

## Module 6: Let's Build a Safe Environment

### Introduction

When you set out to build a safe environment, specifically within the school, you are investing in a project that includes a lot of interaction between people, groups, and institutions. In this sense, it is complex, since talking about being “safe” includes protection, prevention, emergency, accidents, risks, food, illness, vices/habits, technology, training, and communication.

The best way for a school to decrease the number of risks is by remaining informed, conscious, and, above all, by practicing the best preventive measures.

### Objectives

By the end of this module the teacher will:

- a) Understand the variety of accidents, illnesses, and disasters from a community perspective, where everyone participates and has different responsibilities.
- b) Compile a map of school risks, with the objective of having visualized security points and areas of special attention, caution, and maintenance, as a tool for acting in the face of dangers.
- c) Utilize tools for acting in response to risks that can occur inside the school, with the objective of including more viable and effective alternatives with minimal environmental impact.
- d) Manage information that helps students understand the plan and know what to do in case of accidents or other emergencies.
- e) Organize a Safety School Commission to help build and carry out a sustainable security plan.

### Themes

1. *Safe spaces in the schools.*
2. *Managing risks in a safe and sustainable school.*
3. *Safe School Commission.*
4. *Protection plan for a safe and sustainable school.*
5. *Criteria for continuous monitoring of security in the school.*

#### **1. Safe spaces in the schools**

The development of infrastructures and administrative systems for educational goods and services has, as its objective, to contribute to the improvement of the quality of human life, decrease the deterioration of natural resources, and make sure not to incite local, regional, and global environmental impacts (pollution and degradation). The idea of building



safe spaces in the school requires, above all else, strong will, creativity, and communication among teachers, administrators, and parents, so that their job can be effective, costs can be reduced, the image of the school will be enhanced, and, above all, be significant for the students.

A safe space should be based on an ergonomic design, quality materials, human health, etc. It also includes the landscape as a factor that influences the dynamics of the school and the student community.

If we want a safe and sustainable school, we must resolve the following points:

1. Foster a respect for authority at all times, through raising awareness, training, and creating a space for dialogue.
2. Demonstrate and emphasize that violence generates violence and it is not a proper way to resolve conflicts. At the same time, it is advisable to promote values and principles of respect, tolerance, and equality.
3. Promote a feeling of coexistence where identities and feelings of belonging to a group and community can be strengthened. This will orient students towards a sustainable and peaceful future.
4. Foster the development of loving and respectful attitudes and habits, avoiding

consumerism; searching for comfort and gratification at any cost can negatively impact our environment and freedoms.

The teacher is a participant in the construction of a safe school, consciously and unconsciously. Some factors to consider when promoting respect within the student community are:

- Vocabulary
- Verbal and non-verbal forms of communication
- Stress in the personal life
- Customs and social conduct
- Family and community values
- Individual and social attitudes and habits
- Management of emotions
- Physical health
- Mental health

**1.1. Play areas.**

One of the most vulnerable areas in a school is the playground. This is composed of different areas such as: fixed or mobile installations, signage, games, rest areas, shaded areas, picnic areas, bathrooms ((Steen B. Esbensen (1999))).

Ideally, a student recreational area should be:

- A place to observe. Where activities can take place on foot, seated, or walking.
- A place to play. Utilizing toys, board games, or materials that can be shared with other children. These excellent

devices can influence interaction between children.

- A place to play with others. Whether it is for playing with other children or for talking. The site should permit the children' participation in non-programmed activities, informal co-existence, being able to be a part of physical, social, creative, or relaxation games.
- A place to play together. The space can be utilized for programmed and organized activities.
- A place where one can exist: creativity and handicrafts, protection and imagination, social activities and role-playing.

**[TEXT BOX]** Statistics from insurance companies show that scalable games are two times more dangerous than playground slides. In the U.S., 72% of reported injuries in play areas are related to falls, and the statistics show that 59% of fall injuries are directly related to the type of surface underneath the equipment. Esbensen, 1999.

With the intent of building an integrated vision within your school, ask the students as an exercise to list how they would like their school playground to be. Consider all of their ideas and emphasize the connections between prevention, emergency, accidents, risks, food, illness, bad habits, technology, training, and communication. Now ask the students to identify what is already in the school and develop a maintenance,

improvement, and restoration plan for the playground. Next, some suggestions for taking action are presented:

- Maintain the equipment. For example, greasing, changing out stands or supports, connections, or springs, changing out parts, and getting rid of any sharp or pointy edges in the area.
- Make sure that the ground is anti-slip; eliminate dangerous electrical installations, structures (ceilings, supports) in poor condition, open school stores, plants that can cause physical harm, protective guard rails, etc.
- Verify that the installations near game areas don't contain any dangerous parts like nuts, screws, splinters, among others.
- If you have a sandbox or loose soil, make sure there is no glass, metal sheets, animal feces, oil and debris; it's recommended to remove the sand or soil so that it doesn't become compacted.

