School Safety and Security

Lessons in Danger

FOREWORD

A safe and secure environment is a prerequisite for effective teaching and learning. Threats to the safety and security of people and property can arise from natural hazards – such as earthquake, floods and storms – or from human actions – such as vandalism, arson and violent crime. While catastrophic events and human tragedies cannot be eliminated entirely, their negative impact can be mitigated. The OECD Programme on Educational Building (PEB), through the OECD activity on school safety and security, seeks to improve understanding of the issues facing schools, to identify appropriate responses and to initiate action.

The international conference on School Safety and Security, which was organised by PEB and the United States Department of Education (USDOE) and at which the papers in this volume were discussed, is part of PEB's work on school safety and security. It is the second collaboration between PEB and the USDOE. In February 2002, PEB, USDOE and the United States State Department organised an experts' meeting in Washington, D.C. on "Helping Schools Prepare for and Respond to Terrorist Attacks". The purpose of the meeting was to gain a better understanding of how other countries have dealt with the issue of possible terrorist attacks on schools and students; to look at the impact of such events on schools and students; to explore lessons learned; to identify what works and what does not; and to develop an informal sharing group of international educators and others working on security and crisis management issues. The meeting was attended by education and law enforcement representatives from ten countries (*www.oecd.org/edu/schoolsafety*).

PEB's other work on school safety and security includes an *ad hoc* Experts' Meeting on Earthquake Safety in Schools, organised by PEB and GeoHazards International (GHI) from 9 to 11 February 2004. Internationally renowned experts from 14 countries and five continents met to review the problem of improving earthquake safety in schools and identify possible solutions. The expert knowledge, opinions and experiences presented in the report *Keeping Schools Safe in Earthquakes* (2004) provide valuable insight into the nature and scope of the problems involved in protecting school buildings and their occupants. The final recommendations of the group, which are presented in the report, are a call to action for all governments in OECD countries and partner countries to facilitate the implementation of these recommendations.

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EXECUTIVE SUMMARY

Accidents, earthquakes, arson, vandalism, theft, violence, bullying… The range of problems and threats facing schools from within and without is vast, and in some countries the number of incidents is increasing. In response to these challenges in society and education, the number of approaches used to address these problems is also growing. Architects, project managers, ministry officials, psychologists, teachers, security consultants, police officers, academics and many others have a role to play in helping to implement solutions. From 12 to 14 November 2003, 100 professionals from 28 countries met in Paris to discuss how the variety of problems and solutions concerning school safety and security are addressed in their respective countries.

All members of society agree that ensuring the safety and security of children in their place of learning is a priority, but achieving this objective is not evident. To better understand the issues, the conference addressed five main themes and questions related to school safety and security.

- *Risk assessment.* How can safety and security risk be assessed in schools?

- *Crisis planning and management.* How can schools best equip themselves to manage a crisis when it occurs?

- *Infrastructure approaches.* How can building design and security technologies address issues of school safety and security? Do fences and other physical security measures really make schools safer?

- *Collaborative approaches.* How successfully have "comprehensive approaches" to school safety and security addressed problems such as bullying and violence in schools?

- *Education, training and support approaches.* How do countries incorporate education and training programmes for teachers and students into regional, local and school-level policies and programmes?

Part I. Risk assessment

> We need to know why we are reporting and how this reporting can make things better. (Rick Draper, presenter, Australia)

Risk assessment is an important component of the risk management process. It comprises two principle components: risk analysis and evaluation. Risk analysis considers the range of potential consequences and their likely occurrence. Risk evaluation involves comparing estimated levels of risk with pre-established criteria, thus allowing the prioritisation of risk.

Presenters at the conference discussed some of the risk assessment tools currently used in schools to manage threatening situations.

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- *Standards Australia and Standards New Zealand (AS/NZS)* has created a generic framework for establishing the context, identification, analysis, evaluation, treatment, monitoring and communication of risk, which has been used in educational contexts.
- In *France*, the National Observatory for Safety in Schools and Universities use several methods to evaluate risks to schools from natural and technological disasters, such as a general schools safety survey (ESOPE) and hazard risk maps.
- In *Korea*, the issues of assessment of risk, regulatory enforcement and safety standards in schools has become a policy priority following the fatal fire in Chun An primary school in 2002.

Risk assessment has been successfully implemented in several educational contexts in a number of countries, but could a similar methodology feasibly and reliably be applied in an international context? Meeting participants concluded that existing methodologies of risk assessment could be transferable to other institutions and countries. However, further work needs to be conducted on "what works" using current methods – in both local and national contexts – before an agreed-upon international methodology with common definitions can be identified. However, problems of over-reporting, under-reporting and the influence of the "political element" must be taken into consideration. Community need, and not the media, should drive prioritisation of risk.

Part II. Crisis planning and management

It is important to talk to students in planning and preparing for emergencies. This makes a difference. (Benjamin B. Tucker, presenter, United States)

Crises most often occur without warning and can either directly or indirectly affect the school environment. Recent catastrophes in New York and the school stabbings in Ikeda Elementary School in Japan are two examples of such occurrences.

- In *New York*, following four events that highlighted the importance of crisis planning and management – the attack on the World Trade Centre on 11 September 2001, the regional power failure in August 2003, the shooting of a Council member in July 2003 and Hurricane Isabel in September 2003 – school emergency plans are being revised to make provisions for city-wide emergencies.
- In *Japan*, after the tragedy in Ikeda, Japan, in June 2001, the Ministry of Education, Culture, Sports, Science and Technology implemented a number of "soft" and "hard" approaches to strengthen school security. Soft approaches included the development of a crisis management manual for schools, a collection of approaches to school security, crime prevention education, community projects and post-event care for students. Hard approaches included a meeting of experts and a report on security in Japan's school facilities, a revised school facilities guide and a crime prevention manual.

Such accounts demonstrate how a single incident can radically influence national policy, but how can countries effectively learn from the experiences of other countries? When

should students be kept inside a building and when should they stay outside? How can planning be effectively realised, on a school and national level? What are some hard-core and soft-core planning approaches? How do educators maintain a balance between "normal life" and keeping people safe? These questions need to be fully addressed in future meetings.

Part III. Infrastructure approaches

> All schools need to have their boundaries defined in some way. Fences don't need to be forbidding. (Chris Bissell, presenter, United Kingdom)

Incorporating both passive and active security features in school building design, in old and new buildings, is an important consideration for education ministries, school architects and the students and teachers using the building.

- In the *United Kingdom*, the Safe Schools Initiative, which is administered by the Department for Education and Skills (DfES) in co-operation with the Home Office's Police Scientific Development Branch (PSDB), is investigating the benefits of an integrated technology approach, through the use of access control systems, closed-circuit television and radio frequency identification, to reduce crime in two case study schools.
- In *Ireland*, the Planning and Building Unit in the Ministry of Education is conducting a study to identify the current security requirements in schools. A number of stakeholders have been consulted and a variety of methodologies used (*e.g.* Post-Occupancy Evaluation, security auditing) to assess the school's location and surroundings, site boundary, site layout, landscaping and lighting.
- In *Mexico*, the Secretariat of Public Education (SEP) has implemented two federal schemes – the Natural Disaster Fund (FONDEN) and the Natural Disaster Preventive Fund (FOPREDEN) – to provide support for educational buildings and their occupants in case of disaster.

At the conference, discussion focused on a number of areas relating to the ownership and context of school design. The community plays a vital role and sets the context for much of school design. The insurance industry does not drive design solutions, although legal status does influence design, especially in determining public and private space. Passive design choices can enhance security, although some risks are too high and active design elements or relocation should be considered in some cases. There is also a clear role for the OECD to provide a catalogue or clearinghouse of ideas and design solutions in context.

Part IV. Collaborative approaches

> The work of this group…was a very moving experience. There is such a great weight of experience here to make schools safe. (Ike Ellis, workshop participant, Australia)

Many problems in schools that impact on students can often be effectively addressed by so-called collaborative or comprehensive approaches to school safety and security. Such approaches involve a comprehensive range of individuals or groups both inside and

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outside the school, a strategic plan and implementation of a range of programmes to promote safety. A number of programmes were presented during this session.

- International institutes such as the International Centre for the Prevention of Crime, based in *Canada*, are working to consolidate research and knowledge about risk/ protective factors, effective practices and cost effectiveness.
- The Together We Light the Way project in *Canada* is a comprehensive school-based model that successfully intervenes to prevent anti-social behaviours. The project is part of a national strategy to prevent bullying in Canadian schools.
- In 2002, the Ministry of Education in *Malaysia* established a Safe School Programme in response to an increase in the number of negative influences that are threatening the teaching and learning process in schools.
- The VISIONARY project, which is supported by the European Commission, has created an international Internet portal on violence in school. Participating countries *Denmark*, *Finland*, *Germany*, *Portugal* and the *United Kingdom* have also established national Internet portals.
- A report was recently released on the CONNECT UK-001 initiative on school violence and bullying. Research conducted in schools in *17 European Union countries* revealed that while a number of interventions to tackle school violence exist, many of them lack rigorous evaluation.

Given the great number and diversity of existing programmes designed to create safer schools throughout the world, there is a role for the OECD to provide a repository whereby countries can access and add to this existing knowledge and experience. In doing so, effective ingredients – including evaluation methods – in successful programmes can be identified.

Part V. Education, training and support

The role of the school principal in taking responsibility for implementing these programmes [SESAM] is crucial. (School Principal, Collège Les Bouvets, France)

How well schools respond in times of crisis is largely dependent on the extent to which teachers and students have been prepared and trained for such an incident. For example, students and teachers must know evacuation procedures, and they must know how to respond to different situations from both inside and outside the school, whether it be a school fire, an incident of bullying or a chemical spill in a nearby neighbourhood. Teachers must be trained to respond to a range of student behaviours that can occur before, after or during an incident that has threatened the safety of a school and its students. International organisations such as the Council of Europe EUR-OPA Major Hazards Agreement are strong advocates of what is termed a "culture of risk", which emphasises the important role of education in fostering awareness of types of risks, how these risks can be prevented, and the responsibility of each person involved.

- In *Australia*, Emergency Management Australia, which is a federal body, is collaborating with the New South Wales Department of Education and Training and the New South Wales Police Force to develop, implement and evaluate school safety plans and programmes, including training and education, to improve personal safety of staff and students.
- In *Armenia*, the European Interregional Centre for Training Rescuers in Yerevan develops and implements training courses and methodological materials on safety issues for students, teaching staff, administrative executives and parents.
- SESAM (School Emergency Standardised Answer in case of Major accident) is a crisis management tool for school principals in *France*. It has served as a model for the security plan (PPMS) that is used in all schools, and which was made compulsory in national education on 30 May 2002. The "Prevention – First Gestures" programme, which is co-ordinated by the local fire and rescue services in the Grasse area in the south of France, has provided risk prevention training for more than 6 000 adults and students.

The experiences recounted during this session highlighted the fact that regular and accredited training of teachers is essential, both in pre-service teacher training and in professional development and other training programmes (*e.g.* first aid). Training should be specific, direct and experiential, thus involving role-playing and subject-specific content (*e.g.* science teachers should receive general and specific training relevant to their field of expertise). Similarly, the curriculum should reflect general safety issues (*e.g.* how to evacuate the building in case of a fire) and specific ones (*e.g.* safety precautions in the science laboratory). While national and local governments have a role to oversee the development and implementation of such programmes in their countries, the interest and enthusiasm of school principals, the availability of funding, and the role of supportive legislation and regulation are the primary factors guiding the success of such programmes. There is a role for the OECD in working with organisations like the Council of Europe to gather information on such programmes and to monitor their implementation.

Further resources

The Web site *www.oecd.org/edu/schoolsafety* provides up-to-date information on OECD activities on school safety and security, including earthquake safety in schools.

The Web site *www.oecd.org/edu/facilities* contains information on the OECD Programme on Educational Building (PEB), such as the Programme's journal PEB Exchange, which is published three times per year; international conferences; related publications on school facilities; and other resource material.

PART
I

RISK ASSESSMENT

Risk can be defined as the possibility of an event occurring that will have an impact on identified objectives. Risk management is the process by which potential opportunities and adverse effects are handled. An important component of risk management is risk assessment. It comprises two principle components: risk analysis and evaluation. Risk analysis considers the range of potential consequences and their likely occurrence. Risk evaluation involves comparing estimated levels of risk with pre-established criteria, thus allowing the prioritisation of risks.

This section explores the strategies developed by countries to address risk in schools. It concerns the following questions:

• What methodologies have been used to identify, analyse and evaluate risk in different countries?

• What risk assessment tools are currently used in schools to manage threatening situations?

• Could these risk assessment methodologies and tools be feasibly and reliably adapted to an international context?

CHAPTER
1

DEVELOPMENT OF RISK ANALYSIS TOOLS IN AUSTRALIAN POST–SECONDARY INSTITUTIONS

Rick Draper

Amtac Professional Services Pty. Ltd., Australia

Abstract: This paper describes a robbery risk assessment that was undertaken at 124 Tertiary and Further Education (TAFE) campuses in Australia by Amtac Professional Services Pty. Ltd. It identifies the approach and model used for the study, which involved principles of situational crime prevention, crime prevention through environmental design and security risk management. The paper also discusses the framework used to analyse the risk of harm to staff from robbery, which is based on the Australian and New Zealand Standard for Risk Management. The methods of data collection, composition of the project team, database development and final report are also presented.

Introduction

Following a competitive tender process, Amtac Professional Services Pty. Ltd., a Queensland-based security and crime prevention consultancy practice, was engaged to undertake robbery risk assessments at 124 Tertiary and Further Education (TAFE) campuses in Australia. Each campus had between two and ten cash handling points requiring assessment. More that 500 000 students attend TAFE campuses, which are spread over more than 1 000 000 km².

