videos and hands-on labs,” Carrera said. “I cannot have enough equipment for all my students, but the labs build concepts in their minds. They feel like they’re really in Windows. LabSim gives students another way to learn the steps required to do something. That’s why it is so valuable to me.” Carrera explained that many students like learning on a computer, and to him, it is crucial to offer students more than one way to learn. He said, “LabSim is a great tool to reach all the students: videos for kids who need to see it, labs for kids who need to do it, written lessons for kids who need to read it. LabSim really shows students’ strengths.”

### The Result: Eleven Students Certified Last Year Using LabSim Training

Toward the end of the school year, Carrera’s classes begin fundraising to pay for the cost of certification exams. “We have a benefactor that buys us t-shirts, and we sell things at sporting events and at the school’s FoodFest,” Carrera said. He described himself as “a cheerleader for the students” and said he encourages them all to take the certification exam, although students must qualify for the school-funded exam voucher. “To qualify for the voucher, students have to pass LabSim practice exams with a score of 90% or higher, pass my class, and have a good attendance record,” Carrera explained. Last year, Carrera had eight students certify in A+ and three in Network+. “Less students certified when I first started teaching, but with LabSim, we have the tools to get them ready for it,” Carrera said.

As Carrera has seen success using LabSim to prepare students for certification, he has shared the teaching tool with others. Several years ago at a teachers conference, Carrera met Arthur Celestin, a colleague preparing for his first year teaching. “Presenters were talking about certifications, and he looked lost!” Carrera said. “I gave him my books, lesson plans, timeframes, and a LabSim contact. He used LabSim in his courses and got six students certified last year. Very impressive! He’s a great teacher, and LabSim was a big help to him.”

Carrera has worked hard to make it possible for his students to take the certification exam they’ve trained for. At first, Carrera noticed students not showing up to the testing center on exam day, even though their vouchers had already been purchased. Then he realized the problem: many students didn’t have transportation to the testing center. Carrera worked with Pearson VUE to establish Holmes High School as an official testing center. Other schools and teachers are able to utilize Holmes for their students’ testing as well, including Mr. Celestin. Now students are better able to complete the exam they spent many hours preparing for—and take a big step forward toward a career in IT.

“LabSim is a win-win for us,” Carrera said. “The kids like it. The videos are great, quizzes are good, and labs are wonderful. And the tests are even better than vendors’ own practice exams.”