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School risk management and prevention for an institutional culture for everyone

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Abstract

This article is developed in the Departmental Pompilio Martínez educational institution, aiming to carry out a review of the current regulations on school risk management plans guided by the surrounding characteristics, location, and environment, as well as to design appropriate emergency plans. For the above, an evacuation plan was elaborated identifying and signaling potential risks, the probability of occurrence of these events was qualitatively estimated and the necessary controls were determined in order to prevent, mitigate and respond to the situations that may arise in an emergency.

Keywords: *risk management, mitigation, prevention, emergency, vulnerability, vulnerability, risk management*

Introduction

Colombia has stood out in Latin America for its comprehensive approach to risk and disaster management [1], This has made it possible to reduce the loss of life in the face of the different events that may occur. However, damage to property, infrastructure and livelihoods continues to increase, demonstrating that disasters are not simply natural events, but the result of inappropriate development models that do not consider the relationship between society and nature. According to [1] risk management was first addressed in 1985 as a response to the priority need for a system to coordinate actions to prevent and deal with disasters, especially after the eruption of the Ruiz Volcano on November 13 of that year [2]. Consequently, the National System for Disaster Prevention and Attention (SNPAD) was established by Law 46 of 1988 [3]and its organization as an institutional network is regulated by Decree-Law 919 of 1989 [4].

Within the framework of the National System for Disaster Prevention and Attention (SNPAD) in Colombia, the need to improve and update the direction and coordination of the system was recognized, adopting an integral vision of disaster risk management. To achieve this, the creation of a specialized entity at the national level was considered to ensure the coordination and implementation of policies in public and private entities and the community in general. As a result, the National Unit for Disaster Risk Management was established by Decree 4147 of 2011, with administrative and financial autonomy, attached to the Administrative Department of the Presidency of the Republic. In addition, Law 1523 was enacted in 2012, which adopted the national disaster risk management policy and established the National Disaster Risk Management System.

This law provided political, legal and technical instruments to reduce vulnerability, transform the approach to emergency attention and strengthen coordination with territorial entities, promoting the incorporation of disaster risk management in planning at the municipal, departmental and national

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levels.In view of this, according to [5], the emergency plan is an instrument that defines the policies, systems and procedures necessary to face calamity, disaster or emergencies in an efficient and effective manner, allowing to reduce the negative effects of the different situations that may arise.

According to [6], school risk management and education in emergencies are essential to ensure the safety and security of educational centers. These spaces provide support to students and educational personnel who may be victims of attacks during conflicts, in addition to transmitting essential life-saving information and strengthening survival skills. From the general perception of [7], disasters are more than risks, being risks something abstract and potential that could occur in the future, while disaster is something concrete, measurable and visible and can be dealt with after it occurs. Both share the same determinants, but disaster can be identified, analyzed and intervened upon.

Likewise, hazard refers to the possibility of the occurrence of a phenomenon with a certain intensity in a specific location and within a defined time, affecting exposed social elements [8]. Overexploitation of resources, inadequate waste management and the construction of houses near rivers, volcanoes or mountainous areas are examples of how human actions have a negative impact on the environment, exposing them to risks such as floods, volcanic eruptions or landslides.Disasters can have a variety of causes and affect academic activities, so educational communities must assess, plan and act to prepare for and respond to different environmental obstacles [9].

School risk management and environmental education in emergencies are essential to provide safe learning spaces and support for children and adolescents in need. These educational processes also allow students to learn how to protect themselves in case of future emergencies. In accordance with the above, a school risk prevention program should be implemented that complies with current legislation, allowing to evaluate them and thus propose control mechanisms. Therefore, the author in [10] establishes educational institutions as protective territory for children and adolescents. In this sense, as a strategy, the formation of emergency education tables is encouraged, which allows preventing the affectation of the right to education, and formulating emergency plans based on emergency preparedness in the face of threats.

