

Bridging the Gaps: Cisco TelePresence Connects, Engages Inner-City Students



Los Angeles, California

As the country continues to feel the effects of the flagging economy, virtually every public sector segment is struggling to shrink operating budgets. In education, the reductions have been especially brutal: 85 percent of the 14,000 school districts in the United States have had to slash expenses in the past year, with many forecasting still deeper cuts during the 2011–2012 school term.

Nowhere is this trend more disheartening than in inner-city school districts, where students face a barrage of challenges daily. With the widespread elimination of arts programs, which encourage the self-discipline and self-expression so crucial in urban districts, there is a corresponding danger that youths will yield to the negative influences that surround them. In inner-city schools, after-hours arts programs are more than just an extra; they offer a path for students to gain self confidence and begin to change their futures.

Faced with this dilemma, a number of districts that serve inner-city families are discovering an innovative means of stretching their budgets, and retaining programs vulnerable to budget cuts. By implementing Cisco TelePresence® video systems, districts can scale personnel and programs across large geographical areas and beyond.

In May of 2011, the Los Angeles Unified School District—which serves some 700,000 students—hosted the country's first ever, live multipoint schools concert, in which student performers gathered in three of the largest cities in the U.S. to celebrate their proficiency in the arts. The event connected hundreds of urban students with their peers from across the country, providing compelling evidence that Cisco TelePresence can expand learning beyond the four walls of a classroom, easily and cost-effectively.

Celebrating a Sense of Self

On the stage in a darkened high school auditorium, a hushed audience watches the images flicker across a massive screen. In a clip from an episode of the Dr. Phil show, three teens are sharing the grim details of their former lives.

"In the neighborhood I grew up in, gunshots and police sirens were like my lullaby," says Sheven Morris.

"I was in a gang. I fought people. I robbed people," adds Creshinda Johnson.

"I've been arrested seven times already, just hanging out in the streets, 'cause I didn't have anyplace else to go," reveals another student.

But now the video captures the same trio: their voices are blended in harmonies, their bodies move together in dance. Moments later, Urban Entertainment Institute (UEI) Founder and President Fred Martin beams as his students explain what their participation in his performing arts program has done for them.

Says Creshinda, "This program showed me I could be anything I want."

"I didn't know I had this gift. This program has been a lifesaver," a tearful Chavonne Morris declares.

As one, the audience at Robert F. Kennedy High School in Los Angeles erupts in cheers and applause. The screen shows similar waves of emotion sweeping over students at King College Prep in Chicago, and DreamYard Prep in the Bronx. Before the morning is over, 800 young people in the three cities will be united in song, dance, and the spoken word. Most importantly, they will celebrate their sense of self.

Their forum: a "virtual stage" made possible by an innovative partnership between the Los Angeles Unified School District (LAUSD), UEI, and Cisco. Their link: Cisco TelePresence technology.

Creativity + Technology = Art

Through talent and discipline, Fred Martin escaped the gangs of his native Compton, becoming a music industry leader and youth advocate. In 2002 he launched UEI to equip students in South Central Los Angeles with the tools they need to combat the often overwhelming forces that surround them. At UEI, students train in vocal, theatrical, and musical performance, and learn the technical aspects of the entertainment business. Martin makes the after-school program available to students free of charge; in return they must pledge to earn the best possible grades and steer clear of drugs, alcohol, and gangs.

UEI participants regularly engage with technology to craft musical and video compositions. "When most people think about computers, they don't think about them being used very heavily in the arts," Martin says. "But over the past year, technology has become an everyday, integral part of what we do, and how we do it."

When the popularity of UEI began exerting increasing demands on Martin—requiring frequent travel and time away from his students—he looked to technology to provide a solution. During a conversation with Cisco about TelePresence, he glimpsed the potential to simplify his life. In the video conferencing solution, he also saw profound implications for education.

Creating a Cross-Country Connection

As Martin learned more about Cisco TelePresence, the

"I realized that with a tool like TelePresence, not only would I not have to fly all over the place, but I could scale my art program across the world. When art programs are being cut, districts can't hire 20 choir or dance or art teachers. But with TelePresence, one or two teachers can be scaled across 30 schools."

Fred Martin, President and Founder, Urban Entertainment Institute

possibility of extending UEI beyond the Los Angeles district began to take shape. Subsequent discussions with LAUSD administrative personnel as well as Cisco's sales and marketing teams led to the creation of an event that would link students in several urban areas across the United States.

"Fred wanted to connect our kids with similar-minded kids," notes Ron Chandler, Chief Information Officer for LAUSD. "We saw that there would be two significant benefits in producing a multipoint event. First and foremost, our students would be able to interact with their peers in real-time in their physical world. Then from an administrative perspective, we could help our staff understand the power of integrating this technology into the classroom."

