Enhancing Learning Environments Through Network Technology

Overview

CLQ School executed a network modernization involving deploying WiFi 6 systems. This ensures stable, secure connectivity for over 3,000 simultaneous users. Collaborative efforts between Zyxel and DCA successfully overcame connectivity and infrastructure management challenges, significantly enhancing network performance and the student learning experience.

Challenges

"We faced significant challenges, especially in my role as the IT coordinator. Managing all the components and setting up a functional infrastructure to meet the school's needs was complex. Keeping up with technological advances was crucial, but the results didn't meet our expectations," stated Douglas Bissoli, IT Staff at CLQ School. The school experienced frequent connection issues. During peak usage times, the radio signal would weaken or navigation speed would slow down, affecting the overall network experience.

Solutions

As part of its commitment to technological advancement, the school has upgraded its entire network infrastructure cabling from CAT5 to CAT6. This transition not only embraces the latest technology but also minimizes potential interference. Subsequently, the school strategically installed 48 Zyxel WiFi 6 access points in key areas such as libraries, classrooms, and common spaces to ensure comprehensive coverage. These APs are proven to provide more efficient and secure connections, catering to over 3,000 students and teachers who rely on network stability for increasingly common online activities. To streamline network management, the school implemented Zyxel's Nebula solution, enhancing the school's ability to provide timely access to individuals as needed and offering precise control over the authorization process.

Customer
CLQ School

Industry
Education

Location
Piracicaba, Brazil

Partner
Delta Cable Americas (DCA)

Customer Background
CLQ School fosters comprehensive education from kindergarten to high school, ensuring meaningful knowledge building journeys. Its teaching promotes a love of learning, research, technology with academic excellence.

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Beyond addressing connectivity issues, the solution surpassed our expectations, offering the flexibility to create necessary networks to meet the demands of parents, students, and users at large."

Douglas Bissoli, IT Staff
CLQ School

Results

The entire installation process was quick, and the school found the interface user-friendly. The Zyxel installation is consolidated into a single interface at the school, enhancing both ease of use and intuitive operation. Bissoli notes, "Nebula allows for the quick identification if any access point or internet device experiences signal issues within Nebula." The cloud networking solution provides a comprehensive overview of the equipment in question, enabling proactive troubleshooting. This centralized and intuitive interface not only simplifies network management but also enhances security measures, fostering a safe digital environment for students and teachers alike.

The focus on rapid deployment and improved student accessibility throughout the school has led to entirely positive outcomes. The new infrastructure has not only resolved existing connectivity problems but also set the stage for more interactive and collaborative teaching approaches. The school is pleased with its robust and dependable network, which is vital for supporting contemporary digital educational tools.

- Efficient network management and enhanced security
- Robust wireless network to over 3000 users simultaneously
- Unlocking student potential through modern digital educational resources

Product List

- WAX610D WiFi 6 Access Point
- NWA90AX WiFi 6 Access Point

- GS2220-28HP/50HP L2+ PoE Switch

- USG FLEX 500 Firewall