## 2. *Managing risks in a safe and sustainable school*

Implementing a Safe School program is an important step towards transforming the educational space into a sustainable school. Because of this, it is necessary to have a disaster evacuation plan ready, assuming your school already has an

evacuation plan in case of emergency. In addition to having a disaster evacuation plan (which occur sporadically and unexpectedly), the school can continuously work to reduce risks. For that, we suggest performing a risk diagnostic in the school to identify risks in physical areas such as: classrooms, administrative offices, laboratories, school stores, playground, etc... Next we demonstrate the methodology for putting together a risk map:

### 2.1 School risk map

The purpose of making a map is to graphically represent the physical elements (structural and functional) that will indicate to anyone, where he or she is, the possible risks and the safe spaces. As part of the socialization process that students constantly undergo, it's recommended to have the students participate in the making of the map. You can request that teachers work with their students (it can even be described as an exercise). Another alternative is to form a team of students from different grades and later communicate the results to the entire school community. Yet another option would be to have all of the teachers comment in detail on the project and divide the work:

- a) Some will make a graphic representation of the school and its surroundings
- b) Others will do an inspection through a tour and the identification of areas of risk

- c) Others will identify the more fundamental areas on the map, such as exits, meeting places, fire extinguishers.
- d) Still others will be in charge of reproducing and placing the map in important places and lastly, forming teams to communicate ways to avoid risks to all the members of the school community

### 2.2 Steps for developing a risk map:

1. Diagnostic (participation from the school community).
2. Physical description of the school and its surroundings (map, plans and sketches).
3. Define types of risks and the symbol that will be used to represent them (for the responsible committee).
4. Locate the risk points (indicate with colors and graphics).
5. Identification of important areas (entrances-exits, emergency equipment).
6. Planning action strategies. (risk-action-resources-time).
7. Reproduction and distribution of the generated information.
8. Training for the school community.
9. Promotion and feedback from the school community.

**Evacuation in the face of disasters (emergency evacuation plan)**

Disaster evacuation practice calendar (emergency).  
Determine responsibilities and who is responsible for them.  
Alarm maintenance (changing batteries).  
Telephone numbers of firefighters, civil protection, and public security.

### 2.3 Behaviors that can put the safety of the school at risk:

The following are examples of unsafe behavior in the school:

- Using equipment without having any previous training or competency. For example, using equipment and materials in the laboratory or in the classroom.
- Using electronic equipment without authorization or previous training.
- Removing security signage, putting it in places that aren't visible, or using signage that isn't clear or legible.
- Moving motor vehicles inside the school.
- Performing maintenance to electrical lines without the aid of an expert or being authorized to do so.
- Transporting dangerous waste during school hours.
- Keeping materials and dangerous wastes outside of their designated place (or without security locks).
- Using tools without training or authorization.

- Playing practical jokes that provoke chaos or panic.
- Lack of order and cleanliness.

As an exercise, we suggest inviting other groups to identify which are the most frequent unsafe behaviors in the school, with the goal of raising school community awareness and afterwards orchestrating emergency plans, first-aid training, or other strategies for reducing risks.

### 3. Safe School Commission.

When we talk about safe spaces we have to consider every area of a school and everyone that is involved. As part of the work and organization for achieving a sustainable school we suggest you contact the Safe School Commission, who is in charge of:

1. Forming a team of workers with a plan that, over the course of the year, works to decrease the risks identified in the diagnostic.
2. Motivating and training the work group.
3. Evaluating the results and communicating their advice about safety regulations with the entire student community, including parents and the surrounding community.

As part of the training, the Safe School Commission should study the most common causes of the health problems found in people who work and study in the school. An example of this might be respiratory problems, skin problems or problems caused by



consuming the foods and drinks that are frequently served in the school.

**Advice for avoiding risks and decreasing environmental impacts:**

Avoid using cleaning products during school hours and promote the use of more environmentally-friendly products that are generally less toxic. Uphold strict control over dangerous substances that are used in the school. Be up-to-date with information about common illnesses in each season and put together campaigns for health, especially in summer and winter. Promote healthy eating habits. Adequately manage trash and waste. Avoid the use of pesticides by promoting biological control of pests.

**The following measures will help protect children against risks by managing toxic substances:**

Store pesticides and other chemicals that are used for cleaning in places that children do not have access to (in the case that they do have access, install a security lock). Do not use toxic substances during school hours. Use toxic substances only in the manner indicated in the instructions. Do not mix substances. In case of toxic poisoning immediately call the appropriate authorities.