Chandler, who is charged with the maintenance and support of the computing systems in all 800 of LAUSD's schools, adds that every deployment of a new technology in the district is done very carefully and deliberately, with a single goal in mind. "I'm a firm believer that you don't implement technology for technology's sake. At all of our schools, we lead with our instructional program, and then enable that program through technology.

"We could see that a TelePresence-based event, in which we were connected virtually, would enable us to establish a presence in other cities without actually being there. And our kids could go somewhere else."

Ron Chandler, Chief Information Officer Los Angeles County Unified School District

High-Fidelity, High-Quality Production

On May 6, 2011, Martin and Chandler welcomed students, faculty, and staff members from all three schools —along with such notable guests as poet and author Dr. Maya Angelou, television and film producer Norman Lear, and casting director/film producer Reuben Cannon— into the RFK High School auditorium for the "Bridging the Gaps" concert. With the help of Cisco TelePresence systems installed in all three sites, Martin led the young people in sharing songs, poetry, and dance with each other. The multipoint connection also enabled the students to interact live with the honored guests.



In Martin's estimation, the ability of Cisco TelePresence to deliver high-fidelity, low-latency video was critical to the success of the concert. "Being able to have multiple endpoints is so different than just doing a one-on-one teleconference. The quality when you're looking at people in high-definition video, and the fact that you can actually do full music and dance...it's definitely a much more enhanced experience."



"We simply couldn't have done this without TelePresence," Chandler confirms. "The ability to share in real-time, and to collaborate visually, was exactly what we needed, and what made this work. It had to be done in real-time, with high density, rich video. Because it wasn't just about what our kids would see and hear...it was about the audience's reaction as well."

Chandler adds that the superior audio quality delivered by Cisco TelePresence was an essential aspect of the concert. "My son, who's a musician, says you get to a point where you 'start to hear the notes within notes,'" he explains. "A really good system like TelePresence allows that to happen. We were able to capture the really small nuances that are lost in a system that lacks that level of fidelity."

History in the Making

Dr. Angelou, who connected to the concert from her home in Winston-Salem, North Carolina, expressed delight at being a part of the event. "What a wonderful experience—to hear all of those wonderful young men and young women, to hear the poets and the singers," she observed. "I listen to everyone, and I'm made to feel safer; we're going to be all right. These are leaders, these young men and women, who have the courage to learn."



For his part, Lear, one of Hollywood's icons, said he was witnessing an extremely important event from his Beverly Hills office. "I had the best time listening and watching everyone. I knew we'd be part of something big...but not this big. This has been fabulous." Cannon, who shared his own path to success in the entertainment industry from his home in Atlanta, said he "was inspired to be a part of history. The stars of tomorrow are being presented here today."

The UEI participants, even those for whom social networking is as natural as breathing, also realized they'd taken part in a monumental event. "It wasn't what I expected at all," said Jordan High School student Michelle, who attended the concert. "I thought everything would be recorded, and we'd just watch videos of each other. I didn't know it was 'live,' and that other people could watch, too."

David, a member of the UEI choir, had had a very different idea about how the morning would play out. "I thought everyone from Chicago and New York was going to fly here. Then I found out that it was all being done through technology, and I thought 'whoa, that's amazing; they can see us, and we can see them!"

"For me it's all about the students; how we can improve their experience and help them achieve. I think Cisco understands that. They know that our focus will always be on the quality of the instructional process, and how technology supports teaching and learning."

Ron Chandler

Maximizing Budgets, Curricula

Chandler believes that Cisco TelePresence offers the ability for cash-strapped school districts to maintain their arts programs, and enhance their entire curricula in exciting new ways. Sending students on virtual field trips to explore Australia's Great Barrier Reef, bringing in an instructor in Mandarin Chinese, creating a dialogue between young people and the brightest minds in the fields of science and medicine; Chandler says all of these formerly impossible connections are now within reach.

"With TelePresence," says Ron Chandler, "we can pull in various industry experts and expose them to our students. That's incredibly powerful, and is made possible through our partnership with Cisco."

The "Bridging the Gaps" concert included support from Cisco TV, which provided:

- Integration of the multipoint TelePresence with the public-facing Ustream experience
- Production management to drive creation of the show format, rehearsal schedule, testing
- Real-time console control of TelePresence camera feeds to enhance the viewer experience

"The challenge," Chandler concludes, "is doing all of that in our current economic environment. But I would tell other districts that you won't get there by being penny-wise and pound-foolish. That's a lesson that has to be repeated, several times over."

For Ron Chandler and other visionary CIOs in large, inner-city districts across the country, video offers new, next-generation opportunities to engage the hearts and minds of students everywhere. As Chandler says, "Our priorities in technology investments should be focused on the things that can change lives and help student outcomes, now."



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