Covina-Valley Unified School District

EXECUTIVE SUMMARY

CUSTOMER NAME

- Covina-Valley Unified School District (CVUSD)

INDUSTRY

- Education

BUSINESS CHALLENGE

- Overcome budget cuts to improve student achievement and test scores
- Meet the education requirements of a wide range of students from different socioeconomic backgrounds, with different language needs
- Improve student access to technology and strengthening parent-teacher communications

NETWORK SOLUTION

- A Cisco converged IP network infrastructure, to support IP telephony, a wireless network, IP video, IP videoconferencing, and new media centers

BUSINESS VALUE

- IP network infrastructure supports district-developed mentoring program with universities
- IP video enables distance learning, bringing a variety of content to every classroom
- Wireless network provides ubiquitous access to resources and people, from anywhere on campus
- IP telephony runs XML productivity applications, including unified messaging that enables teachers to retrieve both voicemail and email from one inbox, plus an auto dialer for calling hundreds of parents in minutes
- IP videoconferencing enables deaf students to communicate with each other by signing

Covina-Valley Unified School District in Southern California is deploying a Cisco converged IP network to improve access to resources, reduce costs, and support its innovative mentoring programs.

Business Challenge

Covina-Valley Unified School District (CVUSD) is a large, suburban district located in the San Gabriel Valley of Southern California. The district serves nearly 15,000 students in kindergarten through 12th grade, as well as 22,000 adult education students, and employs some 800 teachers and 2,200 staff members.

"The district has an outstanding reputation for academics and athletics," says Dr. Louis Pappas, assistant superintendent of the district's Personnel Services. "Our mission is to provide a quality education for our students and community, to provide an opportunity for lifelong learning, and to provide a nurturing, safe and academically-challenging environment." To achieve these goals, the district has been an early adopter of technology. "We want students, parents, administrators, and teachers to acquire proficiency in technology, so they can maximize learning and take full advantage of multimedia, and ultimately become part of a global economy," says Dr. Gayle Odell, assistant superintendent of the CVUSD's Educational Services department.

Like other large districts, Covina-Valley encompasses both affluent regions and low-income areas. It serves a diverse student population from different socioeconomic backgrounds, including numerous English-language learners. As a result, its teachers have been hard-pressed to maintain high education standards, at a time when funding cuts have put a severe strain on resources. "We've tried to be creative and flexible, but without the proper budget and support, it's hard to meet so many challenges," says David Samuelson, director of Long-Range Planning for the district.

From an IT perspective, the district was hampered by separate existing private branch exchange (PBX) systems at each school. "These systems weren't even common across high school or across elementary," recalls Bob Pletka, the district's Director of Technology. "Each school had its own system, its own service contracts, and its own repair people, and it was hard to deal with that kind of complexity."

Network Solution

To address these IT and budget concerns, as well as to improve student achievement, Covina-Valley USD determined that a technology upgrade was necessary. The district also saw that this would enable it to support partnerships and community outreach programs with universities and businesses, as students could connect with mentors through a new network. In June of 2001, the community passed a $50 million dollar general obligation bond to improve the district's instructional program and to deploy a new network infrastructure.

Raising Student Achievement by Strengthening Community Partnerships.

Covina-Valley USD decided install a converged network from Cisco Systems® that would support IP telephony, IP video, IP videoconferencing, and a wireless network. "We made that choice because we'd been a Cisco® customer for the past 12 years and had a good ongoing relationship," Pletka says. "What makes Cisco unique is the company's ability to come in and recognize the needs of a district and its schools, and provide solutions in a variety of areas, whether it's security, or video conferencing, or telephony."

Another critical factor in the decision was the concern over network security. "Cisco provides a layered security process, so there isn't a single firewall or other device in charge of our entire security," Pletka continues. "With these different layers, we don't have a single point of failure."

The IP network deployment is currently underway. The network is up and running in the district office, and has been deployed at several schools. As the network is being installed, IP telephony is being deployed as well. "It's been a challenge, but it's been very successful so far, and where we have it in place, it works very well," says Samuelson.

The modernization program is enabling the district to equip each classroom with true multimedia systems. "Every classroom is getting a sound system, with four speakers connected to the computer and resources via the Internet," explains Pletka. "That sound system is also hooked up to DVD players, and even to a microphone on the teachers. So sound, video, and audio all merge in these classrooms, and it provides a more media-rich environment for our kids, along with an opportunity for better instruction and better learning."

