Evolving Trends in Improving Safety and Security in Schools

Larry G. Holloway, CSP, MEP
President
LGH Safety Services, LLC
Kingsport, TN

Introduction

During the last 50 years many violent incidents have occurred on school properties. The worst of these atrocities invariably involves a shooting of some type where the perpetrator(s) usually take their life as law enforcement moves in to apprehend them. These incidents are thoroughly investigated and reports are issued. The single most defining moment for significant change occurred on April 20, 1999, with the shootings at Columbine High School in Littleton, Colorado. This incident was the result of more than a year of planning by two students who wanted to kill 500, blow up their school, and kill responders as they approached the school. Columbine ushered in a nationwide effort to create emergency response plans that address this particular situation and also encompass the multi-hazard approach for emergency response. These plans have been in use for over ten years and they should be updated to take into account the changes that the perpetrators have introduced, which call for a modified response. New trends continue to evolve as these perpetrators change their ways of committing these heinous acts of terrorism. They are becoming more aggressive in their activities and, therefore, the school administration and responders must continually adapt their responses to take into account these changes and improve their effectiveness.

In the years since the Columbine catastrophe, school personnel, law enforcement, firemen, emergency medical service personnel, and others have seen many changes, but has their significance been adequately communicated across the nation to each of these groups on an individual basis? These changes or lessons have been taken by many groups and incorporated into comprehensive generic emergency response plan programs. They have been endorsed or adopted by national, state, and local school organizations for use to improve the safety and security in schools. The work that remains to be done is for the school community to take these programs, customize them for their unique campuses and incorporate the new advances into them on an annual basis. Many schools have embraced these programs and used them to their advantage to update their plans to bring them up to the latest thinking of the safety community.

At the same time, there appears to be reluctance from a significant number of school systems to use these updated programs. There may be the feeling that since a generic plan is in place, there is no more work to be done because the minimum standard has been met. The reasons vary but a false sense of security may be conveyed to the public that schools are doing what is necessary to protect the students and staff from catastrophes. One reason has been the denial that an incident of this magnitude could occur to a school in their system. The lack of resources is another reason. Emergency response is a continuing effort that requires annual reviews and updates. Schools are so regulated that every effort is prioritized in order that they are

not identified as underachievers, and safety can take a back seat. A process is described that shows how these obstacles can be addressed in an efficient and cost-effective manner.

This paper is divided into three distinct parts. The first addresses the steps schools need to take to identify their unique strengths and improvement opportunities. These lessons have been learned throughout the years since Columbine. The second reviews how these lessons are incorporated into new or existing programs that have been developed or upgraded by various organizations for school systems. The third addresses the approach schools can take to use these programs to improve their overall safety and security, and to meet the goals, requirements, and expectations of their respective governing bodies. A method that can be used to assess the effectiveness of these plans will also be shared.

"Lessons Learned" Categories

The lessons learned from incidents and exercises have been compiled in this section. The predominate thought that incidents would provide the same list of lessons learned has not been substantiated. In fact, the review of many incidents and exercises has provided new categories and elements. Essentially, every review, whether it is of an incident or an exercise, has provided at least one unique improvement opportunity that was not identified previously. The differences in the campuses, structures, and specific procedures account for the uniquely identified elements for improvement. These must also be incorporated into the update process. As improvement opportunities are identified and implemented, the perpetrators also change their methods or modus operandi.

The Virginia Tech catastrophe provided a change in which the perpetrator chained the doors to the building so no one could exit and the responders were delayed in their entry. This technique had not been used previously.

Three years ago, two new scenarios surfaced. One involved a teacher who was informed that he was not going to be rehired for the next year. The students were dismissed that day at noon because of snow and the teacher went to his vehicle, retrieved a handgun, lured the female principal and assistant principal into the office, and shot them. This was the first time a teacher had shot an administrator, and tenure was a major part of the issue. In this state, teachers must be notified in March if they are not going to be rehired but they are still under contract to finish the school year. In industry, when a person is going to be released they are usually escorted off the property immediately. The school dismissal policy in this particular state was changed to notify teachers of their employment after the school year ends.