A number of important elements needed to be considered in the project planning phase, such as the remoteness of many of the sites; modes of travel, travel time and safety of review staff operating in remote areas; contingency plans for potentially problematic situations; and the most expedient way to facilitate consistent and reliable risk assessment reports from all staff. A key challenge for this large-scale project was to ensure that recommendations addressed the management of risks within a legally and morally defensible framework, which is also sensitive to philosophical, operational and financial constraints.

Definition and scope of the problem

"Robbery" was defined in consultation with the client as "the act of stealing from a person by intimidation, threat or force, often known as a 'hold-up'".

Research conducted by the Australian Institute of Criminology (AIC) revealed that the rate of robbery in Australia peaked at 136 per 100 000 persons in 2001. Of the incidents recorded, "59% were unarmed robberies, 35% were committed with a weapon other than a firearm, and only 6% were committed with a firearm". The rate of robbery has been declining since 2001 (AIC, 2002).

At the time of the review, relatively few incidents of robbery had been reported on TAFE campuses, although robbery on campus had been more widespread prior to a change in policy regarding receipt of cash for course fees and charges. However, on most campuses cash was still used for a range of transactions, including parking, student association fees, library fines, hairdressing services, child care, materials charges, vending and games machines, telephone coin box collections, photocopying charges, bookshop purchases and other operations such as massage, gymnasiums and restaurants. Some individual cash transactions were over AUD 200, but most involved much smaller amounts.

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Although at the time of the review the campuses were clearly not identified by offenders as attractive targets, robbery can occur in locations that have not previously been targeted. The fact that the campuses are located in local government areas where over 1 700 robberies occur every year would suggest that a strategy is required to make these locations unattractive targets for robbery.

Approach

The principles of situational crime prevention, crime prevention through environmental design (CPTED) and security risk management were used to complete the robbery risk assessment.

Situational crime prevention is based on an understanding of the situational elements that may influence offender decision-making. An offender will consider the effort involved in committing a robbery and/or the risk of the robbery not being successful with the perceived level of reward (Clarke, 1997). This process can be meticulously planned or spontaneous. Situational crime prevention strategies seek to augment the effort involved in committing a successful robbery by increasing the perceived risk to the offender of something or someone intervening or of being caught and punished, and also to reduce the perceived reward available. Situational crime prevention theory also seeks to remove excuses for behaviours that may be precursors to robbery, such as loitering in cash-handling areas.

Crime prevention through environmental design strategies maintain that the design of the environment can be used to support desired behaviours and to discourage undesired behaviours (Crowe, 2000). When preparing to commit a robbery, the offender will pick up on "cues" from the environment and look for environmental factors that will serve to reduce the amount of effort and risk involved. When used appropriately, CPTED strategies such as natural surveillance, access control and territorial reinforcement (*i.e.* a sense of ownership) can be powerful deterrents, reducing the "attractiveness" of a cash-handling point as a target for robbery.

The concept of security risk management recognises two dimensions of risk: likelihood and consequences (Standards Australia, 1999). It focuses on reducing the likelihood that a robbery will occur and reducing the potential consequences should a robbery occur. Typically, both situational crime prevention and CPTED contribute to reducing likelihood. Others strategies contribute to staff safety, thus reducing potential consequences.

Model

Initially, a basic decision tree model was prepared to support the development of more detailed risk assessment tools. The model employed the principles of situational crime prevention, CPTED and security risk management to describe the likelihood that a given cash-handling point would be the target for a robbery, given a range of variables used in offender decision-making (Figure 1.1). Research undertaken by AIC on how robbery offenders select targets was also used to develop this model (Nugent *et al.*, 1989).

Figure 1.1. Offender decision tree

Area crime/ Site profile	Perceived reward	Guardianship/ territoriality	Success expectance	Immediate environment	Likelihood

The figure shows a decision tree connecting the following node values across the columns, with a vertical arrow on the right labelled "Almost certain" at top and "Rare" at bottom:

- Area crime/Site profile: High, Low
- Perceived reward: High, Low, High, Low
- Guardianship/territoriality: Poor, Strong, Poor, Strong, Poor, Strong
- Success expectance: High, Low, High, Low, High, Low, High, Low
- Immediate environment: Soft, Hard, Soft, Hard, Soft, Hard, Soft, Hard
- Likelihood: Almost certain ... Rare

Data collection and site visits

Before visiting the sites, Amtac collected the following background information on each campus:

- Location and site plans.

- General purpose of each building.

- Floor plans of all buildings with cash-handling facilities: cashiering areas, Student Association, libraries, restaurants, canteens, bookshops, vending and games machines, student parking gate houses, entry and exit points, and other areas where cash is collected.

- Drawings of intruder alarms, access controls, closed-circuit televisions (CCTV) and other security equipment.

- Documentation on security policies and procedures.

- Staff and student information booklets.

- Job descriptions and duty statements of all personnel with security-related and cash-handling responsibilities.

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- Demographics, including number of students.

- Campus timetables and calendars.

- Scheduled hours of use of buildings and/or grounds.

- Details of any third parties who use the campus.

- Details of alarm monitoring, guard or patrol services, and any other contracted security function.

- Details of cleaning and/or maintenance contractors that access cash-handling areas.

- Details of all security-related incidents on the campus over the past three years and any serious incidents.

- Current security rosters.

- Details of any insurance policies that relate to cash.

- List of key issues and concerns about security.

Each site visit included:

- Formal interviews and/or discussions with staff, especially those directly involved in cash handling and security.

- Examination and clarification of polices, procedures, guidelines and management systems.

- Examination of the built environment to identify deficiencies in design, layout and operations, according to the principles of CPTED.

- Examination of security hardware and technology to identify physical security vulnerabilities that may increase the likelihood of robbery and/or increase harm arising from a robbery.

- Digital photography to document issues identified and to support later analysis.

The project team

Amtac developed a comprehensive project plan involving three key strategies:

- A project executive co-ordinated the collection of data, undertook the analysis, and prepared the recommendations and reports.

- A well-trained project team visited all the sites, and gathered and delivered the data to the project executive.

- Technology was used to ensure timely, consistent and high quality campus reports.

Given the short timeframe for the project, Amtac's existing staff was supplemented by casual employees holding undergraduate or postgraduate degrees in criminology or a related discipline. Professional experience of the project team varied considerably. One member, for example, was a recent graduate; a second employee had worked in the field of security risk management for a number of years; and a third staff member, who had been working in an administrative capacity in another post-secondary educational institution, provided valuable insight into some operational matters.

Each team member was provided with a kit that included a notebook computer and relevant software, palm pilot, digital camera, communications equipment, stationery and other supplies. They were given intensive training in the risk assessment tools, technology and underlying theory of the project.

As the members of the project team had different levels of computer skills, alternative methods of data gathering and consolidation were needed. Most of the project team chose to use palm pilots for data gathering. These data were then uploaded to computers after each site inspection. Other members of the project team chose to use paper-based forms to gather data on site, and to manually transfer the information into the database at the end of each day.

Risk analysis framework

The actual level of risk is a product of the likelihood and consequences of the risk. The Australian and New Zealand Standard for Risk Management framework was used to analyse the level of risk of harm to staff from robbery (Standards Australia, 1999). This framework recommends that a separate analysis of the likelihood and the consequences of the risk be undertaken after identifying sources of risk, taking into consideration existing controls that reduce the likelihood and/or consequences of risk. The framework also recommends the use of standard descriptors for likelihood, consequence and risk (Standards Australia, 1999), although it encourages users to adapt the framework according to their needs (Table 1.1).

Table 1.1. Likelihood descriptors

Level	Descriptor	Description
A	Almost certain	It is expected to occur in most circumstances
B	Likely	Will probably occur in most circumstances
C	Possible	Might occur at some time
D	Unlikely	Could occur at some time
E	Rare	May occur in exceptional circumstances

Source: Standards Australia, 1999.
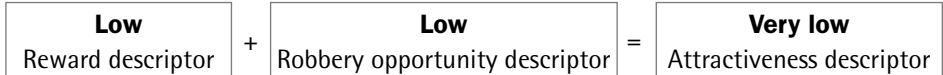
Attractiveness assessment

In order to assess the likelihood of a robbery, the "attractiveness" of a cash-handling point by a prospective offender must be calculated (Figure 1.2). A location with a very low level of perceived reward will generally have a very low level of attractiveness as a target for robbery. Similarly, a location with very little opportunity for a successful robbery will have a very low level of attractiveness for the offender. Figure 1.3 shows that a low level of perceived reward (*i.e.* level of cash) and a low level of opportunity to commit a robbery result in a very low level of attractiveness.

Figure 1.2. Attractiveness assessment

Attractiveness		Opportunity				
		Very low	Low	Moderate	High	Very high
Per–ceived reward	Very low	Very low	Very low	Very low	Very low	Very low
	Low	Very low	Very low	Low	Low	Low
	Moderate	Very low	Low	Moderate	Moderate	High
	High	Very low	Low	Moderate	High	Very high
	Very high	Very low	Low	High	Very high	Very high

Figure 1.3. Example of attractiveness assessment

Attractiveness		Opportunity				
		Very low	Low	Moderate	High	Very high
Cash level	Very low	Very low	Very low	Very low	Very low	Very low
	Low	Very low	Very low	Low	Low	Low
	Moderate	Very low	Low	Moderate	Moderate	High
	High	Very low	Low	Moderate	High	Very high
	Very high	Very low	Low	High	Very high	Very high

Low Reward descriptor	+	**Low** Robbery opportunity descriptor	=	**Very low** Attractiveness descriptor

Contextual variables

A location may be assessed as having a high degree of attractiveness for robbery, but this does not necessarily mean that it is likely to be targeted. A range of contextual variables must first be considered. Amtac used a "site base crime weighting" derived from a weighted combination of three factors:

• Robbery rate in the wider community.

• Incidence of past robberies on the campus.

• Perceived level of other security incidents.

Given similar levels of attractiveness, it is reasonable to assume that a cash-handling point on a campus in a community that experiences frequent robbery will be a more

likely target than one located in an area where there have been no robberies in the past five years. For a robbery to take place, there also needs to be a suitably motivated offender (Cohen and Felson, 1979). Statistics show that a campus that has experienced one or more incidents of robbery is more likely to be a future target compared to a site that has not been victimised previously. Research also indicates a possible link between higher levels of other security-related incidents and robbery, where offenders effectively "graduate" to higher-order offences, given available opportunities (Clarke, 1997).

Likelihood assessment

Using the assessed attractiveness of a cash-handling point as a target for a robbery and the site base crime weighting, the likelihood that a robbery will take place at a given location can be estimated. Figure 1.4 shows the matrix used to derive the likelihood descriptor.

Figure 1.4. Likelihood assessment

Likelihood		Base crime weighting				
		Very low	**Low**	**Moderate**	**High**	**Very high**
Attract-iveness	Very low	Rare	Rare	Rare	Rare	Rare
	Low	Rare	Rare	Unlikely	Unlikely	Unlikely
	Moderate	Rare	Unlikely	Possible	Possible	Likely
	High	Rare	Unlikely	Possible	Likely	Almost certain
	Very high	Rare	Unlikely	Likely	Almost certain	Almost certain

Consequences assessment

The severity and nature of consequences differ for each risk event. The standard uses five descriptors to indicate the severity of consequences (Table 1.2), and provides descriptors for specific categories of consequences for a particular risk event (Tables 1.3 to 1.6). While direct financial costs are the easiest to identify (Table 1.3), other types of consequences such as damage to reputation (Table 1.4), legal (Table 1.5) and personal harm (physical and psychological) (Table 1.6) may also be significant.

Table 1.2. Standard consequences descriptors

Level	Descriptor	Description
1	Insignificant	No injuries, low financial loss
2	Minor	First-aid treatment, medium financial loss
3	Moderate	Medical treatment required, high financial loss
4	Major	Extensive injuries, loss of production capability, major financial loss
5	Catastrophic	Death, huge financial loss

Source: Standards Australia, 1999.

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Table 1.3. Financial consequences descriptors

Level	Descriptor	Description
1	Insignificant	Managed within functional budget
2	Minor	Minor additional administration costs arising from risk event
3	Moderate	Administration costs plus some rectification expenses
4	Major	Significant impact on functional budget
5	Catastrophic	Extensive financial loss or diversion of resources, no possible funding recovery for function

Source: Standards Australia, 1999.

Table 1.4. Goodwill/reputation consequences descriptors

Level	Descriptor	Description
1	Insignificant	Virtually no impact
2	Minor	Credibility questioned
3	Moderate	Damage control implemented
4	Major	Confidence shaken but not totally lost
5	Catastrophic	Total loss of confidence, major recovery action required to restore credibility

Source: Standards Australia, 1999.

Table 1.5. Legal consequences descriptors

Level	Descriptor	Description
1	Insignificant	Threat of legal action but none taken
2	Minor	Plaint served: Action withdrawn or early settlement
3	Moderate	Court defence, settled for moderate award
4	Major	Major settlement or significant award by court
5	Catastrophic	Maximum court award for damages

Source: Standards Australia, 1999.

Table 1.6. Personal consequences descriptors

Level	Descriptor	Description
1	Insignificant	No injuries, inconvenience arising from event
2	Minor	First aid, initial counselling
3	Moderate	Medical treatment, counselling treatment required
4	Major	Extensive injuries, psychological trauma, hospitalisation
5	Catastrophic	Death or permanent disability

Source: Standards Australia, 1999.

Risk assessment

Figure 1.5 shows the matrix used by Amtac to derive the level of risk of harm to staff arising from a robbery. This matrix allows comparisons of levels of risk at different locations (Standards Australia, 1999). "Minor" was used to indicate the lowest potential consequence descriptor for staff who were potential robbery victims. Amtac also isolated those variables that were likely to reduce the potential harm to staff arising from a robbery, such as policies and procedures, training, separation of offender and victim, and availability of post-incident counselling and awareness programmes.