Business Value

Currently, Covina-Valley USD is enjoying significant cost-savings from replacing its separate, outdated networks. "What we've done is to merge these voice and data systems into one backbone," Pletka explains. "We now have management tools so that we can determine where some of our expenses are. At our district office alone, we're saving around US$500 per month by placing calls through the network, instead of through the phone company. We've also been able to get rid of about 120 different phone lines, which saved us about $500 dollars per site. And we've saved on personnel costs, since we only need one person to manage the one network."

Additional cost-savings have been achieved by eliminating the fees for setting up new phones in different locations. "In the past, we'd have to bring in a repair person at $150 to $200 per move, and we'd usually spend around $10,000 per year," recalls Pletka. "Now, to make these transitions, we literally just unplug a phone and plug it back in someplace else. We can easily move someone to another space with very minimal downtime, so they're back up with the tools they need; their phone, fax, computer, and e-mail."

In addition to saving money, IP telephony has improved parent-teacher communications, through voicemail and unified messaging for every teacher. "Instead of a secretary taking a message from a parent, then leaving that message in a teacher's inbox, the parent can just leave a voicemail message," says Pletka. "This can show up as e-mail for the teacher, so the message that was actually spoken gets communicated." IP telephony also supports an auto dialer, enabling the district to call up to 150 parents simultaneously to get any message out. "When we have important school events, or when there's an emergency, we can contact all the parents of our 15,000 students within a few hours, so they know very quickly what's going on," adds Pletka.

But most important, the IP network is enabling the district to deploy technologies to improve student achievement, including

- Ubiquitous wireless access from anywhere on any campus, including new media centers in classrooms. "We're excited about getting resources more quickly, communicating more efficiently, and giving everyone more of a chance to have access to the Internet through the wireless network," says Odell.
- IP videoconferencing, which has enabled the district to meet the special requirements of its deaf students and teachers. "They're now in eight different classrooms, and they're able to sign to each other and collaborate," states Pletka. "It's a way for them to reconnect and become part of the community that their disability had excluded them from."

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Bob Pletka, Director of Technology, Covina-Valley Unified School District

- IP video, which middle school students are using to create tutorials for other students. "They'll make an video presentation about, say, an algebra concept, and upload it onto the server," says Pletka. "Then, other students can access this video from anyplace on campus."
- Mobile computing labs, with 15 computers on a cart, which are currently being used in the district's middle schools, and will soon be deployed in the elementary schools. "These computers on wheels move from classroom to classroom so that students can use them more readily, instead of having to travel to a lab and only be there for a short period of time," explains Odell.
- A SmartBoard, a large touch-screen white board that's connected to a computer. "Students can come up to the front of the class and touch the Smart Board screen, and actually move objects that are on the computer, "notes Pletka.
- Distance learning and e-learning, including a program developed by the district where high school and middle school students are being mentored in photography by grad students from nearby colleges and universities, as well as by professional photographers. "It's another example of how integrating technology can make a difference with student achievement," notes Pletka. "The network enables our students to communicate with these mentors electronically, to bridge the distances and time differences between the classroom and the real world." Nikon is donating 300 digital cameras, which students will use to take pictures, while Apple is providing the distance-learning software. Currently, over 30 districts in California have joined Covina-Valley USD in this program.

Next Steps

In the immediate future, the district will be busy rolling out the IP network to all its schools. "Our vision is to converge the different technologies and systems, to merge data, voice, and video into one system," notes Pletka. "The advantages of that are management and cost-savings in terms of utilizing our resources better. Because of the budget cuts in education, it's important that we free up those resources to be used in the classroom and other instructional areas."

Pletka and other district officials want to expand the district's mentoring program over the next few years. "We want to enhance what we're doing in the classroom, and continue to reach out to the broader community. We believe that connecting students up to the real world, to writers, to engineers, to scientists, is vitally important."

"We want people to view Covina-Valley Unified School District as an outstanding educational institution on the cutting edge of technology," adds Pappas. "And when they see our successes, they see the community in a positive light, and tie that directly to the quality programs and people we have here in our school district."

For More Information

To learn more about Cisco network solutions for schools and districts, visit www.cisco.com/go/education.

This customer story is based on information provided by Covina-Valley Unified School District, and describes how that particular organization benefits from the deployment of Cisco products. Many factors may have contributed to the results and benefits described; Cisco does not guarantee comparable results elsewhere.

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Printed in the USA

16-67/JAD/0805