The second incident involved a tenure issue also but this time it was a female professor at a university who was notified that she would not receive tenure and, therefore, become unemployed at the end of the school year. She was attending a department meeting with her peers and department head when, after about twenty minutes, she pulled a gun and started shooting those in the room. This was the first time that a female had become an "active shooter,"

Just late last year with the massacre in Newtown, Connecticut at the Sandy Hook Elementary School yet another chapter was written in the book of unique means used to carry out these acts of terror. This was the first documented incident of a person shooting their way through secure doors to get into a school and commit a heinous act. This incident is the latest reason for school systems to continually review their emergency response plans to ensure that they are current and that they address these new methods of creating terror.

The categories of the lessons that were learned from these incidents and exercises are listed below:

<u>School Security</u>
- Entrances
  - Main entrance(s) control
  - Other entrances locked and monitored
  - Identify exterior doors
  - Identify four sides of building (for emergency responders)
- Check-in
  - Main office area clearly marked and easy to find
  - Visitors required to pass through main office
  - Visitors must sign in and sign out
- Protocol of school visitors
  - School personnel trained to assess/address all visitors without badges
    - Routine
    - Confrontational
- Badges
  - Badges required for all except students
  - Badges for volunteers, parents, maintenance/construction workers
  - Uniformity of badges
    - Visitor
    - Volunteer
    - Substitute (Do they get keys?)
    - Workers/maintenance/construction
- Remote access to school by emergency responders
  - Knox box (special lock box on exterior of building, similar to safe deposit box at a bank)
  - Forced entry
  - Custodian assistance
- Property Perimeter
  - Fencing
  - Gates (are they locked?)
- Communications
  - Within School
    - Telephones (for bomb threat, do NOT use cell phones, cordless phones, walky-talkies, or 2-way radios)
    - 2-way radios (Do NOT use during bomb threat)
    - Walky-talkies (Do NOT use during bomb threat)
    - PA System (OK to use during bomb threat)
    - Internet (e-mail, video) (OK to use during bomb threat)
    - Megaphone (questionable use during bomb threat)
    - Runners (usually not effective when needed)
    - Video Surveillance (OK to use during bomb threat)
      - Monitors in secured room and easily disabled
    - Playground
      - Speakers

- Lockdown policy
- Assembly point(s)
  - Outside School
    - Central Dispatch (never hang up)
    - Description of intruders (number, clothing, sex, guns, etc.)
  - Disabled Communications
    - Vulnerability assessment (do NOT move unless notified otherwise)
  - Parent/Guardian
    - Handbook (First day of school)
    - Special phone system (Reverse 911, Parent-Link, etc.)
    - Website
    - TV/Radio
  - Public communications (protocol – who approves release?)
  - Media communications (Who approved?)
- Intruder in the building
  - Unauthorized entry
    - School action policy
  - Gun shots
    - School action policy
  - Lockdown
    - Locking of doors
    - Drapes/paper rolls at windows in doors
    - Window blinds
    - Telephone locations in classrooms
    - Custodian evacuation
  - After hours
    - Custodial response (live-in custodian)
      - Remain in apartment
      - Exit building without entering school
        - Police dog could be released inside school for search
    - School security guard
- Administrative confrontation
  - Student fight
  - Intruder with gun
  - Shots fired
  - Fail-safe actions (timeline actions)
- Fire alarm sounds after school in lockdown
  - Stay in room
  - Fire doors
  - Cover window in door
  - Seal door with towel (wet, if possible)
  - Sprinkler system
  - Fire rating of classroom doors
- Evacuation
  - Special code or message to permit evacuation
  - After lockdown - initiated when school administrator and law enforcement officer go door to door
- Assembly points

- Internal causes (excluding fire in school, bomb threat, chemical release, etc.) (one location preferred for each situation)
  - Locations
- External causes (i.e., local industry incident, HAZMAT spill (cars, trucks, trains, or airplanes))
  - Locations
- Hazardous Vapor Release (HVR) Shelter
  - HVAC shutoff
  - hardened area
- Training opportunities
  - 2-way radios
  - credibility code
  - evacuation drill – going to assembly points (alternate to each)
- Audits/assessment activities
- Additional exercises – five-part process
- Orientation seminar
  - Drills
  - Table top exercise
  - Functional exercise
  - Full-scale exercise

School Safety Program Providers

Many organizations have developed their own programs that incorporate elements of existing programs or use lessons they have learned from various resources to improve or update existing programs.

