

SCHOOL SAFETY & SECURITY

MSBA Designer Roundtable

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Agenda:

- Welcome and MSBA Introduction
- Current Guidelines of School Safety and Design
- Design Practices on School Security
- Discussion



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School Security—the Range of Potential Concerns

- **Bullying**
- **Fights**
- **Gangs**
- **Weapons in the school**
- **Student mental health**
- **Domestic issues (custody disputes)**
- **Natural disasters**
 - **Hurricane**
 - **Tornado**
 - **Flood**
- **Armed intruder(s)**
- **Other forms of attack**

Source: AIA CT presentation



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School Safety incidents –likelihood of occurrence

**Chance of getting into a fight in school:
1:7**

**Chance of being threatened or injured with a weapon:
1:13**

**Chance of student homicide or suicide in school:
1:1,000,000**

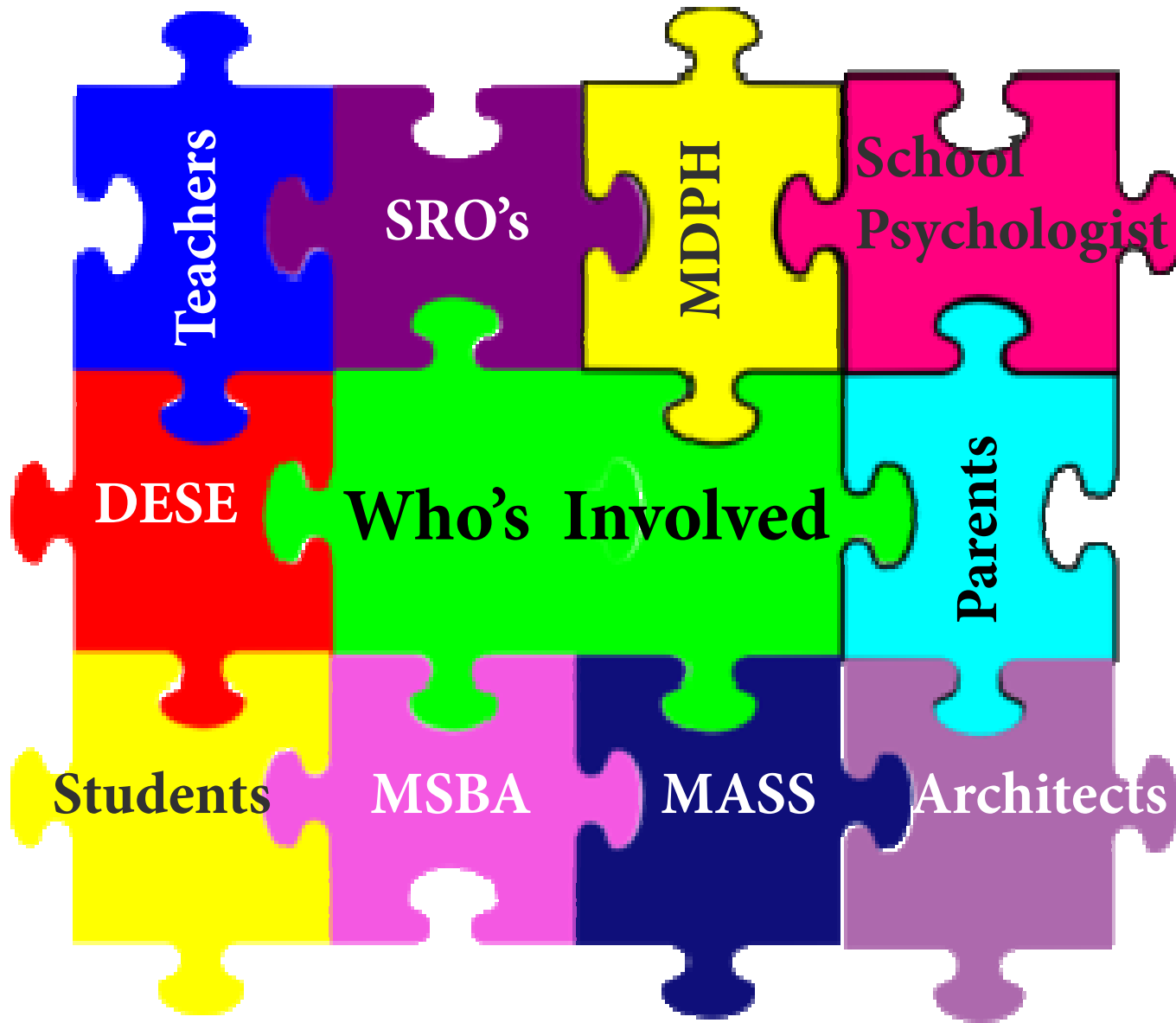
Source: AIA CT presentation



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WHO'S INVOLVED?

