

Hawaiian High School Delivers 21st Century Learning

Waipahu High School uses Cisco technology to create an enriched learning environment for school administrators, faculty, and students.

EXECUTIVE SUMMARY
<p>Waipahu High School</p> <ul style="list-style-type: none"> • Education K-12 • Waipahu, Hawaii • 261 employees including 183 instructors and 78 service staff
<p>BUSINESS CHALLENGE</p> <ul style="list-style-type: none"> • Deploy custom network solution that meets the needs of teachers and students • Reduce operational costs • Establish security and first responder communications
<p>NETWORK SOLUTION</p> <ul style="list-style-type: none"> • Created a custom network solution, with added security benefits • Provided cost-effective platform to install phone system throughout the school
<p>BUSINESS RESULTS</p> <ul style="list-style-type: none"> • More efficient, reliable platform for running online educational programs and phone system at a lower cost • Increase in staff productivity, educational resources, and learning opportunities for students • Significant increase in schoolwide and emergency preparedness communication efficiencies

Business Challenge

The current generation of high school students, often known as the “millennial” generation, has a vastly different way of approaching education and learning than previous generations. Twenty-first century students are technology experts and are used to having information at their fingertips.

For administrators at Waipahu High School in Waipahu, Hawaii, technology was a way to meet students at their level. “They can text messages on their cell phones a lot faster than we can talk,” says Principal Pat Pedersen. Pedersen and other Waipahu administrators recognized the need for Waipahu to reinvent itself via technology in order to better prepare students for the future and to engage them in learning in a way that acknowledges their generational needs and expectations.

Although the need to incorporate better technology into classrooms for students seemed undeniable, initial ideas were resisted by some faculty members.

Teachers were uncomfortable with the thought of introducing unfamiliar technology to their students. And past failures and downtime left teachers feeling that computers and online educational resources were unreliable and could not be counted on.

Principal Pedersen needed to find a way to provide technological advancements for the school that the teachers would support and be willing to utilize in the classroom. She turned to Cisco and determined that the company’s Unified Communications portfolio was able to bridge that gap. With Cisco® unified telephone, network, and messaging solutions, Pedersen and her IT team created a custom solution that addressed the demands of both teachers and students, while delivering advanced physical security to address current and future needs.

Network Solution

For students, the new system has provided exceptional benefits. Over 800 computers are now available in various locations throughout the school virtually any time that students or staff might need them. The after-school library hours were even extended to meet the high demand of students for computers. Now vast arrays of educational resources are available to students and teachers.

“These kids are 21st century learners; they’re wired differently... they’re digital natives; they’re born into it.”

—Carl Ota, Technology Coordinator, Waipahu High School

Because Waipahu students come from diverse socioeconomic backgrounds, it was important for administrators to maintain technology systems in such a way that higher-income students would not have an advantage. One aspect of this recognition includes storage space for student files. Not all students can afford flash drives, so every student has an electronic portfolio on the server that can be accessed from any computer in the school. Now students can have a secure storage space for all electronic files for the duration of their school tenure.

“The barriers to knowledge have been broken,” says Ritche Ortal, Grade 12, Waipahu High School. “The keys to the world of knowledge belongs to us. Now, education is not limited to the classroom and books. We have access to a world of knowledge, and it can be found in a blink of an eye.”

The new robust network provides a more efficient, reliable platform for running online educational programs. Whereas before IT administrators had difficulty even locating the origin of a problem before they could address it, now the network can locate and fix problems automatically, with no system downtime for users.

Teachers are pleased with network upgrades, and are thrilled with the installation of telephones in all classrooms, which they had been denied for years due to budgetary concerns. Cisco delivered a cost-effective platform for Waipahu to install a phone system throughout the school, and now teachers can easily connect with staff and other faculty. The new phones also serve as a PA system, which the old school building never had. This system significantly increases efficiency schoolwide, because not only can staff communicate messages and announcements throughout the building, but they can also target messages to appropriate distribution lists, such as specific departments.

The phone system also provides a crucial security benefit by allowing school administration to communicate efficiently with staff and emergency preparedness officials in a crisis situation. The school has a partnership with the local police department, which is familiar with the technology to quickly inform school personnel of any danger posed to the school facility. In addition, the system acts as a classroom bell that makes it possible for faculty to easily begin and end class at the same time every day. Waipahu’s previous bell system was extremely outdated, inconsistent, and costly due to the frequent need for maintenance.

For one teacher, Carl Ota, the new technology capabilities have done more than just provide students with the technology that they demand; they are keeping students engaged and productive by equipping them with modern learning tools. “These kids, they’re 21st century learners; they’re wired differently. Whereas I consider myself a digital immigrant, they’re digital natives; they’re born into it,” says Ota. “They expect constant availability, so when the network is down or they can’t access their files, they check out.” Because the school is equipped with a more robust network, students are able to learn in an environment that is comfortable to them, which in turn provides them with the best chance at grasping information critical to their education.

Business Results

Due to the system infrastructure provided by Cisco, Waipahu High School will see huge savings in the long run. Any time new technology features need to be installed throughout the school, rather than paying for expensive underground trenches and critical cabling materials, which typically costs around US\$50 per foot, Waipahu IT experts only need new switches to install systems schoolwide via Ethernet. As a result of the successes with Cisco Unified Communication technologies so far,

PRODUCT LIST
Routing and Switching <ul style="list-style-type: none"> • Cisco Catalyst 3560 Series Switches • Cisco Catalyst 3750 Series Switches • Cisco 2811 Integrated Services Router
Security and VPN <ul style="list-style-type: none"> • Cisco Adaptive Security Appliances
Voice and IP Communications <ul style="list-style-type: none"> • Cisco Unified 7900 Series IP Phones • Cisco Unity® • Cisco Unified Call Manager • Cisco 180 Series Analog Telephone Adapters

the school is now considering installing a video surveillance system that previously would have been financially unfeasible.

Since the implementation of the new Cisco technology throughout the school, everyone has been overwhelmingly pleased with the cost savings and increase in productivity, as well as the realm of possibilities and opportunities now available to the students. Teachers learned that they do not have to be experts to achieve valuable results with technology in their classrooms. Administrators have realized that,

although money constraints will always be present when it comes to school budgets, with a well-planned strategy, advanced technology does not have to be out of reach, even in a recession.

As for the students, the technology has increased educational resources and learning opportunities dramatically. In short, the benefits are priceless. “With technology, the kids can get off the island of Oahu and out into the world,” says Pedersen.

For More Information

To find out more about the Cisco 21st learning solutions to help schools build stronger infrastructures, transform education, and enhance administrative efficiency and academic excellence, go to: <http://www.cisco.com/web/strategy/education/primary.html>.



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