Each of these programs is based on the four major phases of emergency management (prevention/mitigation, preparedness, response, and recovery) as defined by the Federal Emergency Management Agency (FEMA). This is a cyclic process where each of the four phases is done in the listed order for maximum effectiveness. This is an evergreen process where it is continuously reviewed and improved.

Prevention/Mitigation
This is the first step in the process where a complete hazard identification assessment is conducted, which lists the risks associated within the system and each facility. The strengths and weaknesses of each system and facility must be identified. The goal is to decrease the need for response by eliminating potential hazards to life and property. The emergency response plan is created or updated based on the findings of this phase of the process. This is the step where the unique evolving trend items are first plugged into the process and addressed from the standpoint of eliminating them or minimizing their impact.

Preparedness
This second step builds on the information gathered above. When hazards cannot be eliminated, they must be accommodated in the emergency response plan by planning for the worst-case credible scenarios. These plans usually address the six to ten universal emergency procedures that are identified during the assessment phase. Many additional elements are incorporated into the plan, which facilitates a rapid, coordinated, effective response when a crisis occurs.

Response

The third step is dedicated to the steps needed to resolve a crisis, based on the emergency response plan that was developed for the facility. This turns out to be a test of the thoroughness of the assessment and the effectiveness of the elements incorporated into the emergency response plan. The four groups (school personnel, law enforcement, firemen, and EMS) that work together in a school emergency are utilized to their maximum to resolve the crisis.

Recovery

The fourth step has the challenge of quickly returning the facility and staff to a learning environment after the crisis is resolved. Recovery also sets the tone of what needs to be done to improve the emergency response process for the facility and system. This four-phase process is cyclic in nature and the goal is always for continuous improvement over time.

There are many groups that have developed emergency response programs for schools. FEMA contracted for the development of the Multi-Hazard Emergency Planning for Schools program. This program is taught as a 4-day course at the Emergency Management Institute in Emmitsburg, Maryland, for school teams. Additional school safety-related courses are available online from this facility. The U. S. Department of Education has developed a comprehensive model program, which is updated as new vulnerabilities are identified. Nearly every state now provides a model emergency response plan for their schools to use. Some states provide the entire program, and conferences are offered to convey these programs to the school systems. These programs can significantly reduce the frequency and severity of these incidents. The Tennessee legislature has enacted the SAVE Act (Schools Against Violence in Education) and other states have developed similar programs.

School System Activities

Now that all these programs have been developed since the catastrophe at Columbine, the responsibility to use these resources is transferred to the school systems and schools themselves. Many school systems embrace these programs and commit the resources to implement them so that they will reduce the likelihood of having a major crisis at their facilities. These progressive systems complete these programs whether they are funded or not and whether there are consequences for non-compliance. Some states created their programs and then presented them to their school systems as unfunded mandates with severe consequences for non-compliance. These programs were developed before the downturn in the economy. Schools are saddled with a tremendous amount of work to be done in the safety/security arena, which is in addition to everything else they must do to run a school system. Unfortunately, the resources needed to complete this work are in many cases inadequate or unavailable. Thousands of hours have been expended to create these Multi-Hazard Emergency Response Plans and Programs. States have taken these general plans and edited them to suit their specific needs. These plans are made available to local districts with the expectation that they be used as models for the updating of existing plans or as the basis for creating entirely new plans. Requests can come from the state as guidelines to be considered, or described as the RIGHT thing to do. Many schools bridge the financial gap by applying for grants to help offset the cost of emergency response plan creation and implementation. These monies are often used for equipment purchases but the perpetuation of these resources is not planned for after the grant money is exhausted. A complete plan has to be developed that provides funding for the continuation of the programs that were developed and implemented.

