

Classrooms Compromised

Don't let the human element undermine safety improvements

By Josh Shoulta
Staff writer

When Kentucky students returned to the classroom this fall, they likely found changes designed to ensure their safety. After last year's shooting at Marshall County High School and others across the country, school boards

and administrators have been re-examining their buildings and procedures all in the name of creating a safer learning environment.

Because most Kentucky school districts do not have the luxury of building new facilities, school boards and administrators must prioritize what security enhancements will be most

effective. But no matter what improvements are made, it's up to humans to maximize their impact.

Even in the most secure facility, inattention to proper procedures can leave schools vulnerable. Architects, policy advisers and safety experts discuss some of the best school safety features and how common human errors can undermine them.

Security cameras

Sight lines are crucial in safe school design.

"Particularly in older facilities, you will see hidden alcoves, nooks and twisting corridors that feel like a maze. It's difficult to monitor those," said Anthony C. Thomas, vice president of Clotfelter-Samokar. In newer buildings, long, unobstructed hallways, protective glass and safety mirrors all serve to provide staff with clear views.

Adding security cameras can minimize blind spots, allow staff to see through walls and peek around corners as they follow a guest through the building. The mere presence of cameras can decrease the likelihood of an event.

"If you have someone who is looking at a camera, or seeing his or her face on a monitor, that makes a person think twice about his or her actions," he said.



Human Element: Is someone watching?

The advantages of security cameras come in the real-time monitoring, but that requires time and attention that may not be available during the most chaotic parts of the school day, such as arrival, dismissal and between classes.

Cameras should not be thought of as a tool to be used only after a crisis, said

Ron Murrell, a senior principal at RossTarrant Architects.

"We don't want them to be seen strictly as something we use to just identify someone or something after the fact," he said.

When the cameras are rolling, are there procedures for observing them and, if necessary, responding to a situation as it unfolds?



"The choices that a board makes with regards to new or existing facilities and the security issues they face, need to be thoughtful, well-planned and executed efforts. We can give you the tools, but **without the human side** of it, involving all those parties in conversations for the solutions – staff, parents, students, first responders – **it will not be effective.**"

– Kevin Cheek, principal and educational planner for Sherman Carter Barnhart Architects

Security vestibules

Older school buildings, particularly those constructed in the 1960s, '70s and '80s, regularly included front entrances with a singular set of doors opening into expansive lobby spaces.

"You would walk in and you were just immediately accessible to students," said Kevin Cheek, principal and educational planner for Sherman Carter Barnhart Architects. "I think that is one of the most vulnerable areas we see in existing buildings. There are a lot of those buildings still out there, but there seems to be a huge number of people wanting to add security vestibules right now."

A security vestibule allows staff to confirm a visitor's identity in a secure area before access is granted to the school. Guests can be buzzed in and designs often include service windows that enable direct interaction between guests and the front office.

"Years ago, they were very small," he said. "Now we're increasing those sizes for larger containment areas similar to a sally port."

Larger vestibules can even double as lounging and gathering spaces, providing a comfortable and welcoming atmosphere.



Security vestibule at Pulaski County Schools' Northern Elementary (Photos courtesy of RossTarrant Architects)



Human Element: Holding doors for guests

Schools are charged with walking the fine line between following proper security procedures and fostering a hospitable environment. Human nature prompts us to hold the door open for the person behind us. This simple, well-intentioned act can compromise otherwise secure entrances.

"Members of a school community must

understand and buy into why it is so important to observe proper protocols," said Kentucky Center for School Safety Training Coordinator Dan Orman. "The inconvenience or perceived rudeness of not opening a door for a stranger pale in comparison to someone with ill intent gaining access to a school."

Encouraging students, parents and even faculty to follow this rule can represent a cultural challenge, not just a procedural one.



Before and after photos of vestibule installation at Simpson County Schools' Franklin Elementary.



"I certainly feel it is very feasible to have an aesthetically pleasing, functional and secure school building all at the same time. In my personal opinion, **once you have the standard security elements in place, it becomes about procedure and protocol.**"

— **Anthony C. Thomas**, AIA, LEED AP and vice president of Clotfelter-Samokar Architects

Door locks

Student entrances and exits are usually limited to main doors, but school buildings are peppered with dozens of lesser-used doors. Gymnasiums often have exterior doors in every corner. Exits can be found in many stairwells and maintenance areas often have bay doors. Without the ability to monitor all these points of access, installing ADA compliant door hardware is a necessity, said Murrell.

"In some of the older buildings, I have seen instances where doors don't hit the strike or locking mechanisms don't really work," he said. "Some doors can appear locked, but you can walk up and give them a good jerk and they will open right up."

Discouraging propping doors limits opportunities for unauthorized access. Objects used to prop open doors can also damage the hardware and keep the door from locking, he said.



Most school buildings have dozens of doors in addition to the main entrance, including doors to the gymnasium. (Fotolia.com)



Human Element: Easy access to keys

Widespread access to keys can expose schools to great risk.

"Too often schools will talk about half the people in the county having a key to the school. Over time, they get passed out to get into a building early for a school program, or a practice on the weekends, or allowing someone with good cause to be in to the building," Murrell said. "Those keys end up being duplicated or they are not properly monitored."

Because of this, schools are transitioning to electronic locks and card readers which

can quickly erase a history of excessive key distribution. For key management best practices, most school districts in the Commonwealth need look no further than their procedural manuals.

"More than 160 districts have some version of an administrative procedure which addresses distribution of keys," said Katrina Kinman, KSBA director of policy services.

The procedure (Administrative Procedure 05.5 AP.1/Building Security) states: "the number of keys to outside doors will be limited and issued only to those persons required to enter the building after hours on a regular basis."



A student passes through a metal detector as she arrives to school at Fayette County Schools' Frederick Douglass High School. (Photo courtesy of Fayette County Schools)

Metal detectors

Metal detectors are one of the hottest topics in school safety. Schools across the state are installing metal detectors at entrances or buying portable metal detection wands.

In Marshall County, metal detectors were added to three schools including the high school where in January two students died and 18 were injured in a shooting.

In Fayette County, the school board approved a \$13.5 million school safety initiative that includes metal detectors for every middle and high school.

Like cameras or school resource officers, experts say metal detectors can serve as a deterrent.



Human Element: Training staff to operate equipment and respond appropriately

Increased use of metal detectors and wands has come about largely out of the need for districts to show that they are doing something, Cheek said. While detectors can be effective when used properly, Cheek believes there are challenges.

"How do we position qualified individuals there in the event that we find a child or an adult carrying a weapon?" he said. "Who is trained to contain and detain that threat until such time that law enforcement or an SRO can arrive? That's a huge issue." ■



"We're trying to create an environment that says both we care about you and want you to be comfortable, but **we've got to provide security for everyone.**"

— Ron Murrell, AIA, LEED AP, senior principal at RossTarrant Architects