

Californians for Adequate School Housing 22nd Annual Conference
"C.A.S.H. 2001 – A School Facilities Space Odyssey"

March 7, 2001 Sacramento, California 9:05 a.m. – 10:25 a.m. Doubletree Hotel Garden/Terrace

Designing Schools for Security Conclusions from Columbine

Moderator:

Steve Wilkerson, AIA, Senior Associate, HMC Architects

Panelist:

Tom DeLapp, President, Communication Resources for Schools

Workshop Focus

A vital component to a District's overall security program is the approach to site and building design of the physical environment on school campuses. The physical layout of buildings and the spaces surrounding them are integral to the success or failure of the overall security program.

Additionally, handling communication during major crisis situations and the need for planning schools with security in mind will be discussed from personal experience from the Columbine High School tragedy.

Top Security Issues on School Campuses

- Outsiders on Campus
- Fights on Campus
- Vandalism
- Theft
- Drugs
- Alcohol
- Weapons
- Malicious ActsParking Lot Problems
- False Fire Alarms
- Bomb Threats
- Bus Problems
- Teacher Safety

Compiled from a report entitled "The Appropriate and Effective Use of Security Technologies in U.S. Schools", published by the U.S. Department of Justice, Office of Justice Program.

Time Tested Strategies

"Defensible Spaces - Crime Prevention Through Urban Design"

Oscar Newman, Architect, Study commissioned by Department of Justice, 1972

"Crime Prevention Through Environmental Design"

- (CPTED Dr. C. Ray Jeffrey)
 - Concepts introduced in the early 1970's.
 - When originally proposed, facilities had not been designed with crime and fear of crime as prevalent as today.
 - Recently, increased emphasis on using CPTED methods to design facilities that work to limit criminal activity.
 - Some states passed laws to require review and implementation of CPTED techniques to reduce crime and costs.
 - Security concerns are different for the particular grade levels of the school.
 - Open campus vs. closed campus
 - www.defensiblespace.com
 - www.CPTED.org

Basic Concepts of CPTED

The physical environment can be changed or managed to produce behavioral effects in a way that will reduce the incidence and fear of crime, thereby improving the quality of life.

Analysis and implementation of four overlapping strategies:

- Access Control
- Surveillance
- Activity Support
- Territorial Motivation Reinforcement

Natural opportunities presented by the design of the physical environment to impact crime and criminal behavior in a positive manner.

Access Control

A design concept directed primarily at decreasing crime opportunity by denying access to crime targets and creating in offenders a perception of risk. This can be reinforced by designing streets, sidewalks, building entrances, and neighborhood gateways to clearly indicate public routes and discouraging access to private areas with structural elements.

Surveillance

A design concept directed at primarily keeping intruders easily observable. Promoted by features that maximize visibility of people, parking areas, and building entrances; doors, and windows that look out onto streets and parking areas, pedestrian-friendly sidewalks and streets; adequate nighttime lighting; channeling flow of activity near potential crime areas, enclosing staircases in glass, single loaded corridors, windows along the activity areas, courtyards, and village building arrangements.

Activity Support

Involves design methods for reinforcing existing or new activities as a means of making effective use of the built environment. This design concept originates in the observation that in a given community, resources capable of sustaining constructive community activities are often under used. Support of these activities can bring a vital improvement to the community along with a reduction of the vulnerable social and physical gaps that permit criminal intrusions. CPTED implements this concept by locating playgrounds where the children can be supervised and observed, replacing reading or activity sources near a building entrance, design an attractive "food-court" to foster constructive social activities.

Territorial Motivation Reinforcement

Physical design can create or extend a sphere of influence. Users then develop a sense of territorial control while potential offenders, perceiving this control, are discouraged. This is also promoted by features that define property lines and distinguish private spaces from public spaces using landscape plantings, pavement designs, gateway treatments, fences, outdoor classrooms. Ownership of delineated areas and social cohesion can lead to a reduction in criminal motivation and promote a sense of security. This would lead to breaking down large campuses into smaller neighborhoods. Graphics, signage, and structural elements reinforce a desired behavior and ownership for those areas.

Conclusions from Columbine . . .

In Preparation

- This is a leadership test; your response defines the district to the world, be credible.
- This is a communication test; how strong is your regular communication program?
- This is a professional test; how will you emerge as a key communications advisor?
- If you start off behind, you will stay behind; being proactive only keeps you even.
- Identify the chain of command for decision making and what to do if it breaks down.
- Site and district plans must have contingencies for catastrophic situations.
- Crisis response plans need to be much more specific and automatic; keep data current.
- Inter-agency protocols need to be in place in advance to avoid confusion.
- Give parents advance notice of your crisis plan and their role in the process.
- Practice worst case scenarios; test drive your response plan with simulations.

Conclusions from Columbine . . .