How to Assess the Effectiveness of Emergency Response Plans

The above sections are dedicated to describing the effort that must be expended by organizations, systems, and schools to reduce the severity and frequency of these incidents. There are two very good ways to identify the strengths and weaknesses of emergency response plans. One involves experiencing crises in the schools (totally undesirable) and the other uses reenactments of incidents. The latter is the exercise design process, which can be used to assess the effectiveness of the emergency response plan in a non-threatening manner under minimal stress. This section will describe how to use this process to improve the safety and security in schools.

The following sections describe how this process can be implemented.

Identifying Exercise Need
This technique has been the mainstay for many years for improving emergency response plans by responders. It is particularly effective in the school setting. Since Columbine, many changes have taken place that involves how schools and responders approach an "active shooter" incident. Before Columbine, law enforcement would want to negotiate with the intruders to resolve the incident. After Columbine, law enforcement has changed to a "seek-and-destroy" approach from a "wait-and-see" approach. This change alone warrants using the exercise design process but many more changes have taken place. The most significant is the move to the "multi-hazard" emergency planning technique for emergency response plan development. This approach is based on a thorough risk assessment and the creation of the emergency response plan that addresses identified vulnerabilities. Four groups are identified as key participants for the exercise. They are school personnel, law enforcement, firemen, and emergency medical services (EMS) personnel. Each of these groups is critical for the success of the project.

Design Team Selection
Once support has been gained for the project, the exercise design team is selected. Ideally, one or more representatives from each participating agency/group are needed. A team leader is selected. Each person is acquainted to the technique and the goal of the project.

Type of Exercise and Desired Impact
Usually, the team creates a list of possible exercises and a selection is made but, in this situation, the school administration already knew what type of exercise they wanted, a tabletop exercise.

The next step is for the team to decide on who will be impacted by the exercise. Once again, the school administration knew who they wanted to impact, the school personnel. For the exercise to be most effective, law enforcement, fire, and ambulance services were included. This setup turned out to be a key part of the entire process because an unexpected synergy developed.

Policies, Practices, and Procedures
Members are asked to bring a copy of their policies, practices, and procedures that could apply to the exercise for review by the team. These documents are reviewed in detail so that the team can gain an understanding of their scope and applicability for the proposed exercise.

This is where the new emergency response plans that were developed since Columbine by various organizations are assessed for their effectiveness.

Exercise Objectives
The objectives for each exercise are captured from the policies, practices, and procedures that apply to the intended exercise. The exercise centered on protocols associated with the following:

- School entry
- Sign in at the office
- Hall security
- Room security
- Administrative confrontation
- Communications capabilities
- Weapons on campus
- Reporting emergencies
- Interactions with law enforcement, firemen and EMS personnel
- School lockdown
- Fire alarm
- Smoke in the halls/classrooms
- "All Clear" announcements
- Evacuation
- Assembly points
- Reunification

Each of these objectives is incorporated into the exercise. The reason for going into this detail is to identify the capabilities that each participating group will need to use during the exercise. This information is used during the Orientation Seminar to inform the participants of what that will need to be able to address during the exercise.

Creation of Master Scenario
The school administration provides the type of exercise they want, a tabletop exercise, and the situation to be used, an "active shooter" scenario. The team works from this information to develop messages that are related to the objectives. Each message is designed to allow the receiving group to react in a manner associated with their policies, practices, and procedures for this situation. The greatest amount of time is spent developing the master scenario. Each message is carefully worded to elicit a response that would follow existing protocol and involve each of the participating groups in varying degrees.

