# PHYSICAL PROPERTIES THAT MAKE A SCHOOL BUIILDING SAFE

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#### INTRODUCTION

Humans live in a very safe world. For the most part, humans are born into, live in, and die in a relatively safe physical environment \* The events of the past few years have, however, certainly indicated that the environment of the world is changing and that such change can and does cause disasters of various sorts.

\* In addition to the disasters that have occurred in the natural environment, there have been repeated acts of violence against students and teachers by other humans.

- **×** Educators are very aware of the need for safe school buildings.
- \* The possibility of a disaster caused by either natural or human causes is very much in the mind of every school administrator daily.
- \* In fact the disaster/violence drills that school children repeatedly perform is evidence of this awareness.

- Educators and architects are very much aware of the physical attributes of the building in which they serve.
- \* They understand the places in a school building which can cause problems for the principal.
- Principals can also identify places in the school building in which the students may be vulnerable.

- Several recent research studies used the expertise of principals to identify features in a building that promote safety (Walton, 2010 & Trosper, 2017)
- Two studies used the results of interviews of principals regarding safety features and compared their thinking to that of architects who design school buildings.

- \* Both principals and architects stated that stairways were a potential safety concern because most interior stairways are fire towers that need to be enclosed for safe exiting.
- \* These stairways must be fire resistant which means very limited glass exposure thus limiting visual supervision

- \* In addition to the stairwells, there are other areas of the school that can present safety concerns for educators.
- \* Restrooms and locker areas were identified by both principals and architects as being potential safety concerns

- \* One solution suggested by the architects was to design a two way entry system with no doors on the restrooms.
- This provides at least a way of hearing unacceptable actions and provides ease of exiting in case of trouble

- \* Principals identified doors leading to the outside as a potential safety concern.
- \* They stated that so often students and even teachers prop open the doors for some reason and doors that are ajar are a perfect invitation for someone from the outside to enter the building without being noticed or identified.

- \* Both principals and architects stated that the main entrance to the school building is a matter of concern.
- They stressed the fact that again visibility and control is necessary for anyone entering the school building

- \* First, the location of the main office of the school should be in the front of the building and highly visible from anyone desiring to enter the building.
- \* In addition, control of the entrance needs to be provided by a secure vestibule and by devices such as a card reader or some means of identification for individuals wishing to enter the school.

- \* The principals suggested the use of cameras to provide surveillance and also to record who is entering the building.
- \* The use of cameras inside the school building was also suggested by both groups as a way of maintaining proper surveillance in the halls

- \* All of the above indicates that principals need to be involved in reviewing the original designs of the school building.
- \* Experienced principals have encountered enough problems caused by the design of the building to be expert in locating such potential problem areas.

- \* Other individuals who should be involved in the review of designs should be the school security officer, teachers, custodians, maintenance personnel, and even representatives of the local law enforcement and fire marshals.
- \* These same individuals should be involved in the annual safety audit of the school conducted by the principal.

- \* Although it is necessary to have the best designed buildings for safety concerns, there is the human factor that also needs attention to prevent unnecessary happenings.
- \* It is the combination of a well-designed facility that enhances user safety and the practice of good behavior on the part of the users that can produce a building that is as safe as any building can be.

- \* One such approach is by using the program called Crime Prevention through Environmental Design (Carter & Carter, 2001).
- CPTED is based upon strategies and actions designed to result in safe and orderly school facilities.

- \* The training includes sessions on design elements that make the building safer and sessions on behavioral aspects.
- \* The latter are predicated on the belief that the building can influence how an individual reacts to design elements within a building as well as the cumulative influence the building can produce upon individuals.

#### SAFETY BUILDING ELEMENTS

- + Reduce dim or dark areas
- + Proper use of all areas of the school
- + Properly secured entrances and exits
- + Wide hallways to avoid congestion
- + Eliminate hidden views

#### SAFETY BUILDING ELEMENTS

- + Maintain all school yards and fields
- + Provide good lighting
- + Adequate sightlines are needed
- + Clear orientation in the building should be provided
- + Provide appropriate landscaping to avoid hidden places.

# BEHAVIORAL STRATEGIES EMPHASIZED IN THE TRAINING SESSIONS

- + Eliminate inappropriate behavior
- + Take action on illegal activities
- + Provide a system of assistance to individuals in need
- + Provide for consistent enforcement of standards and rules (Carter & Carter, 2001).

# NATURAL SURVEILLANCE

\* This feature deals with providing maximum visibility. These features might include wide hallways, open stairs, windows, good lighting. The main objective is to see and be seen to increase the presence of humans.

# ACCESS MANAGEMENT

\* This feature deals with the manner in which users of the building get around the building safely. Design elements might include: secure entrances, proper signage, lighting, color, fencing, and landscaping. The objective of these features is to provide safe access to the school building and within the building.

#### TERRITORIALITY

- \* These design elements attempt to delineate space and show ownership.
- \* They can be expressed through art displays, signage, fencing, landscaping, and pavement treatments.

# PHYSICAL MAINTAINANCE

- \* This feature deals with the proper maintenance of the facilities of the school system.
- \* The element includes proper repair and upkeep of the buildings.

# ORDER MAINTENANCE

\* This feature deals with the maintenance of good behavior on the part of all users of the building. Good behavior should always be stressed and respect for the building inculcated into all who are interested in the school

# **ACTIVITY SUPPORT**

- \* This feature deals with the planning and development of activities that promote the presence of users of the building.
- This aspect supports the idea of casual surveillance and access to management

# WHAT DOES ALL THIS MEAN?

\* A WELL-DESIGNED SCHOOL BUILDING WITH RECOGNIZED SAFETY DESIGN FEATURES,

AND

\* A WELL ORGANIZED PERSONEL SAFETY PROGRAM,

\* WILL PROVIDE A SAFE ENVIRONMENT FOR STUDENTS.

# QUESTIONS?

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