Think of student supervision in grades K-12 and your first thoughts might be yard duty, hall monitoring, lunchroom control, or ensuring no one cheats on a test.

But for a new generation of students who live and learn online, the whole concept of "keeping watch" extends well beyond the school and schoolyard. It also includes visibility into what they're doing on the school network, including cell phones, tablets, PCs, and the Internet, says Renee Patton, Cisco U.S. Public Sector director of education.

"When you think about it, the device becomes an extension of the student," says Patton, who believes supporting students in an online world requires a new way of thinking. "Cash-strapped schools need to find ways to manage their networks, to ensure the right person is connecting to the right resource at the right time."

PERSONAL DEVICES AND LEARNING

It's a challenge that's growing as more students arrive at school carrying personal devices, expecting to use them. And rightly so. As Patton points out, devices are now "an integral part of how students consume knowledge and information, and how they remember."

That's where Cisco® Meraki® cloud networking is proving a good fit for modern K-12 classrooms. Highlights of the system include:

- Wireless access points optimized for high-density environments
- Switches that are easy to manage and scale
- Education-centric security appliances that automate content filtering and web caching
- Cloud-based mobile device management

Most importantly, Cisco Meraki enables IT administrators to keep their eyes everywhere on the network.

"You can log into our dashboard from any Internet-accessible device, see your networks, view equipment, and get visibility into who's using what applications," explains Emily Sporl, Meraki product marketing manager, Cisco.

PEACE OF MIND

Alvin Independent School District (ISD) in Brazoria County, Texas, uses Cisco Meraki to support its Bring Your Own Device (BYOD) and One-to-One (1:1) strategies across 23 schools serving about 19,000 students and 2500 staff members.

Initially planned to provide wireless coverage to 1:1 schools only, the system's affordable pricing enabled it to include all Alvin ISD schools. The deployment took less than three weeks and network administrators are so confident in their ability to limit student access to appropriate content only that they're now offering BYOD to sixth graders.

One reason for the district's success is Cisco Meraki's ability to support multiple networks...
From school yard to school network: Supervision comes of age

from a single access point, each with its own policy, explains Sporl. “They can run a student network, staff network, or guest network all from the same access point,” she says.

ONLINE TESTING

At California’s Oakland Unified School District (USD), Cisco Meraki is used to reliably administer new Common Core testing, a state-mandated online initiative that sets standards for math and English. The district not only needed a high-density network to support hundreds of test-taking students simultaneously, it also needed to control student access during those tests.

Tapping into federal funding, Oakland USD purchased more than 300 Cisco Meraki access points along with 10,000 Chromebooks, and is now providing a standardized test environment easily managed by its small networking staff.

“They can make their test network available at various times and at various locations, and then lock it down with different authentication requirements, different firewall policies, basically blocking everything that’s not needed for the test,” says Sporl.

THE NEED FOR SECURITY

With security being a top concern for school IT administrators, Cisco Meraki was developed with a number of important security features and appliances, including:

- Intrusion detection
- Anti-phishing
- Anti-malware
- YouTube for schools integration
- Safe search
- Integrated content filtering

Also important is the fact that policies can be defined by device type, and any device that does not have antivirus installed can be prevented from accessing the school network.

“Being able to provide reliable, secure network and Internet access is key for schools,” says Sporl. “The wireless network is kind of becoming table stakes for education. Once you have it in place, you have to provide that visibility into who is doing what, and ensure that everyone has an optimum experience.”