MSBA School Safety Working Group

- MSBA Leadership and Staff
- BSA Ed Facilities Members (3), AIA/Mass
- Mass Office of Homeland Security
- Executive Office of Public Safety
- District Attorney Sullivan
- Mass Association of School Superintendents
- Executive Office of Education (EOE/DESE)
- House & Senate Public Safety Leadership
- Mass Department of Mental Health
- Others?



Issues for School Designers:

1. Know the range of available design responses for safety concerns.
2. Know what Districts need to have worked out for security approach before design so that there is a sound basis for appropriate security design.
3. Advocate for wise policy relating to safety in building design:

A prescribed process; Not prescribed solutions.

Source: AIA CT presentation



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School Safety & Security

Every Community has unique situations and unique needs

- **First responders**
- **How schools are used**
- **Site and community setting**
- **Threats**

No single approach is suitable for all Districts

Source: AIA CT presentation



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The Focus Needs to Remain on the Design of Good Environments:

Design must create good educational environments while providing for safety and security



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Design Process—there needs to be a basis for design

- **Designers need to learn from the District what design responses are appropriate for the District’s circumstances and expectations.**
- **Districts need to have engaged in a process to articulate safety goals and expectation.**
- **This can take the form of a “Strategic Review” that can address the following:**
 - **Articulate the District’s desired security approach**
 - **Identify strategies for the desired level of security.**
 - **Identify Security criteria.**

Source: AIA CT presentation



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Literature on Design for Security-some main sources:

1. **AIA-CAE bibliography-- Multiple references on design**

- * **CPTED --the basis for security requirements in some jurisdictions**
- * **CEFPI Pamphlet—Safe Schools**
- * **FEMA - Primer to Design Safe School Projects**

2. **Bibliography from CEFPI Conference—**

Safety and the Whole Child

- * **greater focus on student issues**



Reference sources (from the CAE bibliography):

CPTED

- Tina & Greg will address
- Part of pending CHPS National Core

CEFPI—Safe Schools

- Infrastructure
- Crisis communications
- Staffing
- Procedures

FEMA—Primer to Design Safe School Projects

* available on-line



Priorities of School Design

1. At a minimum, contribute to the creation of a learning environment whose mission is unencumbered by threat to teachers, students, staff, or to physical operation of the school.
2. Create a special place or haven for education and learning to flourish.
3. Create a physically attractive facility with appropriate equipment, staff, and policies to support the educational mission and security objectives.
4. Reduce or eliminate the exposure to personal harm and legal action.