Other consequences such as financial costs arising from litigation or harm to reputation were also considered. However, in order to assess the risk of financial losses through litigation should a robbery occur, the likelihood and consequences of this risk event would also need to be assessed. For example, in the event of a robbery, the existence of appropriate strategies and post-incident management would determine if the campus was declared negligent in a civil litigation case. In addition, the likelihood of robbery may be assessed as "possible", but the likelihood of litigation may be assessed as "likely". The management of this risk can be approached from two directions: the reduction of the likelihood of robbery and/or reduction of the likelihood that the victim may seek compensation in the courts.

Figure 1.5. Risk analysis matrix

Risk		Potential consequences				
		Insignifi-cant	Minor	Moderate	Major	Cata-strophic
Likelihood	Rare	Low	Low	Moderate	High	High
	Unlikely	Low	Low	Moderate	High	Extreme
	Possible	Low	Moderate	High	Extreme	Extreme
	Likely	Moderate	High	High	Extreme	Extreme
	Almost certain	High	High	Extreme	Extreme	Extreme

Database development

Customised databases were used to store and analyse variables. The first stage in the database development process was identifying and programming risk analysis variables, which helped to qualify levels of opportunity, perceived reward, attractiveness, site base crime weighting, likelihood, consequences and risk.

Variable-dependant sentences and paragraphs were generated from these databases to produce reports. Each report needed to be easy to read and detailed, and contain specific recommendations for each cash-handling point reviewed. A model report framework was designed to create a list of report variables. The potential relationships between report variables, and between the risk analysis variables and the report variables were

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explored and a series of matrices created. Some of these relationships were simple, such as the choice of phraseology to communicate likelihood; while others were extremely complex, such as the generation of recommendations. Calculations were then written in the databases to produce variable-dependant and variable-interdependent text. For example, the output in relation to the attractiveness of a particular cash-handling point as a target for robbery, dependent upon a specific set of risk analysis variables, appeared in the reports as either:

- "...makes this location *unattractive* as a target for robbery".

- "...makes this location *only moderately attractive* as a robbery target".

- "...makes this location *potentially very attractive* as a robbery target".

The process of verifying the calculations and monitoring the change in output, dependant upon changes in variables, was a time-consuming process, but one which delivered the required outcomes. The following is a calculation of likelihood, as shown in Figure 1.4, based on the variables of site base crime weighting and the attractiveness of the cash-handling point (CHP) as a potential target for robbery.

> If((Weighting_Base_Crime="Very Low" or zCHP_Attractiveness="Very Low" or (Weighting_ Base_Crime="Low" and zCHP_Attractiveness="Low")),"Rare", If((zCHP_Attractiveness="Low" and (Weighting_Base_Crime="Moderate" or Weighting_Base_Crime="High" or Weighting_Base_ Crime="Very High")) or (Weighting_Base_Crime="Low" and (zCHP_Attractiveness="Moderate" or zCHP_Attractiveness="High" or zCHP_Attractiveness="Very High")),"Unlikely", If(Weighting_ Base_Crime="Moderate" and (zCHP_Attractiveness="Moderate" or zCHP_Attractiveness="High") or (Weighting_Base_Crime="High" and zCHP_Attractiveness="Moderate"),"Possible", If((Weighting_Base_Crime="Moderate" and zCHP_Attractiveness="Very High") or (Weighting_ Base_Crime="High" and zCHP_Attractiveness="High") or (Weighting_Base_Crime="Very High" and zCHP_Attractiveness="Moderate"),"Likely", If((Weighting_Base_Crime="High" and zCHP_Attractiveness="Very High") or (Weighting_Base_Crime="Very High" and (zCHP_ Attractiveness="High" or zCHP_Attractiveness="Very High")),"Almost Certain", "Error")))))

Reports

A report was produced for each campus, containing a photographic supplement and an annex including the assessment for each cash-handling point. Each campus report contained the following sections:

- Introduction.

- Method: Review instruments and sources of information.

- Campus background.

- Findings: Security-related incidents, existing security strategies and security issues.

- Threat assessment: Threat source objectives and limitations.

• Risk analysis: Process and risk assessments.

• Cash-handling point annexes.

• Photographic supplement.

The following excerpt from the "campus background" section of a campus report shows how variables were integrated into fixed and variable-dependent text to create sentences and paragraphs.

> XYZ College is located at 205 Happy Street, Happyville and serves a student population of 2 000. Amtac was advised that approximately 150 staff work on the campus, with up to 12 involved in cash-handling duties.

> According to a search of the records of the Department of Local Government, XYZ College is located in the Happyville local government area. Crime data for this area indicates that there were 114 recorded robberies during 2001. Based on the available data, the campus has been classified as situated within an area that has experienced a "moderate" rate of robbery compared to other campuses.

While the majority of campus reports were produced directly from the database, some required editing. For example, a small number of campuses included shared facilities, and it was important to refer to this within the body of the report. It was considered more efficient to make the required adjustments at the report stage, rather than to programme additional report variables.

Conclusion

This project has demonstrated the value of developing risk analysis tools. The approach used not only delivered reliable and consistent reports in relation to risks across a wide variety of campus settings; it also allowed the project to be completed within a restricted timeframe. The project highlighted the importance of ensuring that the staff gathering data are well trained and understand the significance of the information they are collecting. It was also important to have a strategy for dealing with discrepancies between sets of information provided by the client, presented during interviews and gathered by review staff. On several occasions, inconsistencies were identified and data needed to be validated before any analysis could be undertaken.

There is no legislative requirement in Australia to follow the Standards Australia and Standards New Zealand (AS/NZS) standard to assess and manage security-related risks, but as has been illustrated in this paper, the standard does provide a useful framework for delivering consistent outcomes. While the standard requires a commitment to gathering reliable data for analysis, the approach used for this project demonstrated the potential use of large-scale assessments of risks to establish a defensible position for managing those risks.

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CHAPTER
2

RISK ASSESSMENT IN SCHOOLS IN FRANCE

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Abstract: Since 1995, the National Observatory for Safety in Schools and Universities in France has been actively involved in the area of school safety and security. This paper presents the activities of the Observatory, which in co-operation with other public bodies such as the Ministry for Ecology and Sustainable Development in France, has developed a number of risk assessment tools for schools, including an annual survey on risk prevention in public lower and upper secondary schools. It also describes the explosion of the chemical plant in Toulouse in 2001 and assesses its impact on schools in the area.

Introduction

In 1995, the French Government set up the *Observatoire national de la Sécurité des établissements scolaires et d'enseignement supérieur* (National Observatory for Safety in Schools and Universities), comprising representatives of public authorities holding title to school buildings, teaching staff, parents of students in public and private schools, and ministries. The Observatory's mission is to address all issues affecting the safety of persons, buildings and equipment in the French education system, including building stability and fire hazards, accident research and prevention, technological and scientific equipment, and major risks. Its mandate does not include violence-related security issues. The Observatory's annual reports, which are prepared with experts, are distributed to various governmental agencies, public authorities, and safety and security stakeholders (Observatory, 2003).

Methods of assessing natural risks

Information on natural and technological risks

In France, prefects are required to compile a general document with information on natural and technological risks, identifying the risks to which each *commune* in their *département* is exposed. From this *département*-wide catalogue of major risks, the prefect prepares a summary document for each *commune* with information about the risks, location of risks and preventive measures that have been taken within the *commune*.

The Ministry for Ecology and Sustainable Development prepared a report on the summary *commune* documents. The study showed that reports had been prepared for 6 700 of the 16 000 *communes* with known risks, and that an average of 800 reports were prepared each year. It also found that certain *départements* were falling behind; documents had not yet been prepared in some *communes* with nuclear waste reprocessing plants or major volcanic risks. So although mayors are required to keep their populations informed of risks at least every alternate year, in many cases, schools were not adequately informed about major risks.

Mapping

Knowledge of risk zones in relation to the location of schools is a fundamental element of both crisis prevention and crisis management. To assess major risks, risk areas can be mapped according to the geographical area or type of risk – areas that are vulnerable to flooding, are subject to seismic risks, or contain hazardous industrial facilities, nuclear

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power plants or air traffic corridors. While lack of information on schools located in risk zones is dangerous, such information could also be used to stigmatise schools that are more highly exposed than others.

A safety plan for each school

From May 2002, each school in France is required to prepare a safety plan, which is an important tool for risk assessment and crisis management. Preparing these plans requires knowledge of the major risks in the *commune* and the school's environment. In order to be effective, this information needs to be disseminated to all students and parents and maintained through frequent simulation drills, regularly updated information and regular contact with local aid authorities.

Risk assessment tools for schools

The ESOPE general safety survey

To improve school safety assessments, since 1995 the Observatory has conducted 35 surveys in a number of work areas developed by its commissions. To avoid respondent burden and to ensure regular and consistent reporting, in 2003 the Observatory introduced an *Enquête sécurité de l'Observatoire pour les établissements* (ESOPE), an annual survey on risk prevention in public lower and upper secondary schools. In the future, the survey will also be carried out in elementary schools, higher education institutions and private schools under contract. The survey is designed to help school managers to complete the single risk prevention document and to implement the annual prevention programme. The survey covers a number of security-related topics in school buildings and sporting facilities, including fire safety, health and hygiene, building maintenance, and major risks.

A document for preventing risks in the workplace

New regulatory provisions for assessing and preventing risks in the workplace have increased employers' obligations and responsibilities to protect the health and safety of employees. School principals are therefore obliged to institute a comprehensive prevention plan to identify the risks to which staff and students under their authority are exposed, and develop a culture of safety through risk assessment and the annual prevention programme.

Main risks identified

Accidents

Since 1995, the Observatory has been conducting a study of accidents that cause bodily injury to students in school. "Accident" is defined as an event leading to hospitalisation or medical intervention. In 2002, the analysis covered 46 774 accidents reported during the 2001/02 school year. Two per cent (1 000 accidents) of accidents in elementary schools required hospitalisation for more than 48 hours. Head injuries were by far the most common type of injury in elementary schools, making up more than one-third of injuries reported. In addition, the risk of accidents increased with age up to the first year of

secondary school. Accidents in school playgrounds were the most common (68%), many of them caused by students bumping into each other. Accidents in physical education accounted for 57% of incidents in secondary schools. In vocational secondary schools, 505 reported accidents (18%) involved machinery.

Fires

The first comprehensive safety survey of public and private secondary schools in France focused on fire safety in 30 000 buildings in 11 000 schools. Alarms, emergency lighting, non-conformity of doors, partitioning and smoke detection in staircases, and containment of risk areas were examined in safety committee reports. Seven per cent of buildings were found to be at risk.

Initial ESOPE findings indicated that 89% of schools were rated favourably by the safety commission. However, in 44% of schools, fewer than two daytime evacuation drills had been conducted in that year, although three drills per year are mandatory. In nearly 54% of schools, the evacuations lasted less than three minutes. Only 17% of schools with boarding facilities conducted the required number of night-time evacuation drills.

A census of violent acts conducted by the Ministry of National Education revealed that a disturbing number of arson attempts are directed against schools. Some 607 arson attempts were recorded in 2001/02, and 567 in 2002/03. Over the same period, the number of partial fires increased from 293 to 261. For its part, the Observatory designed a fire report form that can be used to determine the most frequent causes of fires and to monitor fire safety developments in schools.

Major risks

In the ESOPE survey, 46% of respondent schools identified major risks in their *communes*. This low percentage can be accounted for in part by the lack of information provided by mayors. According to survey results, the main natural risks to which schools reported they are exposed are cyclones and storms, floods and mudslides, earthquakes in exposed areas, and landslides. The most commonly reported technological and industrial risks were the transport of hazardous materials, chemical accidents and nuclear accidents.

Special safety plans for major risks were implemented in 13% of schools. This is clearly insufficient given that an official document published in the form of a practical guidebook required schools to formulate these plans from May 2002. While some efforts are being made – 20% of school staff have received training – much work remains to be done.

Assessment of the disaster in Toulouse

On 21 September 2001, ten days after the attacks in the United States, the Azote de France (AZF) plant in Toulouse exploded. The blast from the explosion inflicted damage over a radius of 5 km. The plant was part of a vast chemical complex located on the approach route to the airport, 5 km from the centre of the city, in the southern part of metropolitan Toulouse. Ammonia, nitric acid and sulphuric acid were stored at the facility. Three hundred tonnes of ammonium nitrate for use in fertilisers exploded.

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Human and material casualties

Most of the 30 deaths involved plant personnel. Of the 3 000 people injured, school personnel were most affected. One student was killed, and 16 students and two teachers were among the most seriously injured. Two secondary schools were destroyed: *Lycée Galieni*, which was occupied by 850 persons, and *Lycée Françoise*, where 650 staff and students were located. At the time of the explosion, *Lycée Galieni* students were either in classrooms or in auto-repair workshops. A number of students were in the locker room changing for a physical education class in the adjacent gymnasium, which was totally destroyed by the blast. All of the building's windows were shattered, and false ceilings and partitions collapsed. Roofs were torn off a number of buildings, and the roof of the school canteen collapsed. And yet, concrete structures held up, as in the other schools. At *Lycée Françoise*, where the support beams of a number of buildings collapsed, the same types of damage were sustained. In the ravaged hairstyling apprenticeship rooms, the students – mostly girls – suffered injuries from flying glass and other objects. The most serious injuries resulted from falling blocks of materials.

The fatal accident that killed a young student warrants closer attention. The student, who had just changed in the locker room, went out to the gymnasium before the others at the very moment of the explosion, which sent construction materials and heavy metal fragments in particular, flying in all directions. He died almost instantly, not far from another student, who had also come out before the others, and who for the same reasons will unfortunately be scarred for life. If the disaster had occurred five minutes later, the dozens of students who had been changing in the locker room would have been either outdoors, struck by flying debris, or in the gymnasium, which was devastated by the blast. With the exceptions of the canteen and gym, which with its unique architecture was totally devastated, the other buildings offered students much better protection than outdoor areas.

