Tech-savvy School Uses NETGEAR® ProSafe® to Maximize Students’ Learning Opportunities

Profile

Company Name: Harvest Park Middle School
Size: 1,200+ Students; 120 Faculty and Staff
Industry: Public Middle School
URL: http://www.harvestparkmiddleschool.com
Location: Pleasanton, California

Background

Located in Pleasanton, California, Harvest Park Middle School is a leader in using technology to enhance the learning environment of its students. Technology has been integrated into the core curriculum and is now a key medium of delivery. As a result, rather than simply reading and listening, student learning is stimulated through multi-media lesson plans, Internet references, and special computerized teaching plans and applications. Every teacher has a laptop and a wireless network has been deployed throughout the school to provide ubiquitous Internet access to faculty and students.

One-third of the school’s students participate in a laptop immersion program, in which laptops are used in language, art, history, and science classes to take notes, participate in classroom activities, and complete homework assignments. In addition, many students access the school’s network using their own devices such as Wi-Fi enabled smart phones.
**SITUATION**

**REQUIREMENT FOR CONSISTENT, RELIABLE, SECURE WIRELESS ACCESS THROUGHOUT THE CAMPUS**

Like most schools throughout the United States, Harvest Park Middle School has experienced significant budget cuts, putting its technology program at risk. State and Federal funding has decreased by 75 percent over the past five years, and the IT staff has been reduced to one part-time person. As a result, the school needs to find ways to provide its students with high-quality, reliable technology solutions while leaving enough money in the budget for investment in other educational tools and programs.

The growth of the laptop immersion program and the advent of ‘bring your own device’ have put a significant strain on the school’s ability to provide reliable, secure wireless Internet access across its 21-acre campus. In addition to its 120 faculty and staff, the school needs to provide wireless access to students, 400 of whom bring their own laptops to school; plus many additional students bring their own Wi-Fi enabled devices. That presents challenges to the school’s ability to provide consistent levels of secure access to inconsistent devices and platforms, particularly since they only have one part-time IT staff and a dwindling budget for the level and amount of network equipment required to support it.

**IMPACT**

**SPOTTY WIRELESS ACCESS DRAWS COMPLAINTS AND THREATENS THE PROGRAM**

Aging network and wireless access equipment, coupled with the growth of the school’s technology immersion program and budget cuts has led to spotty, unreliable wireless coverage throughout the campus. The existing equipment was never designed to handle the kind of load the school is currently placing on it, which has contributed to poor coverage and dropped connections. But with the extraordinary limits on its funds, the ability for the school to get the right equipment to serve its current and future needs is a major challenge.

The coverage and security concerns have become a major issue, to the point where the entire program is at risk. “The whole point of leveraging technology is to enhance student learning and make it faster and more efficient to obtain the information they need,” says Ken Rocha, Principal of Harvest Park Middle School. “But if the class is sitting around waiting for an adequate connection to the Internet, the use of technology has the opposite of the desired effect. Regardless of the potential positive outcomes from technology-infused curriculum, we have to work in the best interest of our students. If the costs outweigh the benefits, we will cancel the program.”

**RESOLUTION**

**NETGEAR® PROSAFE® MEETS CURRENT AND FUTURE NEEDS**

NETGEAR® ProSafe® provided the ideal solution. Using the NETGEAR ProSafe WC7520 Wireless Controller, 24 Dual Band Wireless-N Access Points (WNDAP360 and WNDAP350) and four GS510TP PoE Smart Switches, Harvest Park Middle School was able to obtain the wireless coverage they needed. “The NETGEAR ProSafe equipment is exactly what we were looking for,” says Ken. “We now have far superior coverage and reliability throughout the network, plus it provides the level of security we really required. We got everything we needed, including a low total cost of ownership. The user interface of the controller is also really intuitive, so our IT staff can configure, deploy, and manage the entire system quickly and easily, using a central console that ensures consistency across the entire system. It’s really user friendly, making it perfect for those who are less concerned about the technical details of the equipment, and instead are really just focused on getting the network up and running.”

The NETGEAR equipment also fits well with the rest of the school environment, delivering the ideal mix of form and function. With its sleek, aesthetically pleasing design, the WNDAP360 was unobtrusively placed directly into classrooms. The WNDAP350 provided the durability the school needed in areas that are exposed to dust and other harsh conditions.

All access points are centrally managed using a single ProSafe WC7520 Wireless Controller, which delivers easy configuration, dynamic radio frequency management, client load balancing, and guest access across the entire wireless network. Using the ProSafe WC7520, the part-time IT staff can easily manage the entire network with full visibility into client usage and connectivity status. It also enables the school to provide a guest portal for parents and guests of the school district to access the network.

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Harvest Park Middle School deployed its new wireless network using the WPA-PSK key for a superior level of security, while delivering effortless access for student and faculty laptops and Wi-Fi enabled phones. In addition, both the WNDAP350 and the WNDAP360 are dual band access points, supporting 2.4 and 5 GHz. Since many new laptops are dual band capable, the WC7520 intelligently assigns each client the most appropriate access point to ensure the most efficient connection. The NETGEAR technology team also assisted during the planning and deployment phases of the project to ensure that the placement and configuration of the access points enabled the school to optimize its network.

Ken and the rest of Harvest Park Middle School are pleased and excited about their new wireless infrastructure. “NETGEAR not only met, but exceeded our needs,” says Ken. “Using the NETGEAR wireless solution, we are able to use technology in our core curriculum to enhance our students’ learning experiences to better prepare them for the future.”

*The Lifetime Hardware Warranty only covers hardware, fans, and internal power supplies, and does not include external power supplies or software. Hardware modifications or customization void the warranty. The warranty is only valid for the original purchaser and cannot be transferred.

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