These guidelines are based on two components, the first one presents the policy framework and concepts for its support, the second one proposes the institutionalization of the PEGR with participatory methodologies and activities established by the institution regarding risk prevention and management, promoting school culture.Education during emergencies plays a fundamental role in overcoming trauma, developing conflict resolution skills and promoting peace [11]. The objective of the Ministry is to foster a culture of safety, resilience and adaptation by teaching about hazards and promoting schools as spaces to reduce disaster risk. In addition, it seeks to empower children and youth as leaders in disaster prevention [6]. For [12], methodological exploration paths must be built to strengthen risk management in educational institutions in order to develop a culture of prevention.Based on the above, each educational institution carries out a school risk management plan, naming some as [13], which presents a document where the actions and goals that the institution must implement to follow up with the purpose of preventing emergencies are collected.Likewise, [14] develops some variables on risks that make it possible to show which factors should be taken into account in the manuals, taking as a starting point the rights of children to participate in school through the knowledge of the different risk factors and the solution of problems that arise in their environment.

In the study conducted by [15], a methodology for the implementation of a school emergency plan at the Mercedes Ábrego Technical School was proposed, based on disaster risk management, training

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personnel and establishing procedures, evacuation routes and meeting points, carrying out different drills in the institution. This was followed by [16], who carried out an analysis of the preparedness of the institutions in terms of attention, management and contingency, where the different hazards were evaluated, measuring vulnerability and describing how prepared the educational institutions are for the different hazards that may occur. Also, [17] proposed risk management to reduce the indexes of social, structural and economic vulnerability in educational institutions, in order to present a validation of a model and technological solution that contributes to the reduction of risks. The School Risk Management Plan of the Departmental Educational Institution Pompilio Martinez aims to provide guidance to the educational community to strengthen its capacity to respond to natural or provoked disasters, whether minor, medium or major. This plan identifies the main risks and vulnerabilities both inside and outside the educational institution. In order to establish a culture that consolidates the safety of all those involved, today's organizations are focusing on ensuring safe conditions for both their personnel and their activities. In line with this approach, the importance of being attentive to the safety of its educational community, visitors and members of the organization must be kept in mind. Therefore, guidelines and procedures must be developed to respond to risk situations, such as earthquakes, fires, and explosions, among others. In the event of an emergency, everyone involved should know what to do with the necessary plans and training to achieve an effective response, so these guidelines should be communicated to all related persons. The school risk management plan is a tool that establishes policies, prevention procedures and organizational systems with the objective of dealing in a timely, efficient and effective manner with calamity, disaster or emergencies.

2. Materials and Methods

The School Plan for Risk Management (PEGR) of the Pompilio Martínez Departmental Educational Institution defines the actions and coordination necessary to manage emergencies in the institution.This plan involves all the occupants of the institution, including administrative employees, teachers and students. In case of an emergency, it is coordinated with the emergency group, the National Police and the municipal authorities of Cajicá, Cundinamarca and has coverage only in the facilities of I.E.D Pompilio Martínez, located at Carrera 6 N° 1-47 Sur Cajicá.

Table 1 Basic Information of the Departmental Educational Institution Pompilio Martínez

ASPECT		CHARACTERISTICS
Name of the institution:		Departmental Educational Institution Pompilio Martínez
Address:		Carrera 6a N° 1-47 Sur
Phone:		883 39 84 - 883 39 98
Neighborhood:		Centro
Municipality:		Cajicá
Dean(a)		María Del Carmen Martínez De Torres
Type of institution:		Public
Number of population	Students:	1090
	Teachers:	49
	Teachers' Directors:	3
	Guidance Teacher:	1
	Administrative staff:	2
	General Services:	5
	Total, population:	1151 personas
School Levels:		Preschool, Elementary and Technical High School
Working Hours:		Monday to Friday from 7:00 a.m. to 5:50 p.m.
physical structure:		Three stories

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Source: Own elaboration.

Illustration 1 shows the area where the meeting points are located at the Pompilio Martínez Departmental Educational Institution.

Illustration 1 Meeting Points I.E.D Pompilio Martínez.

Source: Maps

In order to respond to the scope of the intervention, the available resources must be taken into account to foresee the actions to be taken in the event of an emergency situation, considering the following criteria:

- It is important to refrain from taking measures that put life or personal integrity at risk.
- Managers and teachers must respond quickly and control events in their early stages.
- If an event exceeds the capabilities of the personnel or the emergency control committees available, it will be necessary to request the intervention of the external relief corps of the municipality of Cajicá.Illustration 2 summarizes the approach to be used to establish and strengthen the School Risk Management Plan at the Pompilio Martínez Departmental Educational Institution.