Initial lessons

Information gathered after the explosion from the emergency taskforce indicated that school managers did not obtain directives from the academic authorities until one hour after the incident. Radio messages instructed that "students be kept in rooms with windows that can close, and they should not go out". But virtually all of the windows in front-line buildings had been broken.

The regional education authorities in Toulouse, which in the following hours and days had to manage thousands of calls, soon organised material assistance and psychological support for nearly one-third of the 20 000 students in the schools affected by the explosion. Systematic sight and vision tests were also conducted. The feelings of uncontrolled panic recorded by managers and students in interviews after the explosion highlight the importance of general initial-response training programmes, such as the one initialised by Lieutenant Thomas in Grasse (see Chapter 17, in this publication).

Problems of co-ordination with the authorities and external services must also be addressed. Lack of preparation was another important issue. In general, group information

campaigns met with little success, and numerous workshops on how to prepare for major risks were cancelled due to lack of enrolment. As a result, rescue worker roles had to be improvised in a country in which only 10% of the population has received any first-aid training.

Risk assessment is compulsory for schools and state services in France. The various instruments at their disposal enable these bodies to make the best possible assessment, and thus to provide effective prevention and maximum safety for the students in their care. Much remains to be done, however, before everyone truly assumes responsibility for their own safety.

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CHAPTER
3

EXAMINING SCHOOL SAFETY IN KOREA

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Abstract: In the last five years, Korea has reported an increasing number of accidents in schools. This paper presents national statistics on school accidents and compensation paid to those involved, and describes the most recent school safety-related incidents in Korea. It also summarises the policy developments in Korea in 1996, when new student safety administration laws were enacted, and in 2002 in response to the fire in Chun An primary school. A summary of safety education for students, staff and parents in Korea is also presented.

Accidents in schools in Korea: Some statistics

According to national statistics published by the School Safety Mutual-Aid Association (SSMA), in 2001, 18 941 school accidents were reported to local education administration offices in 16 cities in the Republic of Korea. Since 2001, accidents in schools have increased: 9 265 accidents were reported in 1997, 14 481 in 1998 and 15 969 in 2000 (SSMA, 2003).

In 2001, the reported compensation paid for school safety-related accidents was KRW 8 769 340 000 (USD 7.3 million), an increase of USD 1.7 million compared with the previous year. Approximately USD 7.1 million of this compensation was paid by the SSMA, USD 150 000 by donations, USD 11 000 by education departments or schools, USD 5 000 by teachers, and USD 2 500 by student offenders. Seven lawsuits were filed relating to dissatisfaction with the amount of compensation (Korea Education Newspaper, 2002).

Data from the Seoul SSMA indicate that lower secondary schools have the highest accident rates (Table 3.1). Most accidents occurred during break times in primary schools and during physical education classes in secondary schools (Table 3.2). Concerning injury types, bone fracture was common in all schools (Table 3.3).

Table 3.1. School safety-related incidents and payment of compensation in Seoul (2001)

Level of education	Number of accidents receiving compensation			Compensation (KRW)
	Males	Females	Total	
Primary	636	314	950	289 819 140
Lower secondary	902	238	1 140	606 389 130
Upper secondary	710	208	918	528 062 320
Special schools	12	6	18	9 474 770
Total	2 260	766	3 026	1 433 745 360

Source: SSMA, 2003.

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Table 3.2. Number of accidents in schools in Seoul, by location of accident (2001)

Location	Level of education				
	Primary	Lower secondary	Upper secondary	Special schools	Total
Physical education class	348	535	408	4	1 295
Laboratories	16	5	30	–	51
Classrooms	79	103	136	1	319
Cleaning activity	33	38	17	–	88
Break time	407	320	175	8	910
Extra class	44	122	129	3	298
Others	23	17	23	2	650
Total	950	1 140	918	18	3 026

Source: SSMA, 2003.

Table 3.3. Number of accidents in schools in Seoul, by type of injury (2001)

	Type of injury	Level of education				
		Primary	Lower secondary	Upper secondary	Special schools	Total
	Death	–	3	2	–	5
	Disability	1	–	2	–	3
Injury	Fracture	476	718	495	8	1 697
	Dental damage	157	97	79	4	337
	Facial injury	17	21	17	–	55
	Lacerated wound	169	96	122	3	390
	Concussion	26	33	20	–	79
	Articulated sprain	61	113	127	1	302
	Other	43	59	54	2	158
	Total	950	1 140	981	18	3 026

Source: SSMA, 2003.

History of school safety in Korea

School safety incidents

The increase in student's deaths in Korea due to accidents has drawn the attention of the public and policy-makers to school safety issues. Three such incidents are described below:

- On 30 June 1999, 23 students were killed in a fire at the Sea-Land youth hostel in Hwa Sung, Kyoung Ki Do. Pre-school students from the So Mang kindergarten were camping at the hostel when the fire broke out.

- On 23 August 2002, primary school student Han Sung Ji was killed when a goal post fell down during a football training session after school.

• On 26 March 2003, eight primary school students from the school football team were killed in a fire in a boarding house in Chung Nam. The students, who were sleeping, were killed only eight minutes after the fire started. The building interior was made of wood and styrofoam, which burnt easily and produced toxic fumes. The exits and windows in the building were small and narrow.

Policy development

Before Korea joined the OECD in 1996, compensation was the most important school safety issue in Korea. In 1988, the Korean government established the SSMA in Seoul to provide compensation for student and teacher injury or loss of life in school accidents, to protect schools and to create a more positive educational environment. By the early 1990s, SSMAs were organised in 16 local areas.

In 1996, new student safety administration articles and clauses were created through amendments to school health and hygiene laws, which required school principals to check and improve school facilities and equipment, and safety to be taught in schools to prevent accidents. In 2001, the children's welfare law was amended to include articles on children's health and safety: safety standards were imposed on children's play facilities and school safety education taught in every school.

In 2002, the Office for Government Policy Co-ordination, which comprises seven government departments, created the Children's Protection Promotion project. "Enforcing Child Safety" was selected as one of five project areas to be promoted by all seven government departments (Children's Protection Promotion Task Force, 2002). In February 2003, children's safety was an important part of the current government's campaign policy. On 5 May 2003, 81st Children's Day, the year 2003 was declared as the first year of children's safety in Korea. By 2007, children's accidents are to be reduced by half through strong and ambitious government policies. The Children's Safety Prevention Promotion Committee was founded by the prime minister, and the Children's Safety Inspection Team was established in Cheong Wa Dea (Office for Government Policy Co-ordination, 2003).

Following the fire in Chun An primary school, for which the State Council was held responsible, each department is required to report on the progress of accident prevention activities. Several policies were also established to enforce school safety. The main government school safety policies are presented below (Ministry of Education and Human Resources Development, 2003):

• *Laws on school accident prevention and compensation* (Ministry of Education and Human Resources Development). These laws establish a system for safety administration of facilities, and victim support and compensation. The bill was submitted before the National Assembly in March 2004, and was scheduled to be proclaimed and enforced in the first half of 2004.

• *Amendment to enforce school facility business promotion law* (Ministry of Education and Human Resources Development). The Office of Education must approve school

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buildings under 200 m² before construction begins. A legislation notice was submitted in May–June 2003, and the amendment was proclaimed and enforced in July 2003.

- *Design of school facilities and safety preparation manual* (Ministry of Education and Human Resources Development). In December 2003, a safety manual for schools was drafted, which considers student's physical size, teacher's cognitive psychology and physical education facilities. Research for the manual was contracted to specialists in construction, fire fighting, electricity and gas, including non-governmental organisations.

- *Protecting vulnerable facilities against fire* (Ministry of Education and Human Resources Development). Equipment such as non-flammable interior furnishings and kitchen equipment, automatic fire detectors and automatic fire extinguishers were installed in accommodation facilities in 1 124 schools.

- *Amendment to fire fighting enforcement law* (Ministry of Government Administration and Home Affairs). School facilities that are less than 400 m² must meet fire safety standards before construction. Departments in local governments have been working on the amendment since September 2003, and it will be proclaimed and enforced in May 2004.

- *Amendment to construction law* (Ministry of Construction and Transportation). From the first half of 2004, it is compulsory to use non-flammable building materials for interior furnishings in primary schools.

- *Regulation No. 4122* (Seoul Metropolitan Office of Education). This regulation relating to safety administration of school facilities in Seoul was enforced in October 2003 following the death of Han Sung Ji. It requires the safety administration committee of school facilities in the city education office in Seoul to establish basic plans for safety administration and maintenance of school facilities and to define safety standards for school facilities, including inspections.

- *Safety standards improvement projects.* The Technical Standards Institute in the Ministry of Commerce, Industry and Energy is currently carrying out a safety standards improvement project for children's play facilities. The Education Department is continuing to implement safety standards improvement projects for school facilities and equipment. Completion of these projects is planned in 2004.

Safety education

The objective of safety education is to reduce the risk of accidents in schools. A culture of risk prevention can be fostered by teaching students about the causes of accidents and how to avoid them and by encouraging more risk-free behaviours (Christoffel and Gallagher, 1999).

Safety education for students

The 7th Education Programme states that safety education must be integrated into all curricula (Yoon *et al.,* 2002). To meet this objective, the Korean Ministry of Education and local education departments have been distributing safety education texts. Since 1996, the Korean Safety Industry Committee has also been nominating exemplary schools for safety education, and developing instructional safety education books and distributing them to schools.

Safety education for staff

Since 2002, teachers and principals must complete more than two hours of safety education in teacher training programmes. Other educational programmes have been developed for civilian organisations and school staff (Yoon, 2003a).

Safety education for parents

A compulsory safety education programme for parents of pre-primary students is being conducted by class assistants and volunteers through the Ministry of Education and Human Resources Development. Other organisations are running safety-related programmes for parents of primary school students.

Conclusion

Formerly, educational policy-makers and administration in Korea had been slow to improve the school environment in terms of safety, for example to replace and repair outdated equipment and inspecting school facilities. As a result, thousands of school accidents affecting the lives of students, teachers and parents occurred every year (Yoon, 2003b).

Recently, this attitude has been changing. Korean society is now acknowledging that a students' right to a safe and secure learning environment is fundamental to the growth and development of the next generation. In the last decade, dramatic changes in educational policy on the issue of school safety have testified to the sustained commitment of Koreans to promoting a culture of risk prevention in schools.

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PART
II

CRISIS PLANNING AND MANAGEMENT

Crises most often occur without warning and can either directly or indirectly affect the school environment. The events in New York on 11 September 2001, the school stabbings in Ikeda Elementary School in Japan in June 2001 and the explosion in a fertiliser factory in Toulouse in France in September 2001 are three examples of such occurrences.

This section investigates the preparedness of schools in an actual emergency. It addresses the following questions:

• How effectively did students and teachers manage the emergency?

• How effectively did local emergency services and other agencies maintain the safety and security of schools?

• Did school safety and emergency plans help during the emergency?

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CHAPTER
4

APPROACHES TO SCHOOL SECURITY IN JAPAN

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Abstract: This paper describes the school stabbing incident at a primary school in Ikeda, Japan, in 2001 and the response of the Ministry of Education, Culture, Sports, Science and Technology. It describes the implementation of "soft" and "hard" approaches to strengthen school security, and budgetary implications. Soft approaches include developing a crisis management manual for schools, publishing a collection of security models currently used in schools, and implementing crime prevention education, community projects and post-event care for students. Hard approaches include organising a meeting of experts, publishing a report on security in school facilities in Japan, and revising the school facilities guide and crime prevention manual. Finally, the paper presents the steps taken at Ikeda school after the tragedy.

Incident at Ikeda Elementary School

In June 2001, an unprecedented incident occurred that had a significant impact on Japanese society, affirming the need to ensure the safety of schoolchildren. On Friday, 8 June 2001, Mamoru Takuma entered the grounds of Ikeda Elementary School armed with a cleaver. He arrived after 10:00 a.m. through a gate that was used exclusively for automobile access, just as the second hour of instruction was finishing. He attacked children and teachers in first- and second-grade classes on the first floor, leaving eight dead (one male first-grade student and seven female second-grade students) and 15 injured (five male students, eight female students and two faculty members).

On 14 September 2001, the Osaka District Public Prosecutor's Office brought an indictment against Takuma for murder, attempted murder, trespassing and violation of the Firearms and Swords Control Act. After deliberating for two years, the Osaka District Court reached its verdict on 28 August 2003 and sentenced the defendant to death. The defendant's lawyers initially appealed the verdict, but the defendant withdrew the appeal himself on 26 September 2003, resulting in the Osaka District Court passing the death sentence.

On 8 June 2003, exactly two years after the incident, the ministry, Osaka Kyoiku University and Ikeda Elementary School (which is attached to the Osaka Kyoiku University) finalised a written agreement with the families of the children who died in the tragedy. According to the terms of this agreement, the ministry, university and school admitted that security at the school had been inadequate, apologised for the deficiency, and pledged to take systematic and rapid measures to prevent the recurrence of similar incidents. In addition, the national government recognised its responsibility to pay compensation to the victims' families.

Criminal offences in Japan

The tragedy at the Ikeda Elementary School was a great shock to the general public in Japan, which had traditionally been regarded as one of the safest countries in the world. However, in recent years the number of crimes in Japan has been increasing rapidly while the number of arrests has been decreasing. The number of criminal offences rose from about 1.8 million in 1996 to 2.9 million in 2002, which is a 1.6-fold increase; over the same period, the number of arrests fell from around 740 000 to 590 000, a decrease of about 20% (Table 4.1).

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The number of crimes committed on school grounds also rose from about 29 000 in 1996 to 45 000 in 2002, which is about a 1.6-fold increase; the number of felonies in schools – murder, burglary, arson and rape – doubled, rising from 48 to 96 over the same period (Table 4.2).

