

The background of the top half of the page is a blurred photograph of a school hallway. A woman in a white sweater and blue jeans is walking towards the camera on the left. In the background, several students with backpacks are walking away. A staircase with a metal railing is on the right. The Siemens logo and tagline are overlaid on the top left.

SIEMENS

Ingenuity for life

Securing our students

Five keys to help create a safe, secure school environment

White Paper

At Siemens, we believe that a perfect place for learning is one where students, staff, faculty, and parents all feel they are safe, secure, and comfortable, so they can focus on the core mission of education. Today, this is a bigger challenge and a bigger responsibility than ever.

The average American student spends about seven hours per dayⁱ in school, making it the place they spend most of their time every day. But since 2009, the U.S. has experienced 288 school shootings, and an average of one per week in 2018 aloneⁱⁱ.

In this white paper, we will present five keys to success to help create a safe, secure school environment, and we will explore how the right partner in education brings dedicated focus to create and implement the right strategies and technologies. It's a community effort, but together, we can secure our students.



Understanding risks

Over the two decades since the Columbine High School shooting, the risks to our students has never been more clear. Parents, educators, and administrators all expect and strive to achieve the least exposure to risk and danger—all while balancing the need for an open, comfortable, welcoming place for students to learn.

From high-traffic, high-activity times and unsupervised building visitors to trespassing, before and after-school programs, and community use of buildings, our schools face unique risks. Despite these threats, maintaining that openness is essential to the success and wellbeing of our communities.

As incidents continue to happen and these risks continue to evolve, the understanding of security is more prevalent and relevant than ever—and it's expected by the public.

The benefits of practice

Creating safe, secure, comfortable schools starts with effective emergency plans and processes. What do you do when there's a fire alarm? A problem with a campus lab environment? An active shooter? If the building must be evacuated, where do you meet and how do you account for people?

The expectation is that administrators will know exactly what to do in each of these situations. Consider how an athlete gets

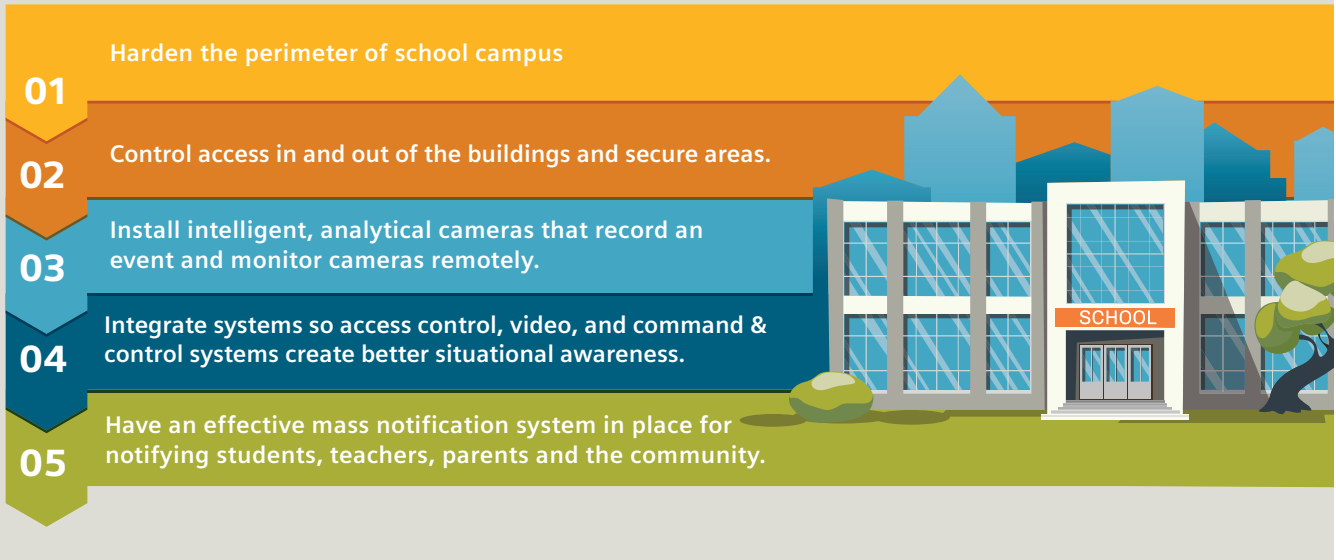
ready for an important game: she practices game situations, runs drills, and studies her opponent. Schools must follow athletes' lead. Securing our students isn't just about having an emergency plan, it's about practicing that plan, running drills, and studying the research so in the event of an emergency, everyone can react appropriately. The time to understand and learn these processes is not during an emergency.