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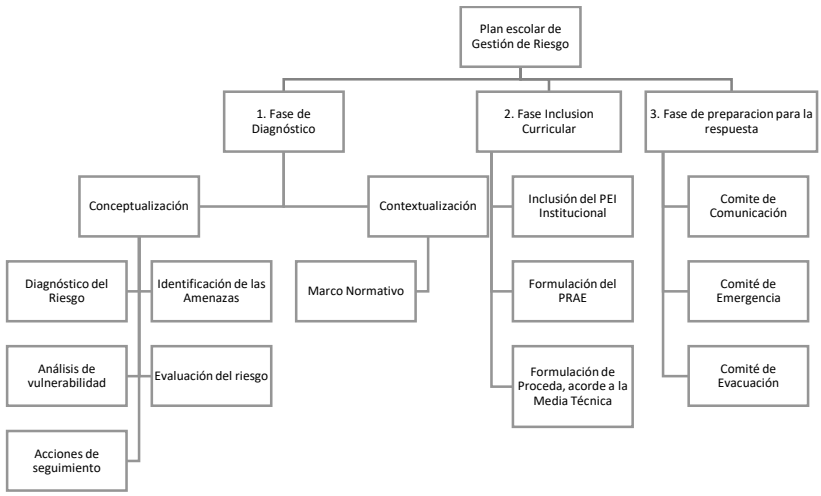
Illustration 2 Methodological Scheme for the School Risk Management Plan



Source: Own elaboration.

3. Results

3.1. Diagnostic phase

3.1.2 Risk diagnosis:

In order to estimate the probability of an undesired event occurring, it is important to take into account the nature of the risk, its accessibility or form of contact (possibility of exposure), the characteristics of the sector and/or population exposed (receptor), the possibility and magnitude of exposure, as well as the resulting consequences. This will make it possible to define measures to help minimize the impacts generated by the risk.

Construction characteristics: The building's foundation and structure meet seismic resistance standards.

Permanent occupation: The population consists of students, administrative staff and faculty.

Characteristics of the inhabitants: The occupants are engaged in academic and administrative activities.

Evacuation routes and emergency exits: Emergency exit doors are kept open.

Location: The facilities are located in a large space with green areas and sports facilities.

Characteristics of the accesses: Emergency vehicles can access the site through Carrera 6a in one direction only.

Location of equipment: Fire extinguishers are strategically located in both blocks and are easily accessible.

3.1.2 Vulnerability analysis

Vulnerability refers to the internal susceptibility or risk of a component or system, either total or partial, of suffering damage due to the impact of a hazard. This analysis was carried out in accordance with the established definition. Table 2 shows the evaluation made to the educational institution against the

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different criteria, where 1.0 does not comply or minimally complies and 4.0 fully complies, also observations are made against what was evaluated as a recommendation.

Table 2 Vulnerability analysis

Condition evaluated	Rating	Comments
1. Evacuation alarm		
	4,0	There are two alarm systems and no whistles.
2. The alarm signal:		
	4,0	Heard in common areas
Smoke detection systems:		
	1,0	There are no smoke detectors.
4. Dissemination of the Emergency Plan to the entire educational community:		
	4,0	Awareness is raised prior to the drill.
5. The evacuation plan:		
	4,0	Knowledge of the meeting points and evacuation routes according to the area where it is located.
6. Evacuation route:		
	2,0	Routes are identified, but not fully signposted
7. External Relief Entities:		
	4,0	Knowledge of the entities and roles
8. The lighting of evacuation routes is:		
	4,0	There is permanent natural and artificial light throughout the institution.
9. Emergency lighting:		
	1,0	There is no emergency electrical backup.
10. The occupants of the buildings are:		
	4,0	Control of visitors, students, teachers and administrative personnel
11. Visitors know the escape routes.		
	3,0	For safety reasons, demarcation and signage must be used.
12. Regarding the meeting points in an evacuation:		
	4,0	Meeting points in the institution are identified.
13. Meeting points:		
	4,0	There are five meeting points.
14. Signaling for evacuation:		
	2,0	The zones are identified with emergency signage.
15. At the entrance of each Zone:		
	3,0	There is an updated sketch, but it is not displayed in all areas.
16. Simulations have been carried out:		
	4,0	The Institution plans two drills each year.
17. Emergency Plan Coordinator.		
	4,0	Roles and responsibilities of the risk management committee are organized.
18. The fire protection system:		
	4,0	Fire Extinguishers are available, but the number of extinguishers needs to be calculated by the number of electronic devices.
19. Fire extinguishers:		
	4,0	Each area has its own fire extinguisher
20. The evacuation routes are:		