Table 4.1. Number of acts recognised as criminal offences in Japan*

Year	Number of acts recognised as criminal offences	Index of number of acts (1995 = 100)	Number of arrests	Number arrested	Crime rate (crimes per 100 000 people)**
1996	1 812 119	101	735 881	295 584	1 439.80
1997	1 899 564	105	759 609	313 573	1 505.20
1998	2 033 546	113	772 282	324 263	1 607.50
1999	2 165 625	120	731 284	315 355	1 709.30
2000	2 443 470	136	576 771	309 649	1 925.50
2001	2 735 612	152	542 115	325 292	2 148.90
2002	2 853 739	158	592 359	347 558	2 240.00

*The table does not include traffic violations.
**The crime rate indicates the number of acts recognised as crimes per 100 000 people. The population used in the calculation of the crime rate was based on data from estimates as of 1 October of each year
Source: Statistics Bureau of the former Management Co-ordination Agency and National Census.

Table 4.2. Number of acts in schools recognised as criminal offences in Japan*

			1996	1997	1998	1999	2000	2001	2002
Felonies		Murder	3	4	8	5	9	3	1
		Burglary	4	7	11	11	8	16	10
		Arson	32	46	37	46	31	36	51
		Rape	9	20	25	30	27	30	34
		Subtotal	*48*	*77*	*81*	*92*	*75*	*85*	*96*
Non-felonies	Theft	Battery	1 124	1 393	1 374	1 530	1 952	1 930	1 702
		Theft, breaking and entering	7 270	7 608	7 081	7 329	7 491	7 438	8 122
		Car theft	10 804	10 761	10 269	10 058	10 758	12 065	11 663
		Other thefts	6 680	6 272	7 436	8 399	9 942	10 704	11 397
	Fraud or forgery		104	182	191	75	264	70	93
	Charge of obscenity		62	132	170	81	141	142	132
	Other criminal offence		2 836	3 184	3 499	4 121	5 965	9 172	11 681
	Subtotal		*28 880*	*29 532*	*30 020*	*31 593*	*36 513*	*41 521*	*44 790*
	Total		**28 928**	**29 609**	**30 101**	**31 685**	**36 588**	**41 606**	**44 886**

*Data refer to all types of schools listed in Article 1 of the School Education Act (*i.e.* elementary schools, junior high schools, high schools, universities, technical colleges, schools for those with visual or auditory impairments, schools for the physically or mentally disabled and kindergartens), those listed in Article 82 of the same Act, and nursery schools regarded as equivalent to kindergartens.

New approaches to school safety and security

Following the tragedy at Ikeda Elementary School, the Ministry of Education, Culture, Sports, Science and Technology in Japan has implemented a number of "soft" and "hard" approaches to strengthen school security.

"Soft" approaches

Crisis management manual for schools

The ministry has prepared a crisis management manual on dealing with school intrusion by strangers (an excerpt is provided in Figure 4.1). It identifies specific procedures to be followed by faculty members for ensuring the safety of children and others in the school during an incident and for obtaining the assistance and co-operation of parents, community members and emergency services such as police and fire departments. The manual also identifies how faculty members can heighten their crisis management capabilities and execute programmes for systematic crisis management in schools.

Collection of school security models

The ministry has also published a collection of security models currently used in schools, mainly concerning the response to school intrusion. Thirty model approaches are presented, which schools and boards of education can adapt to the individual circumstances of the school and community. These include:

- Organising emergency drills to respond to an intrusion, in co-operation with police and fire departments.

- Restricting access, installing signs, and using other methods to control access and identify and monitor the arrival of visitors.

- Establishing a system for rapid notification of the entire community regarding suspicious persons, in co-ordination with schools, police and community groups.

- Designating emergency refuges for children, increasing the number of these refuges and disseminating information about the refuges to community members. Emergency refuges are private homes, stores and other facilities that have agreed to serve as places where children can seek help and shelter if they are approached or pursued by strangers. These centres have identification plates or stickers displayed on doors or windows, and will notify the police once the child is in the refuge.

- Organising patrols inside and outside the school, in co-operation with police and other concerned authorities, community groups and volunteers.

- Preparing and distributing security maps indicating potentially dangerous areas in the school district.

- Installing anti-crime surveillance systems and alarms.

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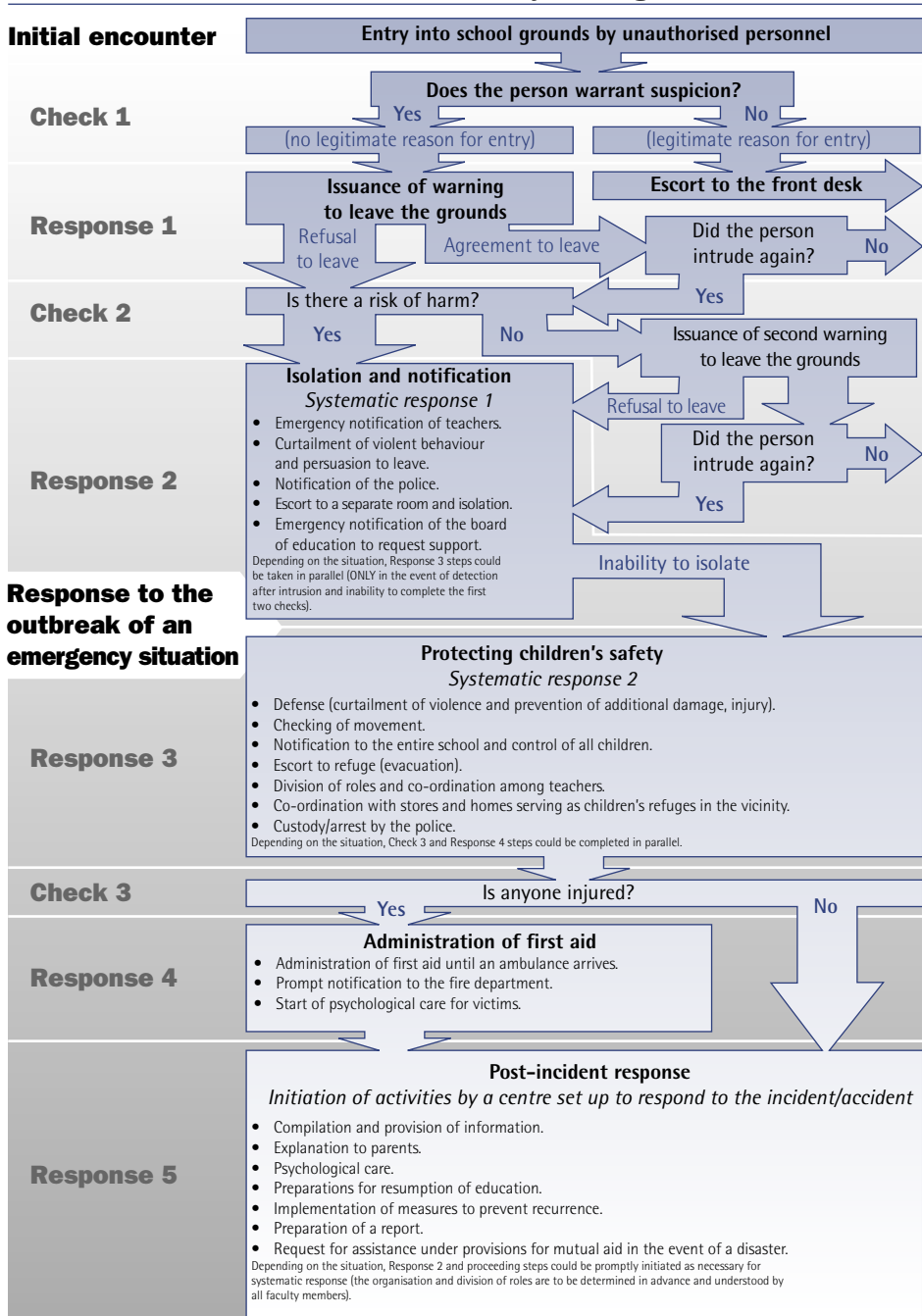## Figure 4.1. Examples of emergency response for dealing with school intrusion by a stranger

Initial encounter — Entry into school grounds by unauthorised personnel

Check 1 — Does the person warrant suspicion?
- Yes (no legitimate reason for entry)
- No (legitimate reason for entry)

Response 1
- Issuance of warning to leave the grounds
  - Refusal to leave
  - Agreement to leave
- Escort to the front desk
  - Did the person intrude again? No

Check 2 — Is there a risk of harm?
- Yes
- No
- Issuance of second warning to leave the grounds
  - Refusal to leave
  - Did the person intrude again? No
  - Yes

Response 2
Isolation and notification
Systematic response 1
- Emergency notification of teachers.
- Curtailment of violent behaviour and persuasion to leave.
- Notification of the police.
- Escort to a separate room and isolation.
- Emergency notification of the board of education to request support.

Depending on the situation, Response 3 steps could be taken in parallel (ONLY in the event of detection after intrusion and inability to complete the first two checks).

Inability to isolate

Response to the outbreak of an emergency situation

Response 3
Protecting children's safety
Systematic response 2
- Defense (curtailment of violence and prevention of additional damage, injury).
- Checking of movement.
- Notification to the entire school and control of all children.
- Escort to refuge (evacuation).
- Division of roles and co-ordination among teachers.
- Co-ordination with stores and homes serving as children's refuges in the vicinity.
- Custody/arrest by the police.

Depending on the situation, Check 3 and Response 4 steps could be completed in parallel.

Check 3 — Is anyone injured?
- Yes
- No

Response 4
Administration of first aid
- Administration of first aid until an ambulance arrives.
- Prompt notification to the fire department.
- Start of psychological care for victims.

Response 5
Post–incident response
Initiation of activities by a centre set up to respond to the incident/accident
- Compilation and provision of information.
- Explanation to parents.
- Psychological care.
- Preparations for resumption of education.
- Implementation of measures to prevent recurrence.
- Preparation of a report.
- Request for assistance under provisions for mutual aid in the event of a disaster.

Depending on the situation, Response 2 and proceeding steps could be promptly initiated as necessary for systematic response (the organisation and division of roles are to be determined in advance and understood by all faculty members).

Figure 4.2. Demonstration by police officer for dealing with school intrusion by a stranger

Crime prevention education

The ministry is promoting talks and demonstrations in schools by professionals in the field of school safety:

- Lectures by experts, school principals, active or former police officers, and active or former fire fighters on school safety to students, teachers and other faculty members.

- Demonstrations by active or former police officers of methods to ensure the safety of schoolchildren in the event of intrusion by strangers (Figure 4.2).

- Demonstrations of staunching, resuscitation and other first-aid techniques by school physicians and active or former fire fighters.

Community projects

The ministry is also promoting a number of community projects involving schools, such as model districts for school security, and disseminating the results throughout the country. The projects involve:

- Preparing and executing guidelines for security education, which can be adapted to the level of education and to the community.

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- Implementing security approaches in schools, in co-ordination with parents, local authorities and community groups.

In 2002, 49 schools and boards of education were instructed to execute these projects.

Care for victims

The ministry is providing a system of care for students suffering from post-traumatic stress disorder (PTSD) and related conditions, which includes:

- Preparing pamphlets on care policies and methods.

- Constructing a database of specialists in psychological care.

- Organising research conferences involving experts, school health care personnel and others to share information and experiences on approaches and issues related to psychological care for schoolchildren.

"Hard" approaches

Meeting of experts and report on security in school facilities

In November 2001, a meeting was held to consider key points in policy-making, planning and design for crime prevention in school facilities. It was attended by school architects, experts in crime prevention and school security, and officials in school education authorities and administrations. In the year following the meeting, a team of experts was sent to schools and public housing projects in Japan. In addition, the team visited schools in the United States where random shootings had occurred. A meeting was also held with relatives of the Ikeda Elementary School victims.

In November 2002, the group presented its findings in a final report entitled "Crime Prevention Measures for School Facilities", which presents comprehensive proposals for crime prevention measures in Japanese schools. The report is divided into three chapters: policies for crime prevention measures in school facilities; key points in planning and design; and ways to promote these measures. It identifies three minimum safety measures that must be implemented in Japanese schools, which are based on crime prevention strategies in school facilities in other countries and principles of crime prevention through environmental design (CPTED):

- *Facility planning to enable confirmation of visitor arrival and identity.* Facilities must be planned to enable supervision of visitors and prevention of intrusion by strangers. This can be achieved by installing security gates at strategic locations; positioning visitor waiting rooms, faculty rooms, offices and supervisors' rooms in view of front and other access gates; installing external access controls at the school front reception desk; and arranging sure locking of classroom entrances and windows on the first floor of school buildings.

- *Facility planning with an emphasis on visibility and domain protection features.* The layout of school facilities must be planned to minimise blind spots and maximise

views of the grounds and interior. Plans must also consider the concept of domain, *i.e.* the scope of protection and the means of protection within the domain. Gates, fences, outdoor lighting, vegetation, parking spaces for cars and bicycles and anti-crime surveillance systems should clearly define, in both physical and visual terms, the domain to be protected.

• *Installation of emergency notification systems in classrooms.* In the event of an emergency, natural or man-made systems should be installed so that police and fire departments, parents, all classrooms, faculty rooms, the principal's office and other offices can be promptly notified. Such systems could comprise interphone or telephone lines linking both normal and special classrooms, intramural communication systems and emergency evacuation routes. Crime prevention measures such as a guard service could also be used on nights and weekends.

The report concluded that:

> There can be no question about the primacy of ensuring the safety of children and other personnel in schools. It is important to develop school facilities that are open to the community only after taking measures for crime prevention and making full provisions for security.

> The opening of schools to the community must not be equated with the practice of keeping the grounds physically open with no measures to keep intruders out.

Revision of school facilities guide

The guide instructs local public bodies and other organisations on basic planning and design policies and practices. It comprises eight chapters on general rules, facility planning, layout planning, classroom planning, detailed design, outdoor design, structural design and equipment design. The ministry has compiled a different guide for each school type. In August 2003, following the publication of the report on security in school facilities described above, the ministry revised the section of the guide relating to crime prevention: a ninth chapter was added on crime prevention planning, basic perspectives on the subject were inserted into the first chapter and related material was incorporated into other chapters.

