# The Computerworld Honors Program

Honoring those who use Information Technology to benefit society

## Final Copy of Case Study

YEAR:
*2012*

STATUS:
*Laureate*

**Organization name:**
Lone Star College System

**Organization URL:**
www.lonestar.edu

**Project Name:**
Video-based Learning and Collaboration Network

**What social/humanitarian issue was the project designed to address? What specific metrics did you use to measure the project's success?**

Located in and around Houston, Texas, Lone Star College System (LSCS) is committed to providing affordable, high-quality education to an increasingly diverse community and an expanding number of online students. As the fastest growing college in Texas, LSCS consists of six campuses and ten learning centers spread over 1,400 square miles, with a student population that has blossomed from 65,000 to 90,000 in just four years. Technology has fundamentally transformed education, and video is a primary driver. Education trends are shifting from book literacy to screen fluency. Today's students have been raised in an environment of anytime, anywhere access to digital media and have considerably different expectations about how to acquire and consume information than their predecessors. "Today's generation is engaged by video. It fosters collaboration," says Link Alander, Interim Vice Chancellor, Technology Services/CIO. LSCS also needed to get faculty from one campus to another for regular collaboration, and instructors wanted to incorporate more interactivity and digital media into their teaching. Before this project commenced, LSCS was lagging behind other institutions in terms of technology they could offer their students and staff. Their network lacked the capabilities to meet the demands of video and digital media. And early video and collaboration technologies lacked the enterprise-grade reliability and integration LSCS required to be able to deploy them across its far-flung campus and to distance learners. LSCS sought to cost effectively make technology a foundation for new ways of teaching and learning, while improving staff and faculty productivity.

**Please describe the technologies used and how those technologies were deployed in an innovative way. Also, please include any technical or other challenges that were overcome for the successful implementation of the project.**

First, LSCS rebuilt its entire network. "The only way you can run pervasive video is to have that core foundation first. You have to have the capacity. And you absolutely need high availability," says Alander. Fiber was laid to each location across the 1,400-square-mile service area, creating a technology-neutral WAN with 5-9s reliability for mission-critical systems. Upon this solid architectural foundation, LSCS implemented several enterprise video technologies to help transform teaching and learning. Capturing, Transforming, and Sharing Video Content: Faculty, administrators, and student leaders use Cisco immersive, multi-purpose, and personal TelePresence, TelePresence Content Server, Cisco WebEx, and portable video cameras to capture video and related content, provide face-to-face communication and collaboration, and reduce time and expense previously lost traveling between campuses. Video content is then transformed from a variety of video formats into formats that can be viewed on any desktop or mobile device using the Cisco Media Experience Engine (MXE). Recorded video content is stored and shared using Cisco Show and Share, an enterprise video portal that allows instructors and students to view, download, and comment on content. Integrated Video-Enabled Collaboration: Cisco Digital Signs deliver current information, schedules, and real-time communications to 500+ displays installed throughout campus and learning center locations. The Cisco Unified Communications suite, including 6,200 IP, wireless IP, and video phones, supports the voice communication needs of faculty and staff in offices and classrooms. Using Cisco Unified Communications Manager, LSCS has built a highly robust call management system that provides one-touch integration with Cisco TelePresence systems to initiate video conferencing sessions. The LSCS network also supports high wireless density, providing students and faculty high quality of service even in lecture halls holding up to 100 students.

**Please list the specific humanitarian benefits the project has yielded so far.**

Lone Star has values that support a rapidly changing demographic and economic environment: providing affordable access for the diverse communities it serves, a commitment to international education, an effective system of communication, embracing diversity, economic and workforce development, and high standards of ethics and integrity. Video technology supports those values by providing effective tools that expand the amount and quality of communication and collaboration through the entire college system, using tools and technologies today's students expect and will be using in their careers. Video is extending the classroom, giving instructors access to the tools that they need to engage their students and use them however and whenever they see fit, and brings the online educational experience to life. Cisco WebEx enables instructors to distribute learning through video and the web to more than 25,000 students enrolled in online classes from all 50 states and several overseas countries. Sherry Watson, an LSCS instructor, says that the integrated video technologies allow her to be more flexible and benefits students that can't attend class in person. "They can sit at home and be part of our class." She says that instructors can pre-record classes, which makes learning easier because students can attend on their own schedules. Alander says, "Using Show and Share internally has been great. We put [video] snippets out there and have them available for anybody to pick up at any time." Delivering a superior, more engaging education through pervasive video has reaped other benefits as well: LSCS is able to attract a higher quality faculty and administration, and the school has been recognized nationally for its academic excellence.

**Please provide the best example of how the project has benefited a specific individual, enterprise or organization. Feel free to include personal quotes from individuals who have directly benefited from the work.**

While today's students expect to have the latest and greatest technologies at their disposal and seamlessly embrace new ways of learning and interacting, the evolution can often pose a challenge to administrators and faculty used to working with traditional educational tools. The new integrated enterprise video technologies were initially rolled out to a group of faculty and administrators that were fairly technology savvy. The initial group had such positive experiences that after hearing their feedback, staff members who were not expected to be enthusiastic adopters have readily embraced its use. According to Alander, "A group that I would never expect to use the technology held their regular monthly meeting instead of traveling via TelePresence and WebEx combined. They integrated the two together. That was 27 people who got together on an event. The feedback afterwards was phenomenal." Shah Ardalan, CEO of Lone Star College-University Park, says, "When you see that you're making a difference in the lives of people, that's the best reward anybody can ask for."