	3,0	There are platforms, safety on the roads, although there is a risk with glass.
21. the main evacuation route:		
	4,0	There are two large outlets
22. Circulation routes:		
	4,0	Access and evacuation routes are comprehensively designed for the egress of all personnel.
23. The exit doors of the areas.		
	4,0	The main door is functional and opens in sections or as a whole.
24. Emergency committees:		
	4,0	It is formed, but communication should be improved and meetings should be established.
25. Structure and type of construction:		
	4,0	The institution has seismic-resistant reinforcement.
TOTAL SCORE		
	88	LOW VULNERABILITY

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

Table 3 shows the levels of vulnerability and the recommendations to be taken into account in view of the results obtained.

Table 3 Vulnerability level comparison.

0 to 50 points, high vulnerability. It is necessary to examine all the elements that imply a danger for people inside a building during an emergency.
51 to 70 points, medium-high vulnerability. The emergency plan is incomplete, which means that it could only be partially activated in the event of an emergency.
71 to 90 points, low vulnerability. The emergency plan needs to be improved and optimized.
91 to 100 points, minimum vulnerability. It is essential to maintain the emergency plan in optimal conditions.

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

3.1.3 Follow-up actions

- **Action plans**

The following are the institution's action plans, which describe the approach to be followed during the normal operation of the site and in emergencies. For each one, the functions must be developed in the normal activities, in case of emergency, before, during and after. Likewise, the constant training that must be provided to the personnel and all educational institutions in case of emergencies and prevention plans must be taken into account.

- **Security plan**

Table 4 Security plan

COORDINATION: The Environmental Management Area is responsible for the supervision and execution of the safety

plan**.**

OBJECTIVE:	**SCOPE:**
To ensure the safeguarding and welfare of students, teachers and administrative staff.	Protection of all occupants in the environment of the educational institution.

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

- **Medical care and first aid plan**

Table 5 Medical Care and First Aid Plan

COORDINATION:	
The first aid leader is responsible for coordinating and supervising the institution's medical care plan.	
OBJECTIVE:	**SCOPE:**
Provide initial care to people injured in accidents and/or suffering from common illnesses.	Provide care to students who suffer injuries or general illnesses within the institution's facilities.

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

- **Fire control plan**

Table 6 Fire control plan

COORDINATION:	
The first aid leader is responsible for overseeing and executing the institution's fire control plan..	
OBJECTIVE:	**SCOPE:**
Ensure the protection of the safety of students, staff and visitors, as well as the physical resources of the institution.	Management and control of small fires that may occur within the institution's facilities.

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

- **Emergency drills**

Each semester a complete emergency drill will be carried out, for which a previous plan will be prepared including the following information:
General data of the drill.
Date, time, place and type of emergency to be simulated, as well as those responsible.
Emergency evaluation and response procedures.In order to determine the level of activation necessary to deal with different types of emergencies, the following levels will be considered in Table 7:

Table 7 Emergency Level.

EMERGENCY LEVEL	**EVALUATION CRITERION**

LOW	Refers to a local emergency that can be managed using resources available in the area. The emergency team, which includes first responders and/or evacuation guidance, can resolve the emergency. It is important to note that this level does not require activation of the emergency committee
CRITICAL	Refers to an emergency that, due to its nature, demands additional resources such as internal support, external support, physical security, medical assistance and evacuation. These resources are activated automatically, but not in their entirety. Although the company's top management does not need to intervene immediately in this emergency, the emergency committee is put in place.
CATASTROPHIC	This is an emergency of great magnitude and implications, which demands an immediate, massive and total intervention of both internal and external resources, including the participation of top management. At this level, all available resources are mobilized to deal with the emergency.