During the Crisis

- Mobilize a district response team that shields the site and students from outside forces.
- Make the call for outside assistance before it's too late; prescreen key volunteers.
- Understand that it's not going to be "business as usual" for a while.
- Responders may have competing agendas and objectives in communicating.
- Act in the short-term, but think in the long-term.
- You need soldiers and generals on the front lines.
- Setting up an effective command center is critical.
- Watch for ripple effect and copycats.
- Know your key messages and then stick to them.

- Don't let the media dominate your time and attention.
- Managing volunteer help can be overwhelming; maintain quality control.
- Stay focused on your target audiences.
- Internal communication is more important than ever.
- Use the media as a pipeline to parents initially, then use your own devices.
- Integrate and deploy all communication vehicles simultaneously.
- Become the wire service and clearinghouse for accurate, timely information.
- Look for crisis from "the outside in" to gauge context and public reaction.
- Maintain an active rumor control process.
- Keep an ongoing record of your crisis response as a learning tool.
- Balance the privacy rights of individuals with the public's right to know.
- Stand your ground on media access to facilities and people.
- The alternative media are becoming a powerful force; watch the Web.
- Debrief daily and learn from your mistakes and success.
- Watch for external political and personal agendas.
- Take care of yourself and your team; bring in the reinforcements.

Conclusions from Columbine . . .

In the Aftermath

- The crisis has a long-term life; remember healing processes and deja vu triggering events.
- Look for opportunities to get back to normal, seek closure and commemorate.
- Brace for the blame as people search for scapegoats, answers, and accountability.
- Continuously update your plan; learn from other situations.
- Train new staff immediately in your crisis plan, retain staff at least annually.

What Sets CPTED Apart from Conventional Security Measures

Conventional security measures emphasize behavior that is prohibited, and such measures are largely fear-based. For example, a school that settles for implementing only conventional security measures such as security guards and metal detectors may succeed at becoming more secure, but it might fail to address the underlying problem (such as bullying) and simultaneously reinforce fear or adversely affect the school atmosphere.

In contrast, CPTED focuses on behavior that is desired. A comprehensive CPTED analysis attempts to identify central problems and craft changes in the physical and social environment that will reinforce positive behavior. Posted rules and theme-oriented artwork to reinforce pro-social curriculum, greater use of windows to enhance visibility and reduce isolation, student art displays to build a sense of pride, altered seating arrangements to encourage supportive group interactions, or changes in scheduling the use of space to avoid conflict are all potential CPTED measures that could be implemented.

How Do CPTED Concepts Apply to the School Setting

CPTED concepts have been successfully applied in a wide variety of environments, including streets, parks, museums, government buildings, houses, and commercial complexes. The approach is particularly applicable to schools, built thirty to sixty years ago, and many were constructed in the early 1900's. Security issues were almost nonexistent at that time, and technology was dramatically different. As a result, the buildings are generally dysfunctional in today's more security-conscious environment.

Although school shootings are rare occurrences, other reforms of violent or antisocial behavior such as bullying, harassment, and vandalism are quite common. A CPTED analysis of a school evaluates crime rates, office-referral data, school cohesiveness, and stability, as well as core design shortcomings of the physical environment, such as blind hallways, uncontrolled entries, or abandoned areas that attract problem behavior.

Each school, district, and community should institute measures appropriate for their own circumstances. A design for an inner city, high-crime neighborhood is often inappropriate for a rural, low-crime neighborhood. There is not a single solution that will fit all schools, but there are many good models that schools can draw on.

How is CPTED Integrated into School Planning

When schools fail to integrate CPTED concepts into expansion or reconstruction plans, an important opportunity is lost. Rectifying this oversight after the fact can be expensive and politically uncomfortable. Applying CPTED concepts from the beginning usually has minimal impact on costs, and the results are a safer school that can focus on its mission of teaching and learning.

Particularly as schools deteriorate with age, major repairs or replacement become necessary. If CPTED analysis is applied at the same time that other construction work is planned, the cost is often negligible.

By far, the most economical approach is to design new facilities with CPTED principles in mind. CPTED measures usually will not increase costs, and may in fact reduce them.

In some cases, such as following a serious threat or a school shooting, security issues become paramount. There may be strong support for conventional security measures, such as metal detectors or video cameras. If a more balanced, comprehensive approach is promoted, CPTED analysis will usually be more productive, especially in the long run.

In most school districts, building new facilities is not an option, so retrofitting of existing buildings must be done. The costs of modifying aspects of existing buildings can be minor or major, depending on the nature of the alteration.

How is a CPTED Analysis Conducted

- Preferably use professionals who specialize in the field, mainly because they are accustomed to recognizing CPTED-related
 weaknesses and risk factors. They are an outside pair of eyes looking in, and do not stand to personally benefit from the
 recommendations.
- If hiring a consultant is not an option, then in-house staff could be armed with site maps and CPTED organizational guides to perform analysis.
- Some components of the analysis are crime mapping, statistical reports, identifying patterns of problem behavior, surveys, time and location of incidents.
- Analyze the physical plant of the school, the school grounds, and off campus.
- Safe route program for off campus analysis.