In fact, the National Fire Protection Association (NFPA) has found the rising number of hostile school incidents so alarming that they have developed a new provisional standard: NFPA 3000™ (PS). This standard is designed to identify minimum program elements needed to organize, manage, and sustain Active Shooter / Hostile Event Response (ASHER) programs to reduce risks, effect, and impact on schools and other organizations.

To take a proactive approach to emergency management and loss prevention and ensure a reasonable level of security for all students, staff, and faculty, schools must strategically align security into their daily operations. The other component to emergency plans that protect people and property, however, is communication. Administrators must be able to get the right messages out to the right people at the right time so that law enforcement can respond, so students know where to go and what to do, so parents get accurate information.

5 keys to know

Creating a safe, secure school environment



5 keys to helping create a safe, secure school

In the event of an emergency, situational awareness is paramount; it's about knowing what's going on in and around the buildings so you're prepared to identify, process, understand, and respond to all of the information at any given time. In addition, we present five keys to helping create safe, secure schools that remain a welcoming place for students to learn:

1. Harden the perimeter of school campus.

Consider natural barriers and other fortifications to protect the outside perimeter of your school and keep intruders out. Technologies can play a role in perimeter security too.

2. Control access in and out of buildings and secure areas.

Access control systems will include a range of technologies that control access in and out of the schools while also helping harden the school perimeter. These systems will:

- Generate an alarm if a door is propped open or there is unauthorized access
- Help control entrance to the school and other secure areas
- Create a record of who enters or leaves the building or area

- Integrate with video for verification and response or forensic review
- Integrate identity and visitor management to connect access using student, parent, and staff directories

Access control is an ideal way to balance the need for an open and welcoming school that protects the people inside.

3. Install intelligent, analytical cameras that record an event, and monitor cameras either at school district or remotely.

The latest video surveillance technologies rely on smart cameras that provide high-quality, searchable digital video. Today's intelligent cameras can analyze the scene and recognize people and objects that are out of place and inconsistent with typical school activities.

For example, when the school perimeter is properly set up and configured with the intelligent video system and license plate recognition, the system will recognize when a vehicle has driven around the school multiple times over the course of a day and flag the incident for additional investigation.

Gone are the days of setting up a single person to watch the security cameras; these new systems automatically detect motion and begin recording, which helps activate

emergency plans when necessary and can simplify followup investigations.

4. Integrate systems so that access control, video, and command and control systems work together to create better situational awareness and alarms.

In the event of an emergency, every second counts. Many schools may rely on a range of disparate systems to monitor and manage access control, video, and other building systems—and most of these systems require a high level of human interaction. As a result, the disconnected nature of building systems increases the risk of human error, delays response times, and impedes the ability to respond effectively to an emergency.

By integrating these systems, however, administrators gain more visibility and therefore better situational awareness. The addition of outside solutions, such as shot detection devices, make the integrated system even more robust and supportive of effective emergency plans.

5. Have an effective mass notification system in place for notifying students, teachers, parents, and the community.

Research shows that people are more likely to take a warning seriously if they receive it more than once and from multiple sources. The right mass notification system will quickly, reliably, and accurately get emergency and routine communications sent to and received by the right people, no matter where they are or what they are doing. These solutions, properly implemented and configured, can support schools' efforts to comply with the NFPA 3000 provisional standard, as well.

Moreover, the right mass notification solution will serve as the integrator for the range of building systems—from fire safety and security to building automation. It will leverage and integrate existing infrastructure for improved safety, security, and control.



A partner in education

It is time for schools across the U.S. to elevate their expectations for their building and security providers. Instead of simply providing access cards and surveillance cameras, schools should instead rely on a partner who understands that the very mission of today's schools is to create the perfect place for learning.

Siemens can partner with you to evaluate your specific needs around safety and security, including the NFPA 3000 provisional standard, to protect your students, faculty, and staff and to coordinate an effective response in the event of an emergency situation. From technology planning, design, and implementation to commissioning, software maintenance, and system service, Siemens becomes a partner in education, helping create a comprehensive security strategy that helps keep schools safe, secure, and comfortable.

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Sources

ⁱ NCEE.org. <http://ncee.org/2018/02/statistic-of-the-month-how-muchtime-do-students-spend-in-school/>

ⁱⁱ Analysis of news reports. <https://www.cnn.com/2018/05/21/us/schoolshooting-us-versus-world-trnd/index.html>