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

- **Preventive measures**

Table 8 shows the institution's Comprehensive Safety Plan, which comprises a set of actions and measures implemented at all stages of operation to prevent or reduce the likelihood of students and teachers suffering work-related harm, whether from accidents, illnesses, pathologies or accidental injuries during regular academic activities.

Table 8 Prevention Measures.

POSSIBLE THREATS	PREVENTIVE MEASURES
Structural fires and/or Explosions	A preventive maintenance program for the electrical system and installations is implemented to reduce the risk of fires and explosions.
Viruses, fungi and bacteria due to possible person-to-person or workplace/office contagion	The use of personal protection elements such as gloves and permanent respiratory protectors is promoted, especially in the context of Covid-19 prevention. In addition, recommendations on the prevention of viral diseases are sent by e-mail and the biosecurity protocol for the prevention of Covid-19 is applied.
Structural failures due to earthquakes	Se realiza un mantenimiento periódico preventivo a la estructura y se llevan a cabo acciones de reforzamiento de las edificaciones, con el fin de reducir el riesgo de fallas estructurales durante los sismos.
Personal accidents	Safety standards are disseminated, explained and published to prevent work and school accidents, with the aim of promoting a safe environment for students and staff.
Food poisoning	An instruction manual or good practices sheet is prepared for the preparation and consumption of food and beverages in order to prevent food poisoning.
Floods	Preventive maintenance is performed on the rainwater system, including downspouts, roof tiles, gutters and inspection boxes, to minimize the risk of flooding.
Vehicle accidents	Road safety rules are disseminated and published to prevent traffic accidents, with the aim of promoting safe behavior in the educational community and respecting traffic rules.

Non-adaptive behaviors	The organization continues to develop activities to raise awareness and promote safe behavior in the school, through talks on hazards, risks and vulnerability, in order to promote adaptive behaviors among students and staff.
Revolts and riots	The emergency and risk attention procedure is disseminated to be prepared to face situations of riots, and ensure the safety of students and staff

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

- **Mitigation measures**

These are the set of prevention and control actions to be carried out in the Institution. Table 9 shows which are the possible threats and the mitigation measures that can be carried out according to each one.

Table 9 Mitigation measures

POSSIBLE THREATS	MITIGATION MEASURES
Structural fires and/or explosions	Implementation of an electrical maintenance program to prevent and detect possible failures in the system.
Structural failures due to earthquakes	Planning and execution of civil works to reinforce structures and minimize risks in the event of seismic events.
Viruses, Fungi and Bacteria due to possible contagion by person-to-person contact, or in workplaces or offices	Implementation of a disease containment program, including hygiene protocols, promotion of good practices, and follow-up on health recommendations.
Personal accidents	Carry out traffic accident prevention campaigns in collaboration with the Cajicá Mobility Secretariat, promoting safe behavior and respect for traffic regulations.
Food poisoning	Development of a food promotion and proper food handling campaign in coordination with the Secretary of Health.
Floods	Implementation of a local and external maintenance program by the Empresa de Servicios Públicos de Cajicá, with the objective of preventing and mitigating the effects of flooding.
Vehicle accidents	Carrying out campaigns to prevent traffic accidents in collaboration with the Secretary of Mobility of Cajicá, promoting safe behavior and respect for traffic regulations.
Non-adaptive behaviors	Conducting workshops on conflict resolution and identification of potential risks present in the institution, in order to promote adaptive behaviors.
Seasonal riots	Development of crisis management workshops to prepare personnel in situations of riots and riots, focused on the safety and protection of the educational community.
Viruses and/or bacteria causing Pandemic	Specialized conference on the subject of SARS-CoV-2 and appropriate prevention measures to deal with a pandemic.
Attacks - terrorist	Conducting crisis management workshops to prepare staff for situations of terrorist attacks or acts, with emphasis on the safety and security of students and staff

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

- **Response measures**

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These are the set of actions to face the different challenges that arise in the institution in the event of an emergency, Table 10 shows which actions should be developed according to the threat.