Crime prevention manual for schools

The ministry is preparing a manual on crime prevention measures in school facilities, which will consider characteristics of different schools, category of buildings (*i.e.* new, existing, renovated and modified schools) and "soft" safety supervisory measures in the context of developing open schools. It will also include case studies for a range of school conditions. The manual will be published in 2004. The ministry is also planning to organise an experts' group in 2004 to study crime prevention measures for school facilities with the participation of teachers, administrative authorities, architectural designers and other related parties.

School security budget 2003

The ministry's budget for security in schools for the 2003 financial year is presented in Figure 4.3.

Figure 4.3. Budget for school security supervision in Japan in 2003

Public schools	National schools	Private schools	National, public and private schools
Subsidies for conditioning of public school facilities	*Measures funded through a special account for national schools*	*Measures for school security costs*	*Improvement of school security and psychological care through the "Children's Safety Project"*
budgeted cost of JPY 8 385 million	*budgeted cost of JPY 379 million*	*budgeted cost of JPY 1 678 million*	*budgeted cost of JPY 395 million*
• Programme for large-scale remodelling work, including rearrangement of classrooms and faculty offices, construction of gates and fences, and installation of anti-crime surveillance systems and notification facilities.	• Funding for all national schools provided by the national government, with a special account. • Cost of consignment of security services, such as posting of guards, at affiliated schools. • For Osaka Kyoiku University: ○ Establishment of a school crisis management support centre, for nationwide use. ○ Conditioning of school buildings at Ikeda Elementary School (budgeted cost of JPY 140 350 million).	• Costs covered as subsidies for expenditure in private secondary schools.	• Crime prevention classes. • Forums to promote school security. • Model projects for school security involving the community. • Preparation of pamphlets for psychological care for post-traumatic stress disorder and other conditions. • Provision of support services for students' mental health. • Programme to execute security measures in school facilities. *Subsidies for expenditures for conditioning of educational facilities, including special education (budgeted cost of JPY 20 million)*

Ikeda Elementary School after the tragedy

Support team

Following the tragedy at Ikeda Elementary School, a team of 60 experts specialising in mental health was sent to provide support for students, parents, teachers and other personnel at the school. The team was organised by Osaka Kyoiku University, in co-operation with Osaka University, Osaka Prefectural Government, Hyogo Prefectural Government, Osaka Prefectural Police, Osaka Prefectural Clinical Psychologists and the Ministry of Health, Labour and Welfare. The team organised the following:

- Counsellors and teachers visited the homes of all children involved in the incident.

- A 24-hour "hot line" was installed to support mental care.

- An emergency check of facilities was completed.

- Three guards were posted at each school gate.

- A three-party liaison council was formed comprising the university/school, Osaka Prefectural Government and Ikeda City Government.

Construction of a temporary school building

After the incident, school authorities decided to construct a temporary building. Given the feelings of parents and the need for continued psychological care of students, it was considered undesirable to resume classes in the building in which the incident took place. Classes resumed in the temporary building on 27 August 2001.

Construction of a new school building

From April to November 2002, an advisory committee on building design, comprising teachers, parents and families of victims at Ikeda Elementary School, examined proposed plans for construction of a new building. The new building was planned to be completed in February 2004. The major features of the new building are:

- Placement of a single entrance to the school grounds.

- Remodelling of the southern building (the location of the incident), which will serve as a special classroom wing with an "encounter gallery" and other facilities on its first floor.

- Reconstruction of the northern building, which will contain ordinary classrooms. The faculty rooms will be designed to allow teachers unrestricted views of the school interior.

- Installation of glass walls in the gymnasium to prevent obstruction of interior views.

Support centre

After the tragedy, many teachers, children, parents and other relatives of the victims

required long-term psychological care and support. Thus, a support centre was established at Osaka Kyoiku University to provide services for all those involved in the Ikeda incident. The centre also conducts research in several areas, disseminating results throughout the country:

• Psychological care of schoolchildren, including recovery from trauma and PTSD.

• Approaches used by schools for children with trauma and other psychological problems.

• Systems of crisis management to be used in schools.

Responsibility of local public bodies and the ministry

Although the tragedy at Ikeda Elementary School took place in a school attached to a national university, elementary and junior high schools in Japan are usually managed by municipalities or other local public bodies. Boards of education and other school authorities attached to these bodies must fulfil their obligation to ensure the security of schools under their jurisdiction. This requires implementing comprehensive and cost-effective measures that consider both "soft" and "hard" approaches to school safety and security, in co-operation with parents, local governments and police and fire departments.

The ministry now allocates subsidies to local public bodies and other qualified parties for school security. It is also looking to learn from school safety and security measures used in other countries, and generally working to increase community awareness.

CRISIS PLANNING AND MANAGEMENT IN NEW YORK CITY

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Abstract: Over the past three years, New York City public schools have experienced at least four events that have highlighted the importance of planning and crisis management: the 11 September 2001 World Trade Centre attack, the 14 August 2003 power failure, the shooting of City Council Member James Davis in July 2003 and Hurricane Isabel in September 2003. This paper describes the nature and impact of these events on schools, students and staff, and the role of the New York City public school system in promoting and maintaining a safe and secure school environment.

Introduction

The New York City Department of Education operates the largest public school system in the United States, serving children of all levels of education, from pre-primary to secondary education, as well as special education and home-schooled students. It is composed of over 1 200 schools and 1.1 million students in five boroughs in the city of New York: Manhattan, Brooklyn, Queens, Staten Island and the Bronx. Of these students, 134 100 are learning English – approximately 120 languages are spoken by students and their families – and 137 400 are in special education settings. On any given school day, there are at least 55 300 classes in session, taught by 91 600 teachers. In addition, 275 200 students attend 914 religious schools and others attend charter and independent-private schools. The Office of Pupil Transportation oversees the transportation of roughly 170 000 young students and students with special needs every day (Lukin, 2003).

The Office of School Safety and Planning, which was established following the restructuring of the New York City Department of Education in September 2002, has primary responsibility for the department's policy development, planning, implementation and management of school safety and security. The office also oversees attendance, discipline, emergency preparedness, and prevention and intervention initiatives.

World Trade Centre attack, 11 September 2001

During the event

On 11 September 2001, a balmy mayoral primary day in New York [City], only the fourth day of school – when teachers and students were still new to one another – the city learned two very poignant and profound lessons: (1) that its school staff are quick-thinking, resourceful and instinctively protective of their students, and (2) that the times demand revisiting all we thought we knew about school safety and public preparedness. (Lukin, 2003)

The events of the day were as follows:

- At 8:46 a.m., a plane hit Tower 1 of the World Trade Centre.

- At 9:06 a.m., a plane hit Tower 2 of the World Trade Centre.

- At 9:17 a.m., the Federal Aviation Administration shut down all New York City area airports.

- At 9:21 a.m., the Port Authority of New York and New Jersey ordered the closure of all bridges and tunnels in the New York area.

- At 9:50 a.m., the south tower of Tower 2 of the World Trade Centre collapsed.

- At 10:29 a.m., the north tower of Tower 1 of the World Trade Centre collapsed.

- At 11:02 a.m., the area south of Canal Street was evacuated.

- At 2:49 p.m., subway and bus services were partially restored in New York City.

- At 5:20 p.m., the 47-storey building located at 7 World Trade Centre collapsed.

- At 9:57 p.m., Mayor Giuliani announced the Chancellor's decision to close New York City schools on Wednesday, 12 September.

There are seven public schools, serving over 5 600 students, located within 800 m of the World Trade Centre site, an area that is now known as "Ground Zero": PS 150 (175 students), Stuyvesant High School (3 041 students), PS 89 (239 students), IS 89 (255 students), PS 234 (613 students), Leadership and Public Service High School (586 students), and the Economics and Finance High School (720 students) (Thomas, 2001).

Students began to evacuate all schools, starting with PS 234, after the second plane struck Tower 2. School staff walked students away from the towers. In addition, 3 000 students from the Murray Bergtram High School, which was located several blocks to the east of the towers and across the street from the New York City Police Headquarters, were also evacuated as there was concern that the police headquarters was also a potential target. School staff safely evacuated almost 9 000 students from schools located in or near Ground Zero. Staff also ensured that all students returned safely to their homes.

After the event

Chancellor Harold. O. Levy extended the school day and cancelled after-school programmes in all schools. The next day, all schools were closed. On 13 September 2003, students from these seven schools were temporarily assigned to other schools: students from Stuyvesant High School were sent to Brooklyn Technical High School, students from the Leadership and Public Service High School to the Fashion Industries High School, students from the Economics and Finance High School to Norman Thomas High School, students from PS 89 to PS 3, students from IS 89 to IS 70, students from PS 150 to PS 3, and students from PS 234 to PS 41 (Thomas, 2001).

The school relocations presented challenges as class sizes doubled and even tripled in some schools. For students from Stuyvesant High School, who were sent to Brooklyn Technical High School, the school had to split classroom sessions: Brooklyn Technical students attended classes from 7:15 a.m. to 1:47 p.m., and Stuyvesant students attended classes from 11:00 a.m. to 6:11 p.m. During the three-hour overlap period, Stuyvesant students attended classes in the auditorium. In response to parents' concerns about overcrowding, the daily class schedule was further modified. Class times were shortened for both Brooklyn Technical and Stuyvesant students, allowing students from each school to attend classes separately (Thomas, 2001). Stuyvesant High School re-opened for classes on 9 October 2001 (New York City Department of Education, 2001a), IS 89 on

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22 January 2002, and PS 150, PS 234 and PS 89 on 4 February 2002. The Economics and Finance and Leadership and Public Service high schools re-opened in early February 2002 (New York City Department of Education, 2001b). Students from Murray Bergtram High School returned to their school within days of the event. The Board of Education also acted swiftly to provide mental health services to children, staff and administrators.

While the evacuation effort was remarkable, it is important to note that in the case of almost every school, the specific protocols for School Safety Plans outlined in the *Safe Schools Against Violence in Education Act (Project SAVE)* (Butterworth, 2001) – which from November 2000 required New York City boards of education to develop district-wide and building-level school safety plans that provide for crisis response and management – were not followed. For example, the recommended evacuation route for students at Stuyvesant could not be used due to the dangerous conditions.

Regional power failure, August 2003

The potential impact on schools

On 14 August 2003, New York State, parts of Canada, Detroit and a number of other states on the east coast experienced a large power failure, which left approximately 50 million people without electricity. A subsequent report to Mayor Michael R. Bloomberg on "Enhancing New York City's Emergency Preparedness" recorded that:

> In New York City alone, 8 million residents, as well as countless numbers of tourists and commuters, were affected…Police officers, fire fighters, emergency management personnel and health professionals worked tirelessly to get the city safely through the crisis…Although the blackout was a serious emergency it could have been far worse. The city was fortunate that the loss of power occurred in nice weather during daylight hours, was of limited duration and occurred at the end of the work week, providing a weekend for business recovery by the city and private and non-profit sectors. Many New Yorkers were out of the city on vacation and the schools were not in session. (Alper and Kupferman, 2003)

The report also stated that had the power failure occurred during the school year, the city would have had to ensure the safety of 1.1 million students in 1 200 public schools. As explained above, every public school must have a safety plan that addresses such issues as evacuation, sheltering-in, fire drills and meals. Activating and implementing these plans is dependent on the nature and duration of the emergency. In an emergency of longer duration, for example, sheltering-in and feeding students and staff could be an issue. On a routine day, schools in New York City serve 145 000 breakfasts and 640 000 lunches, and typically have a two-day supply of food. However, they do not store potable water, medication or blankets, and most do not have generators. Other types of emergencies on the other hand may require evacuation, as was the case on 11 September 2001.

Independent, religious and charter schools would face similar safety and security issues in the event of a power failure or other city-wide emergency. In 2002, the Office of Emergency Management (OEM) and the New York City Department of Education met with representatives from independent schools to discuss emergency plans and protocols.

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Emergency response

In New York City, the OEM is responsible for co-ordinating the city's response to emergencies. In the event of a crisis such as the blackout, the Emergency Operations Centre (EOC) serves as the office's co-ordination centre, gathering and distributing information and co-ordinating staff from the Division of School Facilities and the Office of School Safety and Planning. During the blackout, city-wide emergency response mobilisation protocols worked effectively. Staff from the relevant city agencies reported to the EOC immediately after the blackout, and city-wide contingency plans were activated. Five schools were also used as "cooling centres" for citizens seeking relief from the heat. However, the Department of Education found it difficult to communicate with agency staff as cell phones and other communications networks were not operational. In addition, schools were only equipped with generators with sufficient energy for temporary use of elevators.

On the Monday following the blackout, Mayor Michael R. Bloomberg convened an Emergency Response Taskforce. The taskforce was directed by Andrew Alper, President of the New York City Economic Development Corporation, and co-chaired by Susan Kupferman, Director of the Mayor's Office of Operations. The purpose of the taskforce was to review the city's response to the blackout and to make recommendations on how the city can be better prepared in future emergencies. To ensure independent review, the taskforce members were largely drawn from outside the administration, and, in addition to city officials, included representatives from both the private and not-for-profit sectors with broad experience and responsibilities.[1]

The taskforce focused on six areas: emergency response, business continuity, "the city as employer", communications, transportation, and public health, safety and preparedness. To understand the scope of the city's response, the taskforce began its work by contacting every city agency – including agencies that provide meals to the elderly, enforce health-code violations, manage traffic and free people from elevators – to discover how they perceived that their own response and that of the city to the blackout could have been improved. It also conducted a public outreach survey, which was posted on the city's Web site in English and Spanish and at the 311 Citizen Service Centre. More than 3 700 survey responses were received. Many respondents cited lack of communication as the most pressing problem, followed by transportation.

