

CASE STUDY



OCC's Rugged Products Help With Central Valley School District Technology Infrastructure Upgrade

When Central Valley School District, a K-12 public school system in Spokane Valley, Washington, decided to upgrade their technology infrastructure, they knew they were taking on a large task.

After five years of relatively flat enrollment, the Central Valley schools began to feel the effects of the strengthening economy with back-to-back enrollment increases of more than 200 students for 2 years straight. With more than 12,000 students in 24 school locations across the district, a district-wide retrofit and new infrastructure was necessary to accommodate the growing school system and its technological demands.

The technology infrastructure update was part of a larger June 2012 Capital Facilities Plan initiated by the school district. Initial research for this plan determined that only 8 out of 24 school locations were considered "good with minimal concern" in relation to their Tech/Electrical/Data needs. The school system wanted to fully integrate all aspects of technology including communications, telephone, security and computing into a consistent and unified system across all facilities. These updates included a secure wireless environment with a minimum 10-gigabyte bandwidth to each classroom, a one-to-one ratio for computing devices to students in each building and server capacity to support these networks.

In addition, part of the Capital Facilities Plan required the district-wide installation of access-control and security camera systems to provide additional and increased security measures for students and staff. Cameras were installed at facilities that did not currently have cameras and all district facilities were upgraded with similar camera systems and configurations, for a total of one hundred IP cameras. Additional connect points were installed in anticipation of future camera placements.

Central Valley School District chose Northwest Information Services (NIS) as their engineering consultant. NIS provided the initial in-depth analysis of the physical infrastructure of all the facilities, determining the need for significant upgrades. The NIS team chose Electric Smith, of Spokane, as the contractor to install new copper and fiber cabling within each facility. Optical Cable Corporation's rugged Cat 6A cabling was ideal for the project's 850 wireless access points.

One of the challenges faced by the team was completing the installation of this new infrastructure beginning in December of 2013, while school was in session. One of the advantages of OCC's cabling is its strength and component protection during difficult or tight pulls. Electric-Smith installers were able to navigate the cable pulls through existing areas with minor disruptions to the classrooms.

Once the infrastructure was in place, OCC's pre-terminated MT cable assemblies and cassettes were used to ensure reliable performance with streamlined connectivity. Their sturdy constructions held up well during the installation around existing spaces and once installed, were easy to test. Additionally, a number of OCC's other products were chosen for this project including rack mount fiber panels, Cat 6A patch panels, jacks, OM3 MT assemblies and cassettes. Using the easy to install, pre-terminated MT assemblies and cassettes allowed for significant labor cost savings.

Sources:

http://www.cvsd.org/documents/Public_Information/Facilities/2014-04-FocusFacilities.pdf

http://www.cvsd.org/documents/Public_Information/Facilities/Capital%20Facilities%20Plan-Approved%20Plan-June%202010%20%282%29.pdf



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