Table 10 Response Measures.

POSSIBLE THREATS	RESPONSE MEASURES
Structural fires and/or explosions	Immediately notify the appropriate authorities.
	Use extinguishers according to the nature of the fire and instructions.
	Evacuate all personnel in the areas of the fire.
	Use extinguishers according to the nature of the fire and instructions. Evacuate personnel from the affected area.
Structural failures due to earthquakes	Keep personnel at the meeting points during the earthquake or seismic event.
	Evacuate all personnel to the designated meeting points in the facilities.
	Call and register people according to the lists of students and staff.
	Immediately inform relief agencies of missing or trapped persons.
Personal accidents	Provide first aid to the injured person
	Communicate by telephone with the guardian or legal representative.
	Report the accident to the EPS (Health Promoting Entity) or ARL (Occupational Risk Management).
	Refer the injured persons to the IPS (Health Care Provider Institution).
	Request transportation service through the emergency hotline.
Food poisoning	Provide first aid to the intoxicated person.
	Communicate by telephone with the guardian or legal representative.
	Report the case of intoxication to the EPS or ARL.
	Refer the affected person to the corresponding IPS.
	Request transportation service through the emergency hotline.
Floods	Disconnect power to the affected areas.
	Suspend the power supply in the area.
	Evacuate personnel from the area.
	Recover or safeguard the necessary equipment and elements.
Vehicle accident	Provide first aid to the injured person.
	Report the accident to the SOAT (Obligatory Traffic Accident Insurance).
	Refer the affected person to the corresponding IPS.
	Request the presence of the traffic police.
Virus or bacteria proliferation (Pandemic)	Report and remind the use of personal protective equipment.
	Provide information on pandemic hazards.
	Comply with evacuations and quarantines established by government agencies.
Non-adaptive behaviors	Report the incident to the discipline coordinator.
	Handle the situation calmly.
	Attempt to move the person to a neutral or clear location, if possible.
Virus and/or bacteria causing Pandemic	Report the infection to municipal health agencies.
	Follow infection measures established by national regulations.
Revolts or riots	Request isolation of personnel in case of infection.

Fuente: Adaptado de: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

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3.1.3 Threat identification

Risk analysis begins with the identification of activities or threats that may pose risks to the organization. Once these threats or possible triggers of events have been identified, the probability of their occurrence is estimated. In this sense, a qualitative assessment is made of the events that could generate emergencies, analyzing the possible results with the aim of minimizing the impact on people, the environment, services, goods or resources and the image of the institution. In addition, the characteristics of the construction and structure of the building, the permanent occupancy density, the characteristics of the occupants, the evacuation routes and emergency exits, the location of the site and its surroundings, the characteristics of the accesses and the width of public and private roads, the accessibility of emergency vehicles, and the location of fire protection equipment are also considered.

3.1.4 Risk assessment

Table 11 shows the possible threats, causes and consequences that may occur in the daily work of the educational institution.

Table 11 Threat Assessment.

POSSIBLE THREATS	CAUSES	CONSEQUENCES
Structural fires and/or explosions.	Short Circuit.	Fire outbreaks.
	Fires in Buildings.	Structural fires.
	Gas Leaks (Public Roads and/or Own).	Injuries to persons (burns and/or poisoning by inhalation of gases).
		Damage to buildings.
		Paralyzation of academic activities.
Structural failures due to earthquakes.	Installations are more than 40 years old. It is not possible to comply with current seismic resistance standards.	Possible entrapment.
	The construction site is predominantly gravel, sand, silt and occasional thin clay deposits.	Collapse of structures.
Personal accidents	Slippery floors.	Falls to level.
	Pipe fracture or breakage.	Damage or deterioration of equipment.
	Rain and running in non-permitted areas.	Personal injuries with aggravating circumstances.
Floods	Damage to water storage tanks.	Electrical hazards.
	Deterioration of the rainwater network (roofs, roof tiles, gutters, downspouts and/or inspection boxes).	Deterioration of infrastructure.
Vehicular accidents	Use of bicycles in internal areas of the institution.	Multiple injuries.
	Hit by vehicular traffic (Main and Secondary Roads).	Fracture, trauma, loss of life.
Non-adaptive behaviors	Non-conforming care and dangerous actions by members of the educational community.	Disturbance of order.