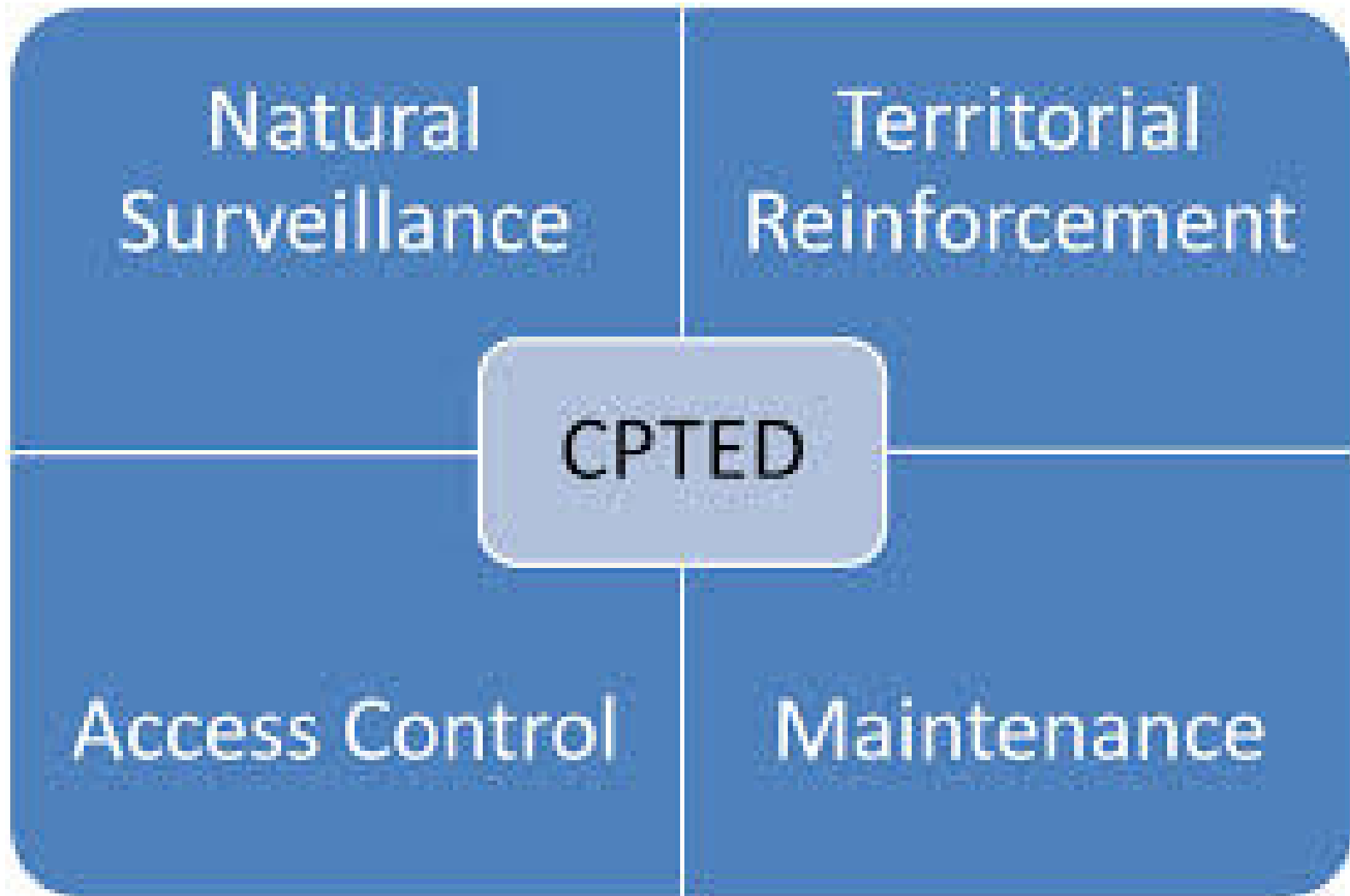
Crime Prevention Through Environmental Design (CPTED)

Based on the fundamental idea that the proper design and management of the physical environment can help prevent and deter criminal behavior.

CPTED was formalized as early as 1971 but has been updated by many authors since then. The latest version of MACHPS references CPTED.

Recognizes that design and management both contribute to the success of the facility.





Four Main Principals of CPTED



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EDUCATIONAL GOALS

Four Main Principals of CPTED

Natural Surveillance

“See and be Seen”

A person is less likely to commit a crime if they think someone will see them do it.



- Position Administration at main entrance with a good view of people approaching from a distance.
- Provide adequate lighting.
- Do not block views with landscaping, solid walls, parked cars or signage.



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Four Main Principals of CPTED

Access Control

“The ability to decide who gets in and out of the school.”

- Clearly define public vs. private areas or the “community vs. school only” areas with doors, signage and simple things like floor patterns.
- Potential trespassers perceive this as control and are discouraged from venturing into the private areas.
- Reduce entrances to as few as possible.
- Most exterior doors can be egress only.



Four Main Principals of CPTED

Territorial Reinforcement

“Direct the flow while decreasing the opportunity for crime.”

- Define the borders of the campus with fencing and signage.
- Utilize walkways, lighting and signage to clearly guide people and vehicles to find the proper entrance and accessible public areas.



Four Main Principals of CPTED

Maintenance

“One broken window will lead to others and can lead to the decline of an entire neighborhood.”

- Maintenance reinforces territoriality. Any unkempt part of a campus sends the message that no one is concerned with that part of the school.



Security Includes Planning and Design of the Entire Facility

The design must consider:

- Site selection
- Site design
- Building design
- Equipment selection
- Facility operations



Security Includes Planning and Design of the Entire Facility

The team must include:

- Educational staff
- Administrators
- Emergency response staff
- Parents
- Proper consultants



Security Includes Planning and Design of the Entire Facility

1. Site selection

- The facility should be an integral part of the greater community.
- Consider access routes, utilities, visibility, impact upon the neighborhood

2. Site design

- Anticipate weather, natural occurrences, and human interaction – both benign and ill-intentioned



Security Includes Planning and Design of the Entire Facility

Building design that contributes to safety and community building

- Grouping of between 125 and 225 students
- Creation of uninterrupted sight lines
- No blind alleys or cul-de-sacs
- Control of congestion/congregation
- Creation of communities



Security Includes Planning and Design of the Entire Facility

Security features incorporated into the design and specification

- Laminated glass and heavyweight doors at entries and separation points.
- Theft / intrusion resistant hardware and keying systems
- Security lighting selection and operation



