Weighing the Value of Evolv Express® System Integrations and Evolv Insights® for K-12 Schools

8 Ways to Use Security Screening Data from Evolv Insights® and Integrations to Improve School Safety

School Safety and Security a Top Concern

According to a recent survey, fewer than one-third of parents feel their K-12 students are safe at school. A little more than one-tenth of parents have moved their children to new schools due to safety concerns, and another one-third have considered doing so.[1]

The pandemic lockdown seems to have exacerbated school violence. Data from the National Center for Education Statistics revealed that a total of 93 shootings with casualties occurred at public and private elementary and secondary schools during the 2020-21 school year, the most since data collection began.[2] The number of school shootings with casualties is a startling number, especially when compared to the number that was recorded when data collection began in 2009-11.

School shootings and violence have a negative impact on the mental health of students, staff, parents, and communities. As concern about school shootings increases, so does anxiety, panic attacks, and other mental health problems.[3]

Failings of Metal Detectors

In response to school gun violence, many K-12 schools are looking at ways to bolster their security. Walkthrough and hand-held metal detectors are often cited as an option. But these legacy approaches to weapons screening are simply not a good fit.

First, they cannot handle the volume of students, staff, and visitors who need to pass through security in a limited window at the beginning of the school day, not to mention the invasive nature of body scanning children and young adults. This results in long queues in front of school entrances that create soft targets themselves, in addition to delaying students from getting to their first classes on time.

Second, alert fatigue is a mitigating factor with metal detectors where security personnel become less effective over time due to a high rate of nuisance alarms and the pressure to admit entrants quickly.

Third, metal detectors lack the capabilities to collect information from entrances, including alerts, rich metadata, and threat images. Similarly, metal detectors are unable to communicate with other security technologies to keep schools safe.

Fourth, metal detectors cannot distinguish between routine metallic objects that students, staff, and visitors carry all the time and real threats—which creates large volumes of false positives. In particular, security personnel are provided with no information as to the location of the potential threat when an alert occurs. This results in an invasive search of the student, visitor, or staff members.

Finally, as metal detectors cannot differentiate between weapons and metallic objects that people carry all the time, alerts can be perceived as potential bias by security personnel and the information shared with other security systems is meaningless.

[1] "School safety, learning gaps top of mind for parents this back-to-school season," Qualtrics, August 18, 2022.

[2] Veronique Irwin, et al., "Report on Indicators of School Crime and Safety: 2021," National Center for Education Statistics, June 28, 2022.

[3] Kira E. Riehm, et al., "Adolescents' Concerns About School Violence or Shootings and Association with Depressive, Anxiety, and Panic Symptoms," JAMA Network, November 1, 2021.

AI-enabled Evolv Express System

The Evolv Express® system transforms security screening, utilizing artificial intelligence (AI) to screen high volumes of students, staff, and visitors and to eliminate the intrusive nature of metal detector screening, all while improving the effectiveness of security screening by differentiating between metallic objects that pose no threat and true weapons. Real-time images and alerts show the operator where the potential threat is located, dramatically reducing the amount of physical contact required—allowing security guards to act quickly, efficiently, and unbiased. As a result, the experience of students, staff, and visitors is dramatically different with Express screening than with metal detectors, as well. Individuals entering Evolv-protected school buildings are welcomed in without stopping at the door and need not empty pockets, divest belongings, or wait in long security queues.

Another advantage that the Evolv Express unit has over traditional metal detection systems is integrated analytics. Specifically, Evolv Express enables schools to analyze weapons-security screening data to optimize their use of security personnel, configure sensitivity settings on the Express system, and demonstrate the risk impact their investment in Evolv is delivering to the school board. These analytical capabilities are available to every Evolv customer in the My Evolv Portal via Evolv Insights. As soon as an Evolv Express system is turned on and configured, Evolv customers can access and begin using Evolv Insights.

Integration with external security systems used for video management and mass notification adds further value, simplifying and improving workflows and administration for security operators. Further, these integrations accelerate threat identification and response by including the time, location, image data, type of threat, and staff requests for additional support as captured by the Evolv Express unit in real time.

8 K-12 Use Cases for Evolv Insights and Express Integrations in K-12 Schools

Following are eight ways K-12 schools leverage Evolv Insights analytics and Express unit integrations with video management and mass notification systems:

1 **Determine the Number of Students, Staff, and Visitors Entering and When They Entered.**
Count how many students, staff, and visitors enter school facilities and how many enter down to time intervals and on what days. In instances where multiple Express systems are used for ingress (e.g., a football or basketball game), school security teams can optimize the allocation of security personnel at each entrance to ensure there are no wait queues for students, staff, and visitors.