	Games not in accordance with places or enclosures (Use of balls in classrooms).	Community aggressions.
	Climbing on the roof, railings, stairs and trees near the school facilities.	Malicious damage to windows, fractures and personal injuries.
Revolts or riots	Demonstration of nearby communities or social groups.	Injury to students or teachers.
		Damage to buildings.
		Interruption of academic days.

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

3.2 Curricular Inclusion Phase

Risk management education should be adapted in educational institutions in order to promote in staff, teachers and students the prevention measures and the strengthening of the different strategies for the mitigation of the different hazards and to act in the face of a risk event.

3.2.1 Inclusion of the Institutional IEP

Education in emergency situations is a planned process that seeks to ensure the continuity of education during crises. In the field of risk management, its objective is to strengthen the capacities of the education sector to cope with the effects of disasters. The interruption of educational services in the context of risk management considers both the consequences of environmental imbalances and violations of the rights of children, adolescents and young people. School risk management plans focus on education during emergency situations and ensure continuity of education. These plans document the objectives, policies, actions and goals of the educational community to address risk and prepare for emergencies. The importance of the school as a protective environment, the rights approach and the differential approach in emergency situations are also highlighted.

3.2.2 Formulation of the PRAE

Curricular inclusion through school environmental projects (PRAE).
PEGRs can be integrated through PRAES in schools, including concepts such as risk, threat, vulnerability, disaster and prevention. Awareness and sensitization activities on the care and conservation of natural resources are carried out within the institution. In addition, projects or inter-institutional collaboration agreements are developed to raise awareness in the community about appropriate practices in environmental conservation, responsible use of water and proper management of solid waste. All this contributes to the formation of habits, values and principles in school life, with the objective of knowing and preserving the environment.

3.2.3 Formulation of the Procedural Formulation, according to the Technical Medium

The school will implement a variety of administrative measures to prevent and manage the risk of contagion, including:

- Assign a committee responsible for monitoring and operating the on-site service under biosafety conditions, periodically evaluating the application of protection measures and making decisions on necessary adjustments.
- Establish work and class schedules to avoid overcrowding, following government regulations.

- Evaluate and guarantee sanitary and hygienic conditions in the facilities, identifying necessary repairs and adaptations to comply with hand washing and physical distancing protocols.
- Organize courses, groups and spaces according to the capacity of the classrooms and maintain a minimum physical distance of 1 meter between people.
- Include the biological risk of COVID-19 infection in the risk identification and assessment matrix to determine appropriate controls.
- Provide guidance and accompaniment to students for their gradual and progressive return, following biosafety protocols.
- Socialize the biosafety measures and protocol with families and competent authorities.
- Restrict the entrance of visitors and external personnel to the school as much as possible.
- Establish opening hours for parents and guardians to reduce the time spent in the facilities.
- Promote the use of virtual channels to meet requirements and minimize personal attendance at school.

Criteria must also be established for:

- Communication, training and signage
- Identification and monitoring of health conditions.
- Measures related to mobility and entry to school facilities.
- Control for the entry and exit of members of the educational community.
- Measures related to the development of the school day.
- Measures for sports, artistic or cultural activities.
- Measures related to the development of the working day
- Measures for food consumption
- Personal Protection Elements
- Description of measures related to cleaning, disinfection and waste management.
- Adequate waste management

3.3 Response preparedness phase

Organizational structure of school risk management

Illustration 3 shows the emergency organizational scheme for the Pompilio Martínez Departmental Educational Institution, assigning functions, responsibility and authority for making decisions and executing activities that lead to actions before, during and after an eventual emergency.