Security Includes Planning and Design of the Entire Facility

Electronic security

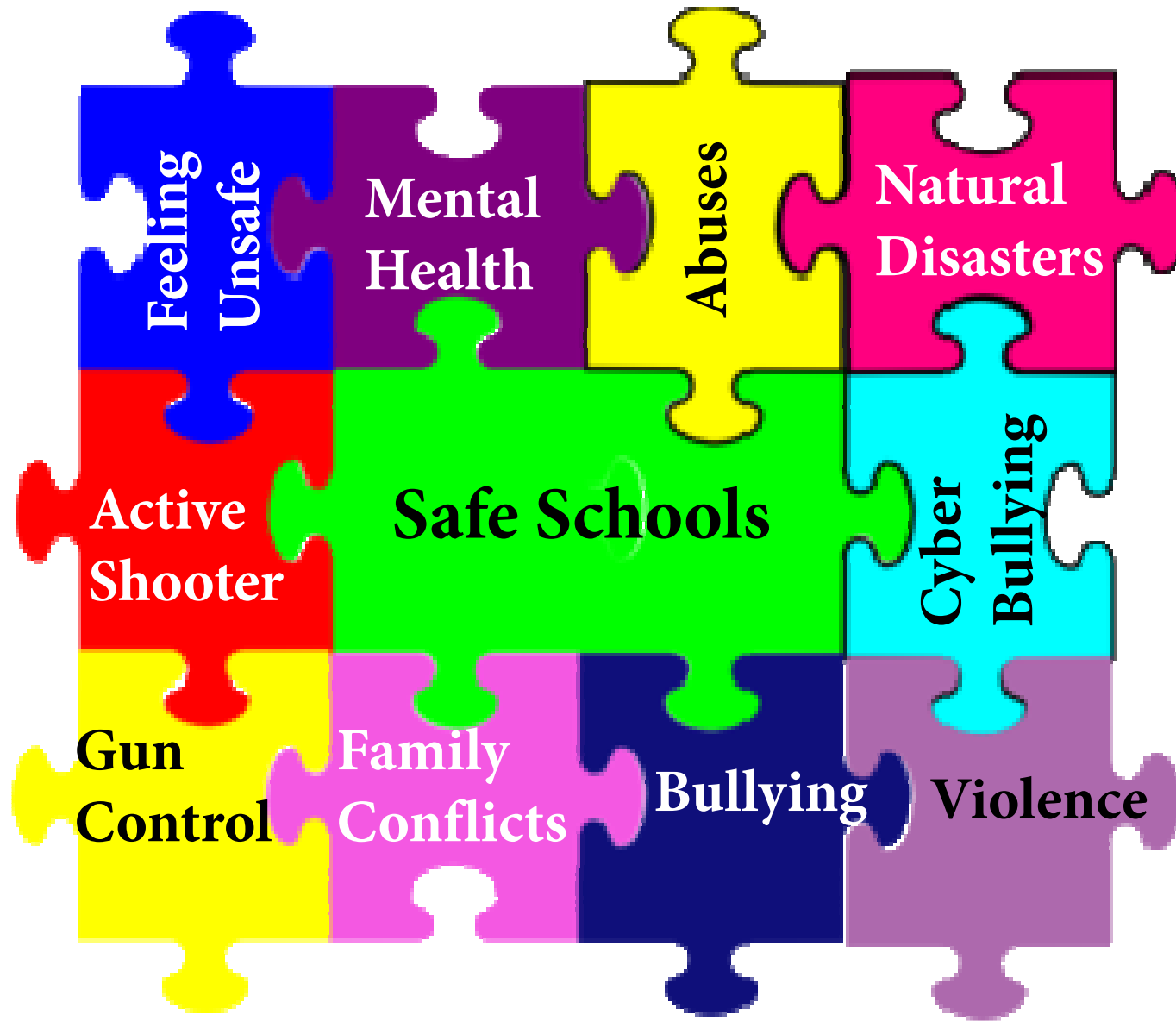
- Intrusion detection
- CCTV
- Access control
- Radio / telephone equipment and protocols



Security Includes Planning and Design of the Entire Facility

1. Security staffing,
 - Selection
 - Training
 - Integration with the greater community
2. Security policies
 - Promulgation
 - Implementation
 - Practice
 - Enforcement





- Buildings Needs to Enhance 21st Century Goals for Teaching and learning
- Collaboration, Communication, Creativity, Critical Thinking and Problem Solving (4C's)
- Project Based and Interdisciplinary Learning
- Use of the Entire School for Teaching and Learning
- Use of the Entire Site for Teaching and Learning