**4. Actions for protection in a safe and sustainable school**

Making our school safe and sustainable is a continuous process that expresses an integral vision of human beings and the environment. Next, we list a series of daily actions that can make a difference in your school:

- Spray walls, floors, benches, and desks with  $\frac{3}{4}$  water and  $\frac{1}{4}$  white vinegar every day.
- Collect waste deposits in areas where every-day materials are consumed by students and teachers.
- Put together waste-management awareness and informational campaigns in which the following color codes can be applied: Yellow, cardboard and paper; Blue, plastic; Gray, metal; Green, organic material; White, glass; Red, sanitary items; Black, non-recyclable.
- Collect waste products that can be dangerous to humans and the environment and promote their proper disposal. Some of these are: oils used in the preparation of food, chemical waste from the laboratory, fuels, printer cartridges, detergents, enamel glaze or paint waste, cleaning bottles, pesticides.
- Offer quality food: School cafeterias should offer nutritional products, avoiding junk food and goods that contain colorants and artificial



flavorings. Promoting local businesses is also a good sustainable action. More information can be found in the module titled Sustainable Consumption in this Manual.

Establish a program for the proper disposal of batteries. In Mexico, contact the Ponte de Pilas Association, A.C. 01 800 830 4781. In the U.S. contact the authorities that manage residual waste in the city.

**Recommendations for saving natural resources in sustainable schools:**

Re-using paper  
 Choose unbleached paper, since the white color of paper normally comes from the use of chlorine to produce it. Refill the photocopier and printer cartridges.  
 Use rechargeable batteries (they can be used 700 times)  
 Share office products that aren't being used (put a box in the administrative area)

**5. Criteria for continuous monitoring of school safety**

There are different types of risks, the obvious ones based on personal bias and that may or may not coincide with an objective risk, for example, buying from someone selling food products outside of the school. Another type is the subjective risk, which is when a person perceives the

thing as a risk, basing his/her assumption on a previous personal experience, such as thinking that when it rains, it is dangerous to use electronic equipment. Lastly, a real risk is one that is determined by people with experience, technical capacity and training, who are able to base their judgment in empirical data or scientific information.

**5.1 Symbology**

- Danger
- Do not enter
- Dangerous substances
- Trash
- Dangerous animal
- Evacuation
- Caution walking
- Do not climb
- Fire

**5.2 Tables for risk monitoring**

Next we present some of the risks that should be continually evaluated in the school. Also, you'll see a list of preventative measures for avoiding risks in sustainable schools.

*Note: The following tables don't attempt to note every risk that can be found in the schools and their surroundings. Their intention is to serve as a reference in the construction of a risk map and to avoid risks that put the integrity of the school at risk.*



<b>Institutional preventative measures</b>
Harmonizing the school's environment with music
Recreation and rest activities
Medicine cabinets and first-aid kits with instructions
Permanent preventative campaigns
Control of chemical waste
Control of sharp and pointed objects
Control of tool use
Control of the use of laboratory products
Strict control of the school stores
Observance of the use of specific equipment
Informing the school community about preventative actions
Cleaning areas with debris or wild plants
Security lights
Maintenance of chairs and student desks
More light of better quality in classroom, hallways, and bathrooms
Evacuation plan
Medical checks and periodic psychological evaluations
Selection of plants for decor and practical means
Signage
Flexible shock-absorbing floors in the recreational installations
Well-closed stalls, sinks, and cisterns
Available vehicle in case of emergency

<b>Type of risks in the school</b>	<b>What to do?</b>
Aquatic activities	Prevention, surveillance, maintenance
Contaminated food and water	Prevention, surveillance, maintenance
Choking from swallowing objects	Prevention, surveillance
Laboratory or farm animals	Prevention, surveillance
Domestic animals without owners	Prevention, surveillance
Wild animals	Prevention, surveillance
School restoration areas	Prevention, surveillance
Large trees (fallen)	Prevention, surveillance, maintenance
Guard rails that are too small/short or in poor shape	Prevention, surveillance, maintenance
Consumption of energy drinks or medicines without prescription	Prevention, surveillance
Acoustic contamination	Prevention, surveillance

Depression	Prevention, surveillance
Illnesses	Prevention, surveillance
Clothes (school uniforms, sports uniforms)	Surveillance
Stairs (slope and size of steps)	Prevention, surveillance, maintenance
Harmful fauna	Prevention, surveillance, maintenance
Natural phenomenons (storms, tornadoes, hurricanes, etc.)	Prevention
Fumigations	Prevention, maintenance
Fire (natural and provoked)	Prevention, surveillance, maintenance
Infections (skin, respiratory, gastrointestinal, for example, diarrhea enteritis, flu, chicken pox, scarlet fever)	Prevention, surveillance
Electrical installations	Prevention, surveillance, maintenance
Games (installation) in the classroom or outside	Prevention, surveillance, maintenance
Compulsive gambling (gambling addiction)	Prevention, surveillance, medical attention
Non-ergonomic furniture (chairs, tables, etc.)	Prevention, ergonomics, maintenance
Raised floors	Maintenance
Slippery floors	Prevention, surveillance, maintenance
Plants with thorns or that produce toxic substances	Prevention, surveillance, maintenance
Burning trash	Prevention, surveillance
Dangerous substances and waste	Prevention, surveillance, maintenance
Vehicle transit	Prevention, surveillance
Using Tools	Prevention, surveillance, maintenance
Selling drugs	Prevention, surveillance
Violence (physical, emotional)	Prevention, surveillance