A key part of providing a high-quality educational experience is having facilities that are safe and secure. In the last decade, schools and universities have carried out many steps to make facilities safer for students and staff members. Many of the improvements can be attributed to greater awareness of the need for security as well as the availability of new and improved tools to enhance campus safety.

Access and key control is a challenge for schools and universities large and small, as one misplaced key represents a crack in the armor that protects against unwelcome intruders. As a result, a growing number of school administrators are turning to smart key solutions to not only improve security but to reduce vandalism and theft on their campuses.

Smart key solutions provide budget strapped educational facilities with the ability to increase access control without the need for structural changes or hardwiring. This type of system is comprised of electronic locks, padlocks, smart keys, and management software. The power for the locks is supplied by the battery in the key. The smart key management software offers system managers the ability to program the electronic keys with access schedules, view a log of lock and key activity, and create custom audit reports.

Established in 1851, the University of the Pacific was the first chartered institution of higher education in the State of California. Today, the private university has three campus locations across the state of California and offers highly personalized undergraduate and graduate programs. Pacific prides itself on taking a proactive approach to security. “Security is not a problem, it’s a solution. When we deploy security, we look to deploy solutions that allow us to reduce the potential for problems,” states Robert Miller, University of the Pacific Card System Manager.

Pacific implemented an online and offline card system for securing the residential facilities on campus. The card system improved security and accountability; however, many areas on campus were still dependent upon mechanical locks and keys. “There were thousands of mechanical locks and keys out there with 24/7 access to our buildings. We had no clear accountable way to know if these keys were lost, or being copied and used by unauthorized people,” says Miller. Even with advanced technology in mechanical keys and locks that have assured your key
can only be used at your organization, there typically is a key or master key that can be as easily lost as with any traditional mechanical key. If a key is lost, your security becomes compromised and the only option is to go through the expense of re-keying the facility or ignoring the lost key entirely.

The university began looking for a solution that would work hand-in-hand with their current card system and increase key control, but faced some challenges. “A number of the buildings have extremely thick concrete walls and ceilings that create serious cabling and pathway issues and many of the buildings have historic significance so preserving appearances and structure is very important to us,” states Miller. After extensive research, the University of the Pacific chose the CyberLock smart key solution to upgrade their mechanical system and increase security. “The electronic lock system incorporates our existing lock hardware so we do not have to drill through the doors and walls of our buildings. We convert our mechanical locks to electronic locks simply by replacing the cores with electronic cores,” comments Miller.

With the CyberLock system in place, each person’s key is programmed with their own individual access privileges and time schedules. If someone loses the electronic key, the key can be quickly blocked from the system, making it inactive. “We will never have to go through the time and expense of re-keying our facilities again,” states Miller.

Both the card system and the smart key system work together to enhance the security at the university. For example, the Wellness Center at the Stockton campus utilizes both systems to ensure only authorized people are entering the facility. “We have card access on the exterior of the building. When someone arrives to work they swipe their card and then proceed to a key lockbox on the wall where they insert their electronic key, which unlocks the front door so they can enter the online building. This is all communicated to the online system. If someone arrives early, the building cannot be accessed because they can enter the online building. This is all communicated to the online system. If someone arrives early, the building cannot be accessed because they are out of schedule,” Miller continues, “Additionally, the facility has a prescription medication cabinet area. Before we incorporated the smart key system, we were not sure who had keys to the building or who was accessing the prescription medication cabinet. Although the cabinet was supposed to be locked at all times, occasionally someone would either forget to lock it or leave it open because they were returning shortly.”

The University of the Pacific’s vision to have the best security measures in place to protect not only their campus facilities, but their students and staff members, is one to admire. “Security is a comprehensive, multifaceted plan that is implemented at various levels, from education and public awareness to enforcement and penalty. We are not complacent that everything is now safe and secure because we have the card and smart key systems in place. We follow up with ongoing training, management, and enforcement,” concludes Miller.

Toppenish School District, located in the heart of the Yakima Valley in Washington State, had been experiencing key control issues and wanted to become more proactive about their approach to security. The district serves approximately 3,300 students and operates 9 schools including a preschool cooperative, 4 elementary schools, a middle school, an alternative school for grades 7-12, a high school which houses grades 9-12, and a virtual school and WebAcademy. Over the years, members of the community had been given keys to access the school facilities, which became a big cause for concern. “We eventually lost control of our system and had no way of knowing who had access to the school grounds,” states Scott Kallenberger, Toppenish District IT Manager.

In addition to keys that were unaccounted for, Toppenish was experiencing loss of product from the school kitchens. “There was no accountability; even with cameras we couldn’t tell who was stealing because there were so many people coming and going,” states Kallenberger. With the mechanical lock and key system, school officials had no effective way to control and audit access to the buildings. The school needed accountability so that when incidents occurred, they would know who was there and when.

In search of a way to regain key control and provide a safe and secure environment for students, staff, and teachers, Kallenberger attended a local school conference where he was introduced to the CyberLock smart key system of electronic locks and programmable keys. Kallenberger was impressed with the system’s capabilities and immediately recognized the benefits CyberLock had to offer his district.

Toppenish researched other security systems but ultimately chose the CyberLock system because it was affordable and no wiring was needed for installation. “We looked at other key systems but the cost benefits just weren’t there. The price per door is a lot less expensive with CyberLock and it’s easy to manage,” Kallenberger said. Toppenish has installed CyberLock cylinders in all the exterior doors throughout the district, as well as their high risk areas including their data rooms, gymnasiums, and gates guarding the recreation fields.

In order to keep staff accountable, Kallenberger has programmed the keys to expire once a week, requiring staff to re-authorize their keys and download the audit trail stored in the keys. “The software creates different access reports; I send one out to the athletics director so he knows who has been accessing the gym and recreation fields, and I send another report to our maintenance supervisor because he uses the reports to ensure the janitorial staff comes to work on time,” said...
Kallenberger. “We have had a lot of issues with lights being left on in the gymnasium and supplies being taken from the kitchen, but ever since we installed CyberLock those issues have been eliminated.”

Administrators, teachers, and other full-time staff are assigned their own keys, but seasonal coaches and substitute teachers are not. “Our substitute teachers are provided a key when they report to the administration office. The administrator programs the key with the access permissions necessary for the sub to do their job. At the end of the day, the key expires,” Kallenberger said. “Our coaches are seasonal so we issue a temporary key instead of a full-time key. The coaches are given a PIN code which gives them access to a key vault that stores unprogrammed electronic keys. When a PIN code is entered into the vault a single key is programmed with their access permissions.” In addition, Toppenish has provided a CyberKey smart key to the local fire and police departments. Their key is programmed as a master key so if an incident arises they have full access to the district facilities.

**UTILIZING TODAY’S TECHNOLOGY**

With today’s advances in security systems, schools and universities have the ability to implement integrated systems that provide physical security, accountability, and, most importantly, key control. Both the University of the Pacific and the Toppenish School District have taken advantage of the greater affordability and availability of technology to bolster campus safety.