**Challenge to All – Create Safe Schools
without Compromising Educational Goals**



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- Cohort Size: 150 (Range 125 – 225)
- Site Approach and Layout
- Building Approach
- Entry Sequence
- Limited Access Points
- Zoning of Building
- Internal Passive Observation
- Active Systems
- Consultation with Fire, Police, Building Officials
- Foster Community, Change the Culture





View to Street, Fire Lane, Compact Layout, One Way Traffic



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SITE LAYOUT / BUILDING APPROACH



Sharon Middle School

Landscape Features Serve as Vehicle Bollards

Grafton High School



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IMPLEMENTATION EXAMPLES



Transparency and Translucency



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Teachers Workroom Placed at Corridor Intersection (1 of 6), Right Sized Corridors and Stairs

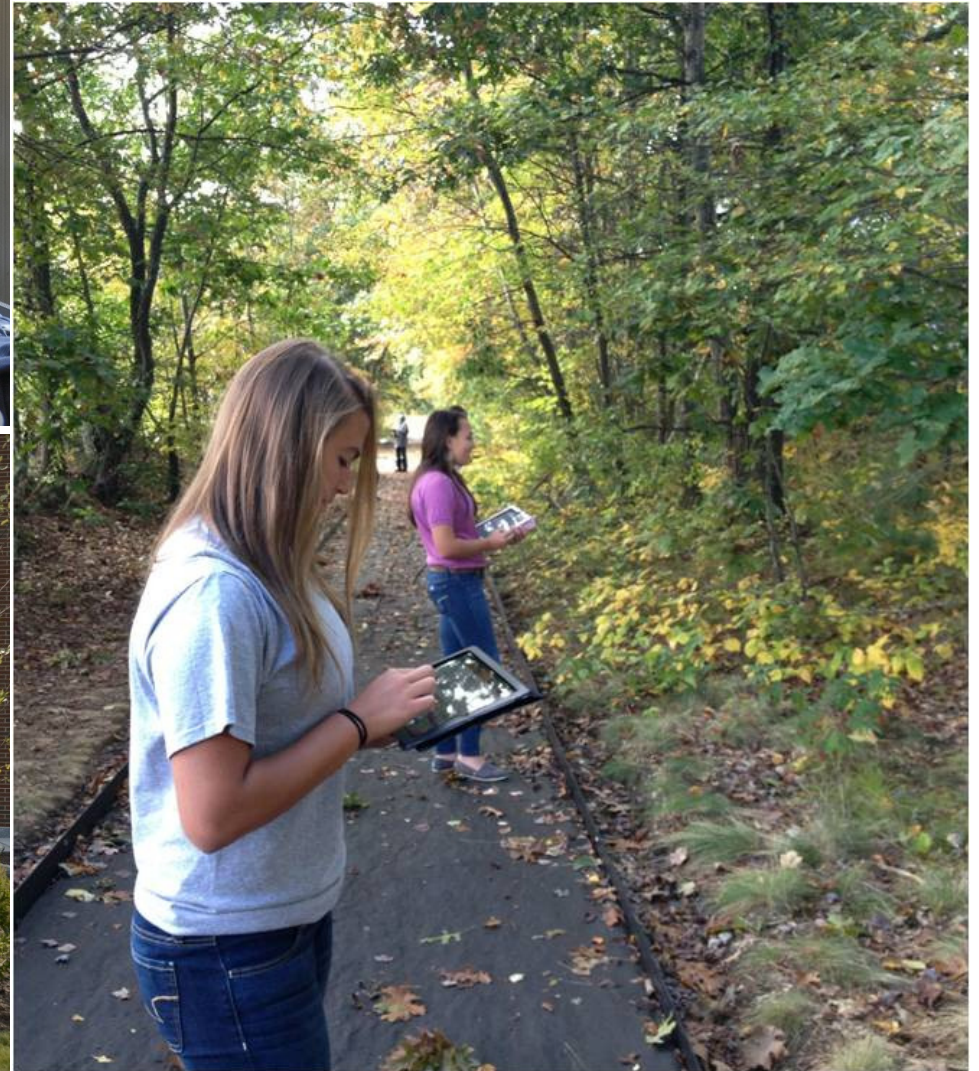


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Entire school as learning environments



Entire site as learning environments



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Learning Environments Kids Want To Be In



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Questions to consider:

1. **Should School Districts be urged to undertake a Strategic Safety Review and Produce a School Safety Planning Document prior to Design?**
2. **If so, what should the contents of that process and document include, to best support the programming and design process?**
3. **When should this occur in the School Approvals process?**



QUESTIONS / DISCUSSION



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