The taskforce's final report included 35 recommendations (Alper and Kupferman, 2003). The recommendation that relates specifically to the school system states that the Department of Education should "assess the comprehensiveness of existing school safety plans and continue to provide a resource to independent and other non-public schools for emergency preparedness". While the city's response was impressive in many respects, it concluded that "it is important to learn from our experiences and find ways to improve current practices", acknowledging that "although there are common themes to many emergencies, every event is unique, and the next one could be significantly more challenging. It is impossible to prepare contingency plans for every eventuality, to model every permutation of disruptions or to stockpile the resources required to respond to an infinite number of worst-case scenarios".

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The shooting of Council Member James Davis, July 2003

In late July 2003, City Council Member James Davis was shot and killed on the balcony of the City Council Chamber during a public event. His assailant was immediately shot and killed by one of the police officers assigned to security who was standing on the chamber floor just beneath the balcony. This event is relevant to the Department of Education because it occurred in City Hall, and the Department of Education central headquarters is located in the Tweed Building, a few steps from the back entrance to City Hall. In addition, the City Hall Academy, a school, is located on the first floor of the building. Fortunately, there were no children on the premises in the month of July, although a group of school principals participating in leadership training were in the building, in addition to several hundred people, including staff and visitors.

The first reports of gunshots being fired in or around City Hall reached the office of the Chief Executive for School Safety and Planning from staff and the news media. As sirens from police and other emergency vehicles reached the area, the First Deputy Commissioner of the Office of Emergency Management was contacted and confirmed reports of the shooting. As early reports indicated that the perpetrator had escaped and could still be in the area, the Chief Executive immediately locked all entrances and exits to the Tweed building, and every floor of the building was searched by New York City police officers. No suspects were found. After one hour and 40 minutes, confirmation was received that the perpetrator had acted alone and had been killed.

After a debriefing with the building security team from the Department of Citywide Administrative Services (DCAS) and feedback from staff and visitors, the Department of Education conducted a thorough review of its safety and security protocols for the building. The morning after the shooting, additional scanning equipment had been installed, and all staff had been notified that everyone entering the building would be screened, not only visitors.

Contingency planning for Hurricane Isabel, September 2003

On 16 September 2003, the New York City Office of Emergency Management (OEM) posted weather warnings that powerful Hurricane Isabel was moving north-west across the Atlantic and would likely make landfall in the eastern United States later in the week. Isabel was being tracked as a Category 3 hurricane, meaning that it would be accompanied by winds up to 130 miles per hour, which could cause extensive damage.

Unlike the other events discussed in this paper, advance warning of the hurricane allowed the New York City Department of Education to make plans to mitigate harm. The OEM immediately organised a city-wide planning briefing for all staff. All information received about the hurricane was transmitted to schools, students and their families. Members of the public were advised to call 311, or to log on to the Emergency Management On-line Locator System (EMOL) to find out if their residence, office or school was located in a city evacuation zone.

However, the storm became weaker as it moved closer to the New York City area, and other than strong winds, the effects of the hurricane were minimal. As the city continued to monitor the storm's movement, the department identified potential flood areas. School bus drivers were stationed outside schools and remained on-call in case students needed to be evacuated. At the end of the day, the storm caused little or no disruption to schools.

Conclusion

The four events described in this paper show that the citizens of New York City and the employees of the school system are exceptionally civic minded when responding to crises. Even in the absence of a specific plan or when the existing plan cannot be executed, the people of New York City emerge as leaders. These events also illustrate that planning a response to an emergency is best done before the emergency occurs. While there are cases where no amount of planning can prevent the crisis, preparation and planning are essential to mitigation and recovery.

The principal challenge of the New York City Department of Education is to discern how to address the myriad of elements that threaten schools. Results from a recent survey highlight the importance of improving upon both the knowledge and practice of emergency preparedness in schools (National Centre for Disaster Preparedness, 2003). Survey results indicate that many Americans are unaware of emergency plans in schools. Only 58% of parents in the United States and 53% of parents in New York City are aware of the emergency or evacuation plans at their child's school, and 19% of parents nationally and 15% of parents in New York City are familiar with the details of the school plan. The New York City Department of Education has recently won a grant award from the United States Department of Education, which will be used to create a comprehensive state-of-the-art Web-based training programme designed to educate parents, teachers, students and other members of the community in all aspects of emergency preparedness. This recognises that emergency planning is a community process implicating preparedness, response, recovery and mitigation as the essential elements.

Note

1. In addition to Andrew Alper and Susan Kupferman, other taskforce members were Lilliam Barrios-Paoli, Senior Vice-President, United Way of New York City; Stanley Brezenoff, President and COO, Continuum Health Partners, Inc.; John Gilbert, Executive Vice-President and COO, Rudin Management, Inc.; Charles Maikish, Executive Vice-President, JP Morgan Chase; Gino Menchini, Commissioner, New York City Department of Information Technology and Telecommunications; Virginia Mewborn, Senior Director, Emergency Services, American Red Cross in Greater New York; Sam Schwartz, President, The Sam Schwartz Company; and Ben Tucker, Chief Executive, School Safety and Planning, New York City Department of Education.

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PART

III

INFRASTRUCTURE APPROACHES

Incorporating passive and active security features in school building design, in both old and new buildings, is an important consideration for education ministries, school architects and for the students and teachers using the building.

This section explores how building design and the use of security technologies can address school safety issues. More specifically:

• How effective are "design" strategies such as Crime Prevention Through Environmental Design (CPTED) and policies of "open-closed school" and "shelter in place"? Do fences and other physical security measures really make schools safer?

• How can security technologies improve school safety (*e.g.* metal detectors, surveillance cameras, locks, lighting systems and school security guards)?

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REVIEW OF SECURITY IN SCHOOL DESIGN IN IRELAND

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Abstract: This paper presents a review of security requirements for Ireland's schools. It describes the factors contributing to security-related problems in schools, and the most prevalent types of security threats. The review identifies four areas to be addressed: organisation, security procedures, building security and site security. Factors influencing building security (such as building access, structural elements and materials, roof design, monitoring and lighting) and site security (such as location and surroundings, site layout and landscaping) are discussed in detail. The review's security strategy and recommendations are also presented.

Introduction

The Department of Education and Science's Planning and Building Unit is responsible for 3 284 primary school buildings and 750 secondary school buildings and funding capital projects in tertiary institutions in the Republic of Ireland. The unit has 90 administrative staff and 27 technical and professional personnel.

In response to increasing acts of vandalism, theft and general misuse of school buildings in the Republic of Ireland, the unit – in consultation with the Garda Siochana National Crime Prevention Office, the school insurance industry, the security sector and school authorities – conducted a study to identify the current security requirements of the built environment. The results of this project were encouraging and will influence the design of future school building projects.

Identifying the issues

To make an initial assessment of the security challenges facing schools, a review of existing literature (see Bibliography) and statistical data was conducted, in addition to an analysis of the site-specific experiences and knowledge of the Planning and Building Unit's technical staff.

This review attributed the security problems faced by schools to the following factors:

- Schools can represent authority to people who have difficulty accepting authority.

- The value of education is not always fully accepted.

- Schools are unoccupied for long periods.

- Schools may be located in isolated areas.

- Poor building design can create security problems.

- Schools in urban areas usually face greater challenges than those in rural locations.

The review also identified – in descending order of occurrence – the four most prevalent types of security threats.

- *Malicious glass breakage*. Malicious glass breakage is one of the biggest problems faced by school authorities. Normally, these incidents are not reported to insurance

companies as insurance only covers damage that occurs as part of a fire or break-in. Malicious glass breakage tends to occur at night.

• *Intruder theft.* Intruder theft comprises a large part of claims to insurance companies. These incidents usually occur on summer evenings, as intruders do not require artificial light to inspect the building, and target areas are clearly visible through the windows.

• *Malicious damage.*

• *Arson.* While arson represents the biggest single loss event, it is not widespread. Most incidents occur during the summer holidays and between November and mid-January.

Figure 6.1 presents the number and cost of reported claims to insurance companies: malicious fires represent 19% of reported claims but only 87% of the cost of claims, while intruder theft represents 43% of reported claims but only 5% of the total cost of claims.

Figure 6.1. Number of reported claims and cost of claims in schools, by type of incident

Soaring insurance costs are currently putting a strain on school funds. Building and contents insurance represents approximately 50% of the cost of a school policy (Ecclesiastical Insurance Company, 1992). Unfortunately for security pro-active schools and fortunately for schools with few security concerns, the insurance industry calculates the cost of policies on a blanket basis, meaning that the risk is divided evenly over all schools. Thus, schools with enhanced security systems are not rewarded. As the element of risk is removed when buildings are better designed and have enhanced security systems, some recognition should be awarded by insurance companies to promote security in schools. This area is under review by some insurers.

Addressing the issues

Following the review, the Planning and Building Unit identified four areas to be addressed: organisation, security procedures, building security and site security.

Organisation

This area involves school administrators. Their role is to co-operate with local police crime prevention units, to establish emergency management procedures, and to make students and parents aware of these procedures. Without good management procedures, state-of-the-art security systems or designs are ineffective.

Security procedures

Security procedures should include identifying those responsible for school security and establishing plans and operational systems to be used in the school's daily operations. When routine procedures are in place, it is easier to notice abnormal events or incidents and to respond to them in a more efficient and controlled manner.

Building security

The planning of a school building should be conducive to students' intellectual, creative, physical and social activities. The school should provide a lively and welcoming environment that is not over-powering, impersonal or institutional and that can accommodate a range of activities (Department of Education and Science Ireland, 2004). It is important that school security solutions do not dilute any of these goals. Security should be considered as an integral part of the design process, from the preliminary planning stages to final construction, for constructing new schools, refurbishing existing schools and adding temporary accommodation, and for operational and maintenance plans. Many school security problems result from building designs that did not consider modern-day security issues.

The issue of building security focuses on the built environment, which is threatened from both inside and outside the school by vandalism, including glass breakage and graffiti, theft and burglary and arson, as described above. The review identified seven factors that influence building security:

- *Building access.* The number of building access points should be minimised due to fire hazard regulations and operational requirements. Screening of all visitors should take place at a main entrance point, which has unrestricted views from the office area, an audio connection and remote-release electronic locks.

- *Structural elements and materials.* To minimise breakage, the use of slate or tiles (which can be easily damaged) on vertical facades should be avoided; special vandal-proof glass should be used when the risk of glass breakage is particularly high. Careful consideration must also be given to replacement of window glazing, which represents a considerable proportion of a school's annual budget (most insurance companies do not provide coverage for glazing). While large 2 x 3 m glazing panels may look attractive on the first floor of a building, they are also an appealing target for stone throwers. Smaller glazed units are easier and less expensive to replace. To minimise fire damage, consideration must be given to the structural containment of the fire; unless multiple fires are started simultaneously in different compartments, schools should be able to operate in temporary classrooms with minimal disruption.

- *Building configuration.* The most secure building type is generally rectangular with no recesses or alcoves. As this uninteresting building design is rarely used, designers must ensure that recessed doorways do not create vulnerable areas and that covered areas can be secured. Similarly, drainpipes should be routed externally because of the long-term maintenance issues and the consequences of failure if routed internally, although

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they should not present climbing opportunities. Single-storey schools tend to be more prone to vandalism compared to two-storey schools, although adjacent positioning of schools should be avoided.

- *Roof design.* Preventing access to roofs, for example by constructing deep overhanging eaves, can eliminate many security problems.

- *Electronic security systems.* Security systems – such as intruder alarms, fire alarms, electronic door locks, security lighting and closed-circuit television (CCTV) – can act as a deterrent to intruders, detect their presence, and assist in identifying and prosecuting them. Not all schools however require the same level of electronic security systems.

- *Monitoring.* While all alarms are equipped with external audible sounders, these devices are not always effective in schools. The installation of a remote signalling device, which is monitored by an external alarm monitoring company, is more useful.

- *Lighting.* While building security lighting can be effective, it can cause problems if incorrectly designed or installed. Good quality lighting that focuses on the building façade and includes time switches with photoelectric cells and passive infrared detectors can act as a deterrent.

Site security

The review identified five factors that influence site security:

- *Location and surroundings.* Theoretically, a school located in a densely populated area that is unoccupied at night, weekends and holiday periods presents a higher risk than a school located in a suburb or rural area. In reality, schools are situated in the community they serve, and the availability of sites is often limited by factors such as poor town planning. Ideally, a school site should not be isolated and should be overseen by the local community.

- *Site boundary.* An effective site boundary is a critical component of school security and can relieve pressure from other areas. Although it is difficult to construct a perimeter that is physically impenetrable, socially acceptable and affordable, an appropriate site boundary should:

  o Be well-defined, prevent casual intrusion and make deliberate intrusion difficult and conspicuous.

  o Prevent access from inside and outside the site, so that it is as difficult for intruders to break in as to break out. Locks on gates should be located out of sight to deter vandalism.

  o Incorporate a symbolic barrier at road entrances to indicate private school grounds.

  o Not impede visual surveillance of the site, for example by using high walls instead of railing-type fences.

- *Site layout.* School buildings should be located in view of surrounding properties and roadways, and school car parks situated within sight of the school.

- *Landscaping.* Marking the territory of the school using fences, landscape-type trenches and low-lying shrubs or hedges can prevent human intrusions and vehicle access. An open area located inside the perimeter can also prevent scaling and concealment.

- *Site lighting.* When designing site lighting, it is important to provide adequate lighting to assist intruder detection, but at the same time to avoid floodlighting areas, which can actually help intruders, create shadows that offer cover and present a nuisance for neighbours. Lighting should include time switches with photoelectric cells and passive infrared detectors.