2 **Track and Analyze Weapons Detection.**
Track the number and types of weapons found, alarm rates, arrival curves, and the sensitivity setting at which the Express system was running when the weapon was detected, and at which entrance (in the event there are multiple ingress points and Express systems in use). This detailed weapons detection information enables schools to reallocate staff who assist with security screening, adjust sensitivity settings on the Express system, and reconfigure screening flows and processes for secondary checks.

3 **Track Security Screening Results for the School Board.**
Generate reports for school boards that provide information such as weapons detected and found, days of the week and time of the day when weapons are detected, security level when the weapon was found, extracurricular events at which weapons were found, and at which school entrances and facilities (in instances where multiple entrances and Express systems are used). Reports created with Insights can be helpful in proving the value of Express system investments to a school board.

4 **Identify Staff Who Need Additional Security Training.**
Track which alerts are tagged and untagged by individual security personnel to identify those who require "refresher" training on security systems and processes. This is especially important since many schools leverage teachers and administrative staff who are not security screening experts to manage the Express systems when students, staff, and visitors first arrive at school facilities in the morning. When used in this way, Insights analytics help schools sustain a high security efficacy.

5 **Assign Risk Based on Extracurricular Event.**
For schools that relocate Express systems for extracurricular events using the optional Mobility Cart, they can drill down into volume of weapons found per different school events. For example, if more weapons are detected at football games versus theatrical performances, schools may elect to have more security personnel at some event versus fewer numbers at others. Insights provides granular analysis of extracurricular events in terms of weapons found, the level at which sensitivity was set, when the threat was detected, and at which ingress point the weapon was found (i.e., if multiple entrances were used). These insights can be used to improve both security efficacy and efficiency.

6 **Streamline Secondary Screening.**
Reduce the number of false positive threat detections by pinpointing the cause of false alerts that may look like components of a weapon, and working with students and staff to minimize those (e.g., Chromebooks, umbrellas, track shoe spikes, etc.). Fewer students and visitors queued for secondary screen helps ensure that no lines form and that secondary screen experiences are positive.

7 **Accelerate Incident Response.**
Integration with video management systems (VMS) such as Milestone and Motorola Avigilon Control Center and mass notification systems like TITAN HST enables K-12 schools to share real-time video and information when weapons are detected. Synchronization of video from cameras looking at the rear or the front of the Express unit or the entrance to the school provides security operations staff with situational details for a response commensurate with the identified threat. This includes the ability to identify where a specific person is, no matter where they are located.

Through Express integration with TITAN HST, security guards can communicate the time of the threat, location of the threat, image data, type of threat, and any requests for assistance as well as share video of the incident in real time with SOC staff using integrations with VMS solutions like Milestone VMS, Motorola Avigilon Control Center (ACC), and Genetec Security Center, VMS Platform. Rules engines in the VMS solutions leverage collected weapons data from the Express unit to orchestrate chain notifications and workflows. At the same time, with mass notification integration, security staff can trigger virtual real-time threat alerts to law enforcement, teachers, administrators, students, and parents that accelerate responses to potential threats.

8 **Share Evidence with Law Enforcement**
Integration with VMS solutions streamlines the process of sharing threat incidents with law enforcement. Weapons data is married with video of the incident to provide law enforcement with a holistic "picture" of the event in question.

> "We can look at the number of students and staff passing through the Express lanes in five-minute increments. This enables us to ensure we utilize our staff efficiently and allocate them at peak entry times. We also look at the scan data so that we can understand what threats exist and use that information to make the screening process more effective."
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> - Lt. Jess McMullen, the School Prevention Resource Officer at Oak Hill High School (Fayette County Schools, West Virginia)

Start Learning About the Evolv Express System Today

While not every one of the above use cases may apply to your individual school, many of them do. The Evolv Express system creates wide-ranging benefits for K-12 schools, and the analytics of Evolv Insights and integrations with video management and mass notification systems are two that enable K-12 schools to get full value from their Evolv investments. The Evolv team is committed to the success of every customer—training and coaching them on every aspect of Evolv technology, including Evolv Insights analytics and integrations with partner video management and mass notification systems.

▶ Discover how the Evolv Express system can protect your K-12 schools by visiting Evolv's webpage dedicated to K-12 schools and watch a demo today: Click here.