

Texas Education Service Centers Establish Broadband Video Conferencing



Texas Education Telecommunications Network enhances its network by deploying HD-capable Cisco TelePresence solutions.

Executive Summary

TEXAS EDUCATION TELECOMMUNICATIONS NETWORK, A COOPERATIVE OF THE TEXAS EDUCATION SERVICE CENTERS AND THE TEXAS EDUCATION AGENCY

- **Industry:** K-12
- **Location:** Austin, Texas
- **Number of Users:** N/A

CHALLENGE

- Keep growing, dispersed K to 12 education population connected and informed
- Update TelePresence infrastructure

SOLUTION

- Leverage network infrastructure to implement flexible, scalable video solution
- Utilize Cisco TelePresence solutions to expand number of users

RESULTS

- Saves US\$2.5 million annually in educator travel costsImproves communication to enhance patient safety and patient flow
- Bridges schools in Texas to provide statewide student programs.

Challenge

The Texas Education Telecommunications Network (TETN) is a cooperative of 20 education service centers across Texas and the Texas Education Agency. TETN's mission is to facilitate communications among educational entities throughout Texas, improve student performance, and increase the efficiency of educational operations. Every service center has a video conferencing room that is scheduled on a statewide basis.

The TETN central video conferencing, or TelePresence™, network is located in the William B. Travis building in downtown Austin, and the TETN system is operated by the staff at the TETN Management Office in Austin. Services provided by the TETN network include: multiparty video conferences, point-to-point video conferences, data transport (IP) services, and special project conferences.

TETN had been utilizing TelePresence for the past few years, but its equipment lacked today's technology, including high definition (HD), and was limited in its other capabilities. The network was also struggling with endpoint restrictions, because its technology was at the end of life. For certain TETN programs, HD is a requirement. For example, in 2010, TETN conducted a conference with the National Weather Service, which requires that counterparts have HD. Without the upgrade, TETN would not have been able to participate.

Solution

The two main components of TETN are: the traditional TETN network that has rooms in service centers, which are mainly used for meetings and classes, such as teacher certification classes; and the larger environment, where school districts are able to participate in meetings or student events.

"When we wrote the guidelines for our rooms at the service centers, we looked at our business needs and wrote the specifications based on what we could do today with the old equipment, what we wanted to continue to do, and what new things we'd like to do, like HD," says Carol Willis, manager, TETN. "One of the resellers took our requirements and worked closely with Cisco to build a unique set of equipment to match our needs. They were very creative and unpackaged traditional offerings and repackaged them so that it met the RFP."

TETN installed Cisco® Multipoint Control Units (MCUs), because they handle HD more efficiently than other comparable products. TETN also purchased Cisco equipment because the endpoints are agnostic, which means that TETN does not have to worry about what kind of end point other users have installed. The MCUs allow TETN to connect to anyone, anywhere, at any time.

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Carol Willis

Manager, Texas Education
Telecommunications Network

Results

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The TelePresence rooms at service centers are mainly used for meetings and continuing education courses. However, there are many student programs, and every service center has a distance learning coordinator, who schedules and organizes the programs. Every service center also has a video network that broadcasts to about 900 school districts, so schools can connect to join in statewide meetings. People can join the meeting or class whether they are at a school or a service center. For example, the former first lady Barbara Bush read to 30,000 students statewide utilizing TETN’s network. This was accomplished by bridging the service centers.

The video network is also used to provide professional development to educators. The service centers are delivering what used to be face-to-face sessions in multiple delivery modes including TelePresence, so that it is still interactive.

An outstanding student program was recently the result of collaboration among TETN, the Texas Education Service Center (ESC) Region XI, Discovery Education, National Weather Center, Internet2, and the University of Oklahoma.

As an added benefit for subscribing to their online video resources, Discovery Education partnered with ESC Region XI in Fort Worth to bring Reed Timmer, host of the Discovery Channel’s wildly popular Storm Chasers program, live to schools across Texas, utilizing high-bandwidth, high-definition TelePresence. The National Weather Center located on the campus of the University of Oklahoma was chosen as the presentation site, and TETN was scheduled to deliver the high-definition video to Texas schools.

TETN and the ESCs delivered the program to over 32,000 students in 700 classrooms across the state, employing the education services centers’ regional video networks with connections to over 900 school districts and TETN’s broadband network. To support Discovery’s broadcast television quality, TETN’s Cisco TelePresence® MCU was connected at HD quality to the National Weather Center across the Internet2 backbone at approximately 2 Mbps of bandwidth. The Cisco TelePresence MCU allowed many of the ESCs to receive the high-definition content across the network without reducing the video quality to standard definition.

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Product List

VIDEO

- Cisco TelePresence

For More Information

To find out more about the Cisco video solutions, go to: www.cisco.com.

