University Intelligently Connects to the Future

University of La Verne Embraces the Internet of Everything to Deliver New Learning Opportunities

“...Our infrastructure is ready to connect our remote sites and deliver an in-person, real-time experience. We want to broadcast events at the main campus—like the president’s town hall meetings—to all of the remote centers so that all students, faculty, and staff have more of an opportunity to feel deeply connected with the university. Additionally, we want students to join a class through [Cisco] WebEx® from anywhere—their workplaces, at home, or on the metro or bus.”

- Clive Houston-Brown, Vice President for Facilities & Technology

Challenges

- Build stronger connections with the university among students at the main campus and at remote sites
- Extend faculty expertise and courses efficiently to all campuses
- Enable teaching and learning opportunities in real time with international colleagues and students

Almost 125 years old, the University of La Verne is a private, comprehensive institution that offers a distinctive, relevant, and values-based educational experience to a diverse population of students. The University enrolls 8,700 students of all ages. Classes are offered at the main campus in La Verne and 10 other locations throughout southern California. The University is ranked among the leaders in California for its online deliver of academic programs and degrees.

The University seeks to retain and graduate as many students as possible; however, sometimes getting to class can be physically difficult because of issues such as southern California traffic, employment schedules, and family obligations. With multiple campus locations and a presence at two military bases, the university also focuses on building strong connections with military students to foster graduation and future success.

The University knew that, with an extended reach across physical locations, it can deliver higher-quality education, as well as serve a greater number of students. With new collaborative technology, students can access faculty knowledge regardless of location.

Case Study | University of La Verne

Size: 8517 Students; 200 Faculty | Location: La Verne, CA USA | Industry: Education
In addition, President Devorah Lieberman envisioned co-teaching with colleagues in other countries. The University has a growing number of opportunities through its international alumni to partner with faculty and students globally.

To help achieve these goals, the University looked to the Internet of Everything (IoE) to connect students, faculty, administrators, courseware, devices, and information with global opportunities. The University began this journey to become a digital institution by deploying a Cisco® network infrastructure, which includes Cisco Wireless, Unified Communications, and security solutions.

“Our infrastructure is designed for delivering many benefits to our students,” says Clive Houston-Brown, vice president of facilities and technology at University of La Verne. “We’ve invested in the physical infrastructure and now want to move outside of the box and find new ways to move forward toward our goals.”

We’ve chosen the right infrastructure, and now it’s time to take innovation to the next level.

Moving from Traditional to Digital

The University of La Verne embraced the Internet of Everything by first creating a more agile IT infrastructure, standardizing the system with one vendor. After careful review, the university selected Cisco as its primary provider and replaced the existing HP switches and server infrastructure with Cisco switching and Cisco Unified Computing System™ (Cisco UCS®) server platforms. The University virtualized its servers and also deployed a Cisco Wireless network. Cisco Unified Communications solutions deliver IP voice and conferencing capabilities. The University has 1900 Cisco IP phones on campus and 4 active videoconferencing endpoints.

Initially, the University used Cisco WebEx solutions to provide online meetings and videoconferencing features across its 11 campuses. In 2014, the University deployed Cisco TelePresence solutions for delivering immersive collaboration experiences. Regional campuses are connected with the main campus, helping to enable more students to connect remotely to classrooms and communitywide seminars. Faculty and staff are more productive because they use Cisco Jabber® technology to communicate instantly.
“The quality is excellent, and we wanted to have the best technology,” says Hany Seyam, senior director for IT infrastructure. “At the same time, the University relies on tuition fees, so we are very careful to make sure that we receive the best value for our dollars.”

“For administrative and academic purposes, our infrastructure is now ready to connect our remote sites and deliver an in-person, real-time experience,” says Houston-Brown. “We are broadcasting events at the main campus—like the president’s town hall meeting—to all of the remote centers so that students feel connected with the university. Next, we want to enable students to join a class through WebEx in their workplace, at home, or on the metro or bus.”

**Bringing People Together**

The Cisco Wireless network made an immediate difference in campus communication, enabling people to connect wherever they are. When Cisco WebEx and Cisco TelePresence solutions were introduced, it brought people even closer together.

“The mobility and collaboration solutions brought us closer,” says Hany Seyam, senior director of IT Infrastructure. “We used to travel between campuses to meet each other, and now we have reduced the need to travel by meeting over WebEx and soon the TelePresence system.”

The University of La Verne also developed a secure app for smartphones that makes almost all university services available online, from career services to registration and location services. Students can log in using their IDs to access their grades, look up classes, register for classes, identify the closest place to eat, find facilities on campus and even see where the parking shuttles are. The app also includes a feedback mechanism, which is connected to Google Analytics so that the university can gain insight through analytics.

**Expanding Online**

“Initially we deployed WebEx to foster enhanced communications between students, faculty and staff,” says Todd Britton, Assistant Vice President for IT. “Now we are deploying Cisco TelePresence and bringing the two technologies together.”

With Cisco WebEx and Cisco TelePresence solutions, students and faculty can now collaborate, have group meetings, and work on team projects in real time.

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**Results**

- Simplified students’ access to university services through their smartphones
- Online enrollment increased by 22 percent
- Enhanced the learning and teaching experience to securely explore new ideas and opportunities
Bringing More Classes Online

The University’s target is to have an online component for all undergraduate courses that meet for more than 3 hours per meeting. Two new graduate-level programs already combine online coursework with real-time collaboration.

“These online courses join three others already in place,” says Abe Helou, dean of the College of Business & Public Management. “Students choose whether to take an online course or not, but from an educational effectiveness perspective, students in the online programs have higher scores on the learning objectives than the face-to-face students.”

Convenience and Savings for Students

Students like the convenience of Cisco WebEx and Cisco TelePresence solutions. Because a large number of students commute to campus, conferencing has made it much easier to participate effectively in study groups.

“More professors are using digital textbooks rather than traditional hard-copy textbooks,” says one student. “I don’t have to buy expensive textbooks, which is nice, and it’s much more convenient to use my tablet or laptop to look up a textbook. And we can make better in-class presentations using the technology.”

Security to Learn and Thrive

To secure the networked connections among students, university processes, devices, and information, security needs to be as pervasive as the IoE itself. At the University, physical video security and cybersecurity solutions work intelligently together to protect students, networks, devices, applications, users, and data. And while these solutions create a safer connected environment, they also provide the freedom to securely explore new opportunities, extend access to intellectual assets, and in short—learn and thrive.

Next Steps

The University of La Verne continues to embrace technology that will help transform the 21st century classroom, expand community engagement, and strengthen cross-campus connections. Future projects are expanding mobile services, data analytics, and other networked solutions that will further connect students, faculty, staff, devices, systems, and information.
Products & Services

Data Center
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Routing and Switching
- Cisco 3900 Series Integrated Services Routers
- Cisco Nexus® Series 7000 Series Switches
- Cisco Catalyst® 4500 Series Switches
- Cisco Catalyst 3850 Series Switches
- Cisco Catalyst 2960 Series Switches
- Cisco 2900 Series Integrated Services Routers

Network Management
- Cisco Prime Infrastructure

Virtualization
- VMware vSphere

Applications
- Cisco Jabber

Wireless
- Cisco Aironet® 700 Series Access Points
- Cisco 8500 Series Wireless Controllers

Collaboration
- Cisco Unified Communications Manager
- Cisco Unity Connection
- Cisco Unified Contact Center Express
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- Cisco WebEx
- Cisco Emergency Responder

Security
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- Cisco Adaptive Security Appliance
- Cisco Intrusion Prevention System
- Cisco Secure Access Control Server

OS
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