Orientation Seminar
The orientation seminar is a very important step that helps ensure a successful tabletop exercise because it is used to introduce new programs, policies, practices, and procedures. It allows for the review of roles and responsibilities associated with the proposed exercise and serves as the starting point for the exercise process (drills, table top, functional, and full-scale). For the "active shooter" exercise, this element is used to review existing policies, practices, and procedures with the participating groups and identify specific exercise objectives that each group would be expected to encounter some time during the exercise. The philosophy of this tactic is to give each group the opportunity to ask questions about what would be expected of them during the exercise and how they would interact with each other before the actual exercise. The orientation seminar is conducted about two weeks to two months before the actual exercise. The overall goal for this

project was for each group to have a "pleasant learning experience, in a non-threatening environment, under minimal stress." This strategy also reduces the likelihood of a person or group being embarrassed because they did not know what to be prepared to do during the exercise.

Scenario Adaptation

The master scenario is designed to have the flexibility to accommodate each campus and the three levels of schools within a system ((elementary (grades 1-5), middle (grades 6-8), and high (grades 9-12)). Each level has its own uniqueness and potential level of involvement by the students. Elementary school students would not be expected to be able to be participants in an incident but middle and high school students would have this capability. Each campus has its own uniqueness for perpetrators to gain entry and start their assault. Approximately two weeks before an exercise, the selected school would receive a walk through to determine strengths and weaknesses on the campus. The information is used to customize the exercise for the school and select an entry point for the start of the exercise.

Table Top Exercise

Each tabletop exercise is conducted in a large room with at least four large tables. Each group of participants has their own table. A computer, projector, and screen are used to display the exercise messages, pictures, floor plans, and videos. The agenda is shown which includes:

- The purpose and definition for the exercise
- The who, what, when, where, and why for the exercise
- Review of the exercise objectives for each group
- Conducting the exercise
- Holding a critique, which includes a follow-up plan

The protocol for the exercise is explained to the groups, and questions can be asked before the exercise starts. Background information such as setting, weather, location, and any other pertinent information to the exercise are presented at this time.

The various views of the school are reviewed to refresh the perspective of the campus to each group. These pictures include aerial, exterior and interior views. Videos of rooms and halls are shown along with floor plans of the facility and a map of the area.

The groups are informed that the exercise will last 90-120 minutes and the critique another 30-60 minutes, with a 15-minute break in between. The entire exercise takes about three hours.

The preliminary activities are now completed, and the first message can be shown on the screen. Each message has an intended purpose. The group to which the message is addressed gives their response based on existing policies, practices, and procedures. Each group describes their response based on the comments of the previous group. Discussion is permitted at the discretion of the exercise facilitator. After each group has had their opportunity, the next message is given and the process is repeated until the end of the exercise.

Critique

After the table top exercise is concluded, a short break is taken before the critique is started. The four groups discuss the following items:

- The items that were done well

- The opportunities for improvement
- The path forward

<u>Expectations for Each School</u>
The following expectations are shared with each school after the critique so that each school will have a checklist to use for internal evaluations:

- How are communications made inside the school?
- How are communications made to outside locations?
- Are there alternate forms of communication (such as if the main office is disabled or power failure, etc.)?
- What is the policy regarding an intruder in the building?
- What is the policy regarding a report of stranger in the hall with a gun?
- What is done if gunshots are heard in the school?
- Is there an administrative confrontation policy in place?
- What is done if the responder does not return?
- Failsafe – are there time limits or circumstances that automatically dictate actions?
- What if school is placed in LOCKDOWN and students are on the playground?
- What is done if school is in LOCKDOWN and the "FIRE Alarm" sounds?
- How does the school get out of a LOCKDOWN?
- What emergencies can cause an evacuation to be declared?
- Are there assembly points for different types of emergencies?
- What is the policy for student and personnel accounting at assembly point?
- What is the policy regarding reunification of students and parents?

Conclusion

This paper describes the unique trends that have evolved since the mid-1960s and what can be done to minimize their impact on schools and responders. This paper also describes how the application of a common industrial practice, the tabletop exercise, can be used to improve the emergency response plans in public and private schools.