

## **PLUGGED IN: to SCHOOL SAFETY**

I'm sure we've all heard (or lived) the all-too-familiar refrain that begins something like "if it plugs in, then it's I.T.'s problem..." While there may be a scant bit of hyperbole in the statement, today it more and more rings true as internet-connected devices (IoT) proliferate to the nth degree around us and into our network environments. And while IT has always been central to schools' digital security, one area in particular that has recently shifted to an IT area of responsibility is an especially critical one; school campus safety and security.

Since the still inconceivable tragedy at Sandy Hook, nearly 90% of US schools and districts have taken steps to change security policies, personnel, and facilities in effort to make their school campuses the safe haven they were once believed to be. In addition to, and as a direct result of these changes, technology has taken on a much larger role in assisting with the physical safety and security of our schools in recent years. New and existing technologies have been developed and adapted to directly address districts' mission of keeping their campuses safe. According to the RAND Corporation's 2016 publication "The Role of Technology in Improving K-12 School Safety" ([https://www.rand.org/pubs/research\\_reports/RR1488.html](https://www.rand.org/pubs/research_reports/RR1488.html)), there are no fewer than twelve (12) categories of school safety technologies in use to varying degrees in US schools. While each district needs to survey and assess their own risk areas and determine which solutions best address their specific needs, there are several widely-used technologies to consider that, combined with policies, procedures, continuous staff training, and collaboration with public safety organizations, can help strengthen our schools' safety initiatives.

### **Access Control**

In addition to natural and constructed barriers that direct and control where a person must go to enter a school facility, electronic access control systems are becoming more prevalent in further restricting school access to authorized persons. These technologies include electromagnetic door and gate locks that can be remotely secured via a variety of credential types, as well as rapidly unlocked during an evacuation. The shift to IP-based access control solutions has unlocked an entirely new set of possibilities. Being an IoT device, these systems are able to connect with other security systems such as IP security cameras, identification systems, and emergency alert systems, creating a multi-layered solution to securing physical access to and from the campus.

### **Visitor and Identification Management Technology**

Every school requires visitors to sign in at the front desk, but simple pen and paper doesn't quite cut it anymore. Visitor management and/or ID management systems let administrators know who is in the building, where they are, and distinguishes those who have authorized access from those who do not using a variety of connected data sources. Some of the more advanced features of these solutions make use of facial recognition and biometric identification technologies.

### **Video Surveillance**

Not a new technology, but IP-based security cameras and video management systems have ushered in much more effective options for securing and monitoring critical locations on campus. Advanced motion detection analysis and facial recognition features, as well as high-resolution imaging and interconnectivity with other security systems, have made video surveillance systems a key element of most districts' safety and security initiatives.

### **Emergency Notification Systems**

Effective school communications systems now reach far beyond the typical classroom paging of generations past. Emergency notification features layered onto school and district-wide communications platforms are the established norm, and the integration of IP-enabled endpoints and interconnectivity with other physical systems have proven to be effectual additions to schools' safety procedures. Panic buttons, digital signage, 911 alerting, enhanced broadcast messaging, facility lockdown and evacuation management...these are just a few of the valuable tools that current emergency notification systems can bring to the table. The ability to instantaneously notify anyone, anywhere, by any modality is an absolutely critical element of any school safety plan.

### **Tracking Systems**

GPS systems for bus route tracking and monitoring, and RFID systems for student location tracking while on campus and when boarding/deboarding school buses have grown in adoption in recent years. While some privacy concerns have been raised with regard to this type of monitoring, the ability to track student ridership and presence on school grounds can greatly improve emergency management, and allow for a rapid response to potential incidents.

### **Anonymous Tip Systems**

"See something, say something" app-based campaigns are spreading, and for good reason. These types of "tip line" campaigns are generally more effective than a phone hotline or online form solution and often lead to better response rates. An app-based system allows students the opportunity to accompany their tip with a photo or video of the incident they are reporting, and some can even integrate into existing notification systems for time-sensitive alerts. Anonymous systems such as these are also considered a less controversial alternative to active social media monitoring.

While not an exhaustive catalog of school safety technologies, those discussed here are some of the more prevalent and proven of those available today. As is the case with most everything we deal with, technology can only help if you've identified your needs, know what will work best for your specific situation and environment, and have a well-vetted plan for implementation and management. It is only a piece of a much larger mission, but it is a piece that can help tie the most important elements together into a cohesive and effective strategy for school safety. Above and beyond all else, our schools must be that safe haven, where students can feel secure and learn without worry.

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