



Distance Learning

Daily Use

- Distance education
- Access to experts
- Administrative/team meetings
- Remote site communications

Solution

- 16 Polycom® HDX™ 9000 series telepresence solutions
- 7 Polycom HDX 8000 series telepresence solutions
- 24 Polycom VSX® 7400 cart-based video conferencing systems
- Polycom PVX™ desktop video conferencing software for PCs
- Polycom MGC™+50 ReadiConvene™ conferencing bridge

Results and Benefits

- Chinese Mandarin program beat proficiency goals by more than 10 percent—and a year earlier than expected
- Districts minimize costs by centrally teaching courses to thousands of students in dozens of schools
- BOCES levels playing field by offering unique classes to districts unable to afford specialized teachers
- Video conferences for administrative and staff meetings save employees travel time and expenses

With Polycom, Oneida Herkimer Madison BOCES Speaks the Language of Distance Learning

Schools throughout New York State rely on Board of Cooperative Educational Services (BOCES) organizations to cost-effectively share centralized administrative functions, IT services, instructional support and more. In Oneida, Herkimer and Madison (OHM) counties, OHM BOCES serves 12 upstate New York school districts with more than 24,500 enrolled students.

For schools everywhere, budget cuts have resulted in fewer class offerings which makes it harder to offer courses that will enable students to succeed in a global economy that grows more competitive every day.

That's where distance learning comes in. Because OHM BOCES encompasses inner-city, suburban, and rural school districts stretching across 549 square miles, distance learning has been crucial to leveling the playing field for students in the region. Begun 14 years ago, the distance learning program at OHM BOCES now offers 4,000 classes a year.

Key to the program's success are high definition (HD) telepresence and video conferencing and solutions from Polycom. OHM BOCES instructors rely on video to teach 23 classes a day to hundreds of students throughout the district. Classes include college-level psychology and sociology, American Sign Language, advanced placement courses, and foreign languages.

In recent years, OHM BOCES applied its pioneering distance learning effort to teaching Chinese Mandarin. OHM BOCES used a grant from the Department of Education Foreign Language Assistance Program to bring Mandarin to schools whose class enrollment in Mandarin classes would be too low to support a full-time teacher.

Delivering a Competitive Edge

By teaching Mandarin Chinese, OHM BOCES administrators aim to give their students a distinct—and relatively unique—competitive edge. With the world's third largest economy, China is a primary U.S. trade partner. One-sixth of the world's population speaks Mandarin Chinese.

"Foreign language classes offer a way to enrich children with the skills they need to compete in the global economy of the 21st century," says Ken Ford, director of Information and Technology at OHM BOCES. "You can imagine that not many school districts have a teacher certified to teach Mandarin

"We're seeing the Polycom and IP video conferencing experience as delivering resources to teachers' fingertips."

Deborah Bauder, Technology Director, Utica City Schools



Chinese. But through the widespread use of Polycom systems, we have 108 students in 10 school districts actively learning Mandarin Chinese. This program is an equalizer. It provides equity across the districts."

In 2001, OHM BOCES began expanding its use of visual communication for distance learning with 24 Polycom VSX® 7400 units and a Polycom MGC+50 conferencing bridge. Success with those solutions led to the deployment of 35 Polycom PVX™ desktop systems.

More recently, an upgrade to HD telepresence added two dozen high-definition solutions—16 Polycom® HDX™ 9000 and seven HDX 8000 telepresence units.

Realizing the Advantage of UltimateHD

For teaching Mandarin Chinese, Polycom UltimateHD™ technology—which combines HD voice, HD video, and HD content—has proven invaluable.

"We're not only teaching the spoken language, but also the symbols for writing," explains Ford. "What HD brings is quality of experience. The video or content is exactly what you'd get in person or on your computer."

Two full-time instructors teach Mandarin Chinese classes to sixth and seventh graders. Deborah Bauder, technology director at Utica City Schools, says student response has been positive. "In some schools, the Mandarin Chinese students have formed their own ad-hoc clubs," she says. "They now share a common language."

OHM BOCES also folded 2008 Summer Olympics coverage into the curriculum—via a Mandarin language TV channel whose content was delivered across the video conferencing network. "That was a big hit with the students," recalls Bauder. "It helped immerse them in the language in a practical, real-world way."

Video conferencing also has helped students connect directly with native Mandarin Chinese speakers. In fall of 2008, OHM BOCES hosted a global video conference at Harts Hill Elementary School in Whitesboro, NY, with a school in Taiwan. "It was 8 p.m. in Whitesboro and 8 a.m. in Taiwan," says Ford. "It went over very well."

Exceeding Performance Metrics

Results have been better than anticipated. "For our grant application, we proposed measuring our students on the Student Oral Proficiency Rating," explains Bauder. "Our proposed two-year goal was to have 75 percent of participants meet Level II of the rating. But after one year, we had 83 percent meet that level."

Use of video conferencing isn't limited to traditional coursework. Virtual field trips also allow students to interact with experts and luminaries, from science fiction author Ray Bradbury to NASA scientists and surgeons in the midst of an operation. "The world opens to these kids," Ford says. "They can go virtually anywhere."

The virtual outings make economic sense as well. "For what we pay for these virtual field trips, you can't even put gas in the bus and pull away in it," says Ford.

Increasing Productivity with Polycom

"This gives our teachers the ability to move between the school districts," says Ford. "Teachers can use the system to virtually travel to other schools and get more "face time" with students, or teach from one school but have students from several other schools attend the class."

And because Polycom systems can deliver multimedia content, teachers often have more options for presenting material than they otherwise would. "We can channel streaming media straight into the content input of the Polycom unit," Bauder says. "During a class session, one flat screen shows the instructor and the other displays content. Since it's streaming media, classroom teachers can pause it, back it up, bookmark it, and start using it as an instructional tool. They can simply view it, or they can edit it and use it in a presentation."

Keeping Costs in Check

OHM BOCES employees also rely on the systems for administrative meetings, training, and servicing. "It has given us the ability to provide services economically," says Ford. "For superintendent meetings alone, video conferencing can save hours of drive time and travel expenses."

Bauder says video conferencing will take an even larger role in the districts. "We see our schools moving toward smart classrooms, with some kind of display unit, Web connection, and AV system," she says. "We're seeing the Polycom and IP video conferencing experience as delivering resources to teacher's fingertips. All you have to do is wheel this unit in the room, plug it in, and you have a remote learning facility."

Even as budgets continue to tighten in the face of a challenging economy, says Ford, the influence of video communications will grow: "As times get tougher, we see our programs expanding."

Polycom Worldwide Headquarters
4750 Willow Road, Pleasanton, CA 94588
1.800.POLYCOM or +1.925.924.6000
www.polycom.com

