Ohio Schools Provide Students with Unlimited Computer Access

Oak Hills Local School District supports academic success by providing students with more access to the classroom.

EXECUTIVE SUMMARY
OAK HILLS SCHOOL DISTRICT
• Education, K-12
• Cincinnati, Ohio
• 8100 students
CHALLENGE
• Outdated technology for students
• Disproportional ratio of devices to students
• Required affordable interface that could handle 2800 students
SOLUTION
• Combination VDI solution, granting personalized desktop access to all students
• Simplified migration to newer operating systems
• Increased security and protection that align with school district standards
RESULTS
• Nearly 1:1 ratio of smart devices to students
• Unlimited access to school projects and programs; continuous accessibility
• Increased student efficiency and productivity on assignments

Challenge

The Oak Hills Local School District is located right outside the center of Cincinnati, Ohio. Encompassing both the Green and Delhi townships in western Hamilton County, the school district consists of five elementary schools, three middle schools, and one high school. In total, there are nine school buildings with approximately 8100 students. Oak Hills provides an increasing number of educational opportunities for students and adults with gifted programs, special education services, vocational options and community education.

For one local high school, the five-year technology and hardware replacement date was approaching, so parents and faculty gathered to draft a technology plan, which is required for educational institutions in Ohio every few years. While discussing their options, school leaders realized that, even with an upgrade of software and computers, it would be a challenge to stay up-to-date due to all the devices students use, including laptops, cell phones, tablets, and iPads. In addition to staying current, they wanted to find an affordable way to create an educational environment where the student-to-device ratio would be equal.

Oak Hills explored a variety of options to determine how to best meet their needs while staying on budget. After seeing a joint presentation between VMware and Cisco for desktop virtualization based on VMware View running on Cisco Unified Computing System (UCS), and with advice from their local partner Champion, they selected the Cisco Desktop Virtualization Solution incorporating Cisco UCS, VMware View, and NetApp storage to provide their students with the most current technologies available.

Solution

Oak Hills turned to Cisco and VMware to implement a Virtual Desktop Infrastructure (VDI) solution based on the Cisco Virtualization Experience Infrastructure (VXI) allowing students, teachers and administrators to work and learn in a secure environment accessed from any device. The VDI solution provides easier-to-manage desktops at a low cost to the school district. Centralization of the management and control of desktops increased access to applications and promoted productivity, allowing students to work on assignments at their own pace – anytime, anywhere.

"We chose the Cisco VDI solution for its processing capabilities, and the fact its interfaces allow us to deliver a solution that can handle 2800 students," Technology Coordinator Mike Cooper says. "We needed a server that can handle many simultaneous connections while still managing to stay within our budget."

In addition to providing every student with computer access, the Cisco VDI solution extends the life of the schools' current computers because the hardware requirements that run the virtual desktop client software are met by repurposing existing PC hardware. The number of help-desk calls and the amount of IT support have been greatly reduced, and the addition of programs and other changes to desktops have been optimized.

> "We learn a lot from our students, because they use tools we never thought about. They are showing us how to increase our technology usage."
> — **Sharon Blanton, Director of Curriculum, Oak Hills Local School District**

Results

Students have been allowed to bring their own devices to school since November 1, 2010, and each has embraced it in their own way. "For some kids, it has been as simple as using their calendar from their own cell phone," Tracy Pirkle, director of curriculum and e-learning, says. "It was not that the technology was not working for them, it was that financially we could not provide every student with the appropriate technology needed to succeed."

Using the Cisco Desktop Virtualization Solution has also allowed the school to give students

PRODUCT LIST
Virtualization
• Cisco Unified Computing System
• VMware View
• NetApp HA FAS3140 with storage

access to classroom materials after hours. Graphic and Web design classes have been expanded, because students can now use their own laptops to work on projects during the school as well as from home.

For example, a student was working on some progressive ideas for an assignment in the Web design class. His teacher informed him that if he ran into problems he would likely face major setbacks. Unfortunately, the idea did not work the way the student wanted and since he did not have enough time to complete the project during school hours, he faced an incomplete on the assignment. With the VDI solution, the student was able to continue his work through winter break and was back on track by the time the class resumed. He later went on to earn an A in the class largely in part to his ability to work on the assignment outside of school. "Accessibility is what enabled that particular student to succeed," says Cooper.

Teachers and students are enjoying the efficiency that the increased ratio of smart devices to students created, and are continuously finding new ways to use the VDI solution to enhance their education processes. "Before turning to Cisco, some students were limited to working on projects only during the school day. They did not have the software required to work on assignments from home," Dave Kearns says. "Now if they want to learn at or do work from home, they can. Our VDI platform allows them to do it anytime they want."

For More Information

To find out more about the Cisco Desktop Virtualization Solution, go to: www.cisco.com/go/vdi

To find out more about the Cisco Virtualization Experience Infrastructure (VXI), go to: www.cisco.com/go/vxi

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