Illustration 3 Risk Management Organizational Structure Diagram

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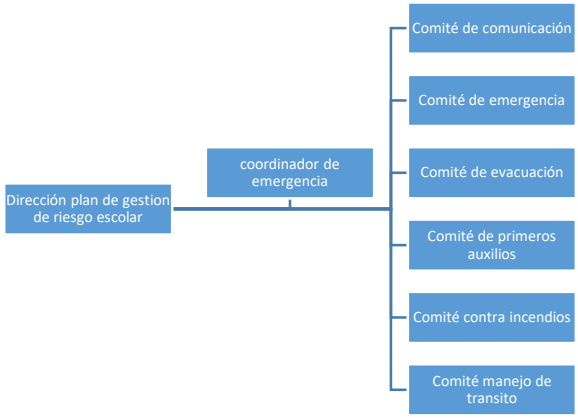

Source: Adapted from: Guía para Prevención y Atención de Emergencias Escolares, OPES, Bogotá. 1993.

3.3.1 Communication Committee

The Communication Committee plays a key role in emergencies. The following is a summary of the main functions it performs:

- Immediately alert the general coordinators in the event of an incident, who will take the necessary measures to control the situation.
- Collaborate with the other committees in the absence of the general coordinator, ensuring an adequate and coordinated response.
- Coordinate closely with the other committees during the incident, providing mutual support and facilitating fluid communication.
- Maintain an updated telephone directory to ensure effective and rapid communication in case of need.
- Request external assistance from specialized emergency agencies or other relevant entities to strengthen the response and mitigate the effects of the incident.
- Have an updated list of the members of the school risk management committees, facilitating internal communication and coordination.
- Provide support during the evacuation of the affected area, following the instructions of the corresponding committee to ensure the safety of the people involved.
- Regularly attend scheduled training sessions to acquire the necessary knowledge and be prepared to act effectively in emergencies.

3.3.2 Emergency Committee

The functions of the emergency committee in the event of a casualty event should be to:

- Coordinate, direct and record the actions taken by the committee during an incident.
- Coordinate with other committees during the incident to provide mutual support.
- Ensure that the requirements of their area are met, especially in salvage and rescue.
- Request outside assistance if necessary.
- Go to the scene of the incident to initiate the necessary actions to protect the lives of employees and students of the institution, even if he/she is not in the area at the time.

- It is not necessary for the coordinator to be present in the area to initiate the appropriate control actions.
- Support in the evacuation and verify that all buildings of the institution are completely evacuated.
- Attend all scheduled training sessions.

3.3.3 Evacuation Committee

The evacuation committee has the following functions:

- Coordinate, direct and record the actions taken by the committees during an incident, following the instructions of the plan chief.
- Coordinate with the committees to provide mutual support during the incident.
  Ensure compliance with evacuation protocols at designated meeting points.
- Request external assistance if necessary.
- Go to the site of the incident to initiate the necessary actions to protect the lives of workers and the institution's assets, even if he/she is not in the area at the time.
- Support the evacuation and cordon off the area according to established instructions.
- Attend all scheduled training sessions.
- Establish the command point at each designated meeting point.

Conclusions

It is necessary to assign procedures to each member of the brigade, detailing their responsibilities and functions in different emergencies. All occupants of the facilities should receive instructions on the location of protection, extinguishing, alarm and communications systems. If they are unfamiliar, they should request appropriate training.Evacuation should always be directed to the first floor and the Gathering Point. The School Risk Management Plan has different committees, each with specific functions in case of emergency, led by a coordinator to avoid interference with academic activities. The School Risk Management Plan is based on the current situation of the school facilities.It is essential to approach school risk management from the perspective of institutional guidance and planning, to develop and evaluate its purpose within the Institutional Educational Project (IEP).Priority was given to the implementation of reactive risk management measures, based on hazard assessments identified in the municipality and the environment of the educational institution. This resulted in greater integration of the school community and increased awareness of the importance of prevention.

The school risk management plan should be an instrument that involves different actors in the community, encouraging early learning of the basic principles of disaster mitigation. This will allow children to contribute positively in the future in this area. It is expected that children will gain a greater understanding throughout their lives, which will enable them to contribute positively to the development of mitigation strategies.This project significantly strengthens educational institutions, as it allows them to have clear and sustained projects, improving their management and negotiation capacity with government entities and the private sector. It also increases their relevance and recognition in the community, making it easier to obtain resources for specific projects.

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