Security strategy

The emerging security strategy following the review includes at present:

- Security must be considered as an integral part of the design process. The Planning and Building Unit should provide clear guidance on design, materials and methods of school security enhancement that are effective, affordable and acceptable to all stakeholders. A security design strategy will be developed in co-operation with each school that considers the school's own particular and unique requirements. These design guidelines will focus on three areas:

  o *Site security,* such as site selection, design of the site boundary, use of symbolic barriers, use of landscaping and sterile areas, and planning of site amenities and way finding.

  o *Building security,* such as external façade design of buildings, building access, roof design, structural elements and materials, glazing design, building configuration, enhanced fire compartmentation, adequate levels of electronic security systems and external security lighting.

  o *Security auditing,* such as auditing of designs and completed installations.

- A security risk analysis should be undertaken for each new project to establish the risks to which a school may be exposed, how security has been used in the design process and a selection of appropriate security technologies.

- As part of the basic design brief, each school should have main door electronic access, an intruder alarm, automatic fire detection alarm, entrance CCTV and external security lighting.

- In schools experiencing high levels of vandalism or other security problems, external CCTV and lighting levels may be considered following a detailed review.

- A security audit system should be established and implemented in the design stage.

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• A security audit system using post-occupancy evaluation should be established and implemented.

• A mechanism should be created to review and monitor the effectiveness of this policy and associated measures in individual schools.

• The unit should work with the insurance industry to promote and reward good design and the use of enhanced security systems.

• School Authorities should promote security management guidelines.

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CHAPTER
7

SAFETY OF SCHOOL BUILDINGS IN GREECE

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Abstract: This paper describes a number of activities in which the School Building Organisation in Greece is involved to provide safe and secure schools. It discusses the safety and security framework used to classify school safety issues, and the measures taken by the School Building Organisation and other bodies to ensure earthquake safety in schools, to encourage tolerance in multi-cultural school settings, and to address problems of AIDS, drugs and alcohol.

The concept of safety

The School Building Organisation (OSK) is responsible for the design, construction, planning and management of property and equipment of all schools in Greece. Another important role of OSK – and of other public bodies such as the Ministry of National Education and Religious Affairs, the Secretariat of Civil Protection, the Earthquake Planning and Protection Organisation, and local and prefectural authorities – is to provide safe educational facilities.

In Greece, school safety and security issues are classified according to how school communities perceive safety. Based on research including a questionnaire on school buildings, which was conducted in all schools in collaboration with the National Technical University in 1998 and in 2002, the following school safety framework was identified:

- *Ensuring earthquake safety in schools.*

- *Enforcing structural and accommodation regulations* for wells, glass areas, fire protection, heat insulation and access for people with disabilities.

- *Using safe structural materials in buildings and equipment* with the aim of protecting the environment (*i.e.* by controlling colouring of materials, chemical emissions and use of asbestos-based fibre materials, and by providing natural ventilation infrastructure).

- *Using ergonomic standards* for the dimensions, shape, size and comfort of school furniture.

- *Ensuring hygiene* in all schools, particularly in sanitary areas and in electrical and plumbing installations.

- *Addressing issues of AIDS, drugs and alcohol in schools* by developing health education and welfare and prevention policies.

- *Ensuring student's safe arrival to and departure from school* by providing secure school routes, special traffic signs and pedestrian roads around school buildings.

- *Encouraging tolerance in multi-cultural school settings.* Socialisation can be an effective remedy for prejudice, alienation and anti-social behaviours. Schools are an ideal setting to promote the principles of democratic governance, tolerance and social responsibility.

Rather than describe specific school safety measures in Greece, such as fire protection regulations and school maintenance, this paper will focus on three of the items listed in the school safety framework above: ensuring earthquake safety in schools, encouraging

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tolerance in multi-cultural school settings, and addressing the issues of AIDS, drugs and alcohol in schools.

Ensuring earthquake safety in schools

Protecting school buildings from earthquakes in Greece is a priority for the School Building Organisation (*www.osk.gr/en/buildings_safety.html*). On 7 September 1999, an earthquake struck Attica, killing 143 people and causing the loss of tens of thousands of homes, schools and other public and private buildings. Following the earthquake, OSK developed and implemented a comprehensive rehabilitation programme: 2 465 on-site surveys were conducted, 377 buildings repaired, 22 lots requisitioned, 530 prefabricated school rooms installed and 25 new school units constructed. The project was executed over a period of 400 days at a cost of EUR 60 million.

Since the earthquake, further progress has been made concerning earthquake safety in schools. First, a central staff service group was established within the School Building Organisation to ensure the prevention and management of natural disasters. The unit serves a research, training and co-ordination function, providing support for the decentralised services and organisations of the local government authorities. Second, in November 2003, a special project on the quality and safety of educational facilities was announced. The school building quality control pilot programme, co-ordinated by OSK and a team from the Technical University of Athens, involves existing school buildings in 40 municipalities in Attica. Data will be collected on the educational and structural soundness of school buildings, and also on the behaviour of school buildings during the earthquake of 7 September 1999. Approximate curves of seismic vulnerability will be drafted, and a strategy for the reinforcement or replacement of school buildings designed.

To share their experiences on crisis management and prevention policies concerning earthquakes, the School Building Organisation, in co-operation with the OECD Programme on Educational Building (PEB), organised an international conference on "Disaster Management in Educational Facilities" in Thessalonica from 7 to 9 November 2001 (OECD, 2004a). OSK also participated in the "*ad hoc* Experts' Meeting on Earthquake Safety in Schools" in February 2004, which was organised by PEB and GeoHazards International (OECD, 2004b).

Encouraging tolerance in multi-cultural school settings

Greece has a high proportion of students from different ethnic, religious, educational and cultural backgrounds. According to 2002/03 national statistics, non-national students comprise 8% of students in pre-primary education, 11% of students in primary education and 10% of students in secondary education. Non-national students are defined as students who do not have the citizenship (passport) of the country in which they are enrolled. In Greece, these students include the Muslim minority group, who reside in Thrace in the north, and the Roma. Adding to the diversity of the population are economic immigrants, whose official population in Greece is 500 000; this figure rises to about

700 000 to 800 000 when illegal immigrants are added. The recent waves of economic immigrants have affected the school population in significant ways because although the total school population has actually decreased by an estimated 3% to 4% each year, the rate of increase for non-national students is about 50% (Houndoumadi, Pateraki and Doanidou, 2003).

The children of immigrants can experience a number of difficulties in school as they adjust to a different cultural and social environment and to a new language. To promote cultural tolerance and reduce the risk of intercultural conflict, which can often lead to xenophobia, racism and violence in schools, the Ministry of National Education and Religious Affairs has implemented measures for multi-cultural education in the framework of regulations provided by Law 2413/96. The Special Secretariat for the Education of Greeks Abroad and Multi-Cultural Education has also implemented special programmes, in co-operation with the Pedagogical Departments of Athens and Ioannina Universities, to establish a multi-cultural curriculum, encourage integration and provide psychological support for non-national students. Similarly, the School Building Organisation is constructing new schools and renovating existing facilities with the aim of providing multi-cultural settings.

Addressing issues of AIDS, drugs and alcohol

According to a report by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA, 2003), in the last decade in European Union countries, drug-related deaths and the use of cannabis by people under 20 years of age increased, and the average age of users of solvents or inhalants is 13. In ten European Union countries, nearly two-thirds of students between the ages of 15 and 16 reported being drunk at least once in their lives. Those described as "experienced drinkers" – having drunk alcohol 40 times or more in their lifetimes – rose in at least six of these countries between 1995 and 1999. In the European Union, 550 000 adults and children live with the AIDS virus; six more people under the age of 25 become carriers every minute; and over 22 million people around the world have died from AIDS-related illnesses since 1981.

Although cannabis use among young people in Greece is much lower than in other European countries (EMCDDA, 2003), research conducted by the University Research Institute for Mental Health in Greece and by specialists in the adolescent therapy community of "Strofi" revealed that substance abuse is a problem in the country. Nine out of ten young people first use a substance before the age of 15. Concerning alcohol consumption, according to European Observatory data, reporting of periodic violence towards children by alcoholic fathers and mothers is common, and a significant number of fatal traffic accidents involving young people – around 40% – are caused by alcohol. In Greece, 2 015 AIDS cases were reported up to the end of 2000, 32 of whom were children under the age of 12. According to data presented at the 14th Pan-Hellenic Conference in Thessalonica, an alarming 50% of the population are ignorant about AIDS.

These statistics indicate a need to adopt and promote prevention policies at school, in co-operation with the scientific community, teachers, parents, self-government

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authorities and non-governmental organisations. The School Building Organisation, in co-operation with the Chief of Hygiene Education in the Ministry of National Education and Religious Affairs, has launched a major information and prevention campaign, which involves distributing educational software about AIDS, drugs and alcohol to all schools. This material is the result of many years of research and has been approved by international and national organisations such as the World Health Organisation, the World Federation for Mental Health, the Pedagogical Institute, the Therapy Centre for Dependent Individuals, the Organisation Against Drugs, the Ministry of Health and Welfare, and the Hellenic Centre for Infectious Diseases Control. One set of material was prepared to increase students' awareness of the issues, and a second set was developed to systematically address the issues. A series of events and speeches will also take place in schools to promote the product and educate students about AIDS, drugs and alcohol.

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CHAPTER
8

PROJECTS FOR SAFER SCHOOLS IN THE UNITED KINGDOM

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Abstract: In the United Kingdom, the government has been increasing capital investment in schools in an effort to raise the quality of the learning environment and thus improve educational standards. Projects such as the Safe Schools Initiative and Classrooms of the Future are ensuring that adequate returns are being made on this investment by helping to create safe and innovative schools.

Safe Schools Initiative

Objective

The Safe Schools Initiative (*www.dfes.gov.uk/schoolsecurity*), which is administered by the Department for Education and Skills (DfES) in co-operation with the Home Office's Police Scientific Development Branch (PSDB), aims to investigate the benefits of an integrated technology approach to reducing crime using two case study schools. These case studies and the Crime Reduction Toolkit will be used as a model by other schools, and may help reduce the cost and fear of crime in and around schools. The technologies used in the study were selected to address the specific security problems identified in the two schools. These technologies are:

- Access control systems, which prevent unauthorised access to buildings, thus protecting pupils and staff from abuse or assault.

- Closed-circuit television (CCTV), which can monitor inside and outside buildings, alerting staff to intruders and protecting property. Recordings from CCTV can also be used as evidence in assault cases.

- Radio frequency identification (RFID) tagging technology, which enables all property to be tracked, aiding the location and identification of stolen property.

- Biometric sensors, which are capable of uniquely identifying individuals, thus controlling access to key assets or areas, such as computer facilities.

School selection

Local Education Authorities (LEAs) were asked to propose schools to participate in the case study. A shortlist of seven schools was drawn up, and each of these schools was visited by a survey team of specialists from the PSDB and DfES and an independent insurance surveyor. Wylde Green Primary School, near Birmingham, and Eastbourne Comprehensive School, a secondary school in Darlington, were selected.

First, a detailed risk assessment was undertaken at each site, and fear of crime surveys were conducted in the schools and surrounding communities. A spatial analysis of each school site was also carried out to identify the location of incidents. The analysis highlighted a problem that is common in many schools: the recording of incidents tends to be sporadic and inconsistent, and many incidents are not officially reported. This occurs for a number of reasons. First, the school often takes independent action, without calling the police or fire brigade, especially when the incident is not covered by insurance. Second, anecdotal evidence suggests that schools are reluctant to report incidents for fear of damaging

the reputation of the school or worrying parents. Third, terminology for incidents to be reported is unclear; for example, it is difficult to distinguish between vandalism and criminal damage, and between threatening behaviour and assault. To address this problem, the PSDB has created a database template to standardise incident reporting. Both schools used this template, which could have more widespread application.

Wylde Green Primary School

Wylde Green Primary School is located in a residential area of Sutton Coldfield, a suburb of Birmingham. Students are generally well-behaved and easy to control. The school is fenced – although fencing is mainly low level – and external areas are clearly identified as closed to the public. However, older children and young adults often enter the site outside of school hours to socialise in small groups, to hold parties and to skateboard. Recently, the school discovered that it is named on a skateboarder's Web site as a good skateboarding venue. As a result, there is much damage to school property, and play areas must be checked for broken glass and discarded needles before students can play outside. Local residents are also disturbed.

Constructing a 1.8 m to 2.4 m fence, using a mixture of rounded-steel bars and welded mesh, was one of the first security measures proposed at the school. The colour of the fence was decided by the school. Defensive planting is also being used adjacent to areas of 2.4 m fencing, with a low wooden fence constructed on the inside to protect children from the thorny vegetation. In addition to fencing, proximity cards are being used to improve access control; secure external doors installed with warning alarms that are activated if locked doors are opened; and external lighting and signage improved. As a camera was already located in the main entrance, additional CCTV was not considered necessary.

Eastbourne Comprehensive School

Eastbourne Comprehensive School is located in an area of two-storey housing blocks. A large number of its students live in a lower socio-economic area further away. Entrances and facilities such as halls are duplicated, as the original building was designed as two separate school blocks for male and female students. A collection of smaller units is located next to the main building, which creates a number of secluded areas and alcoves. As a result, vulnerable windows are covered with grilles or blocked up. The site has security fencing around the playing fields at the back of the school, although this is not extensive enough to be fully effective.

The school has a number of security issues. Before the initial survey visit, for example, recently-installed plastic rubbish containers located close to the main building were burned by students. The design of the school building also contributes to student misconduct: narrow corridors can lead to pupil disturbances during class changes, and entrance and exit points are often congested. One of the project's priorities is therefore to reduce congestion and improve access to buildings, as well as to improve access control and general surveillance of circulation routes. Access to the secluded areas of the school will be restricted with new fencing. A CCTV system will be installed to allow more effective

surveillance of vulnerable areas. These cameras will meet the "identification" level of performance, with improved monitoring compared with the old system. Existing cameras that do not provide a security benefit, and that may be a target for vandalism, will be removed. Improved asset marking will be introduced to prevent theft.

Current status of the project

At this early stage of the project, many measures have not yet been implemented. For example, planning permission for the fencing at Wylde Green Primary School was only obtained at the end of 2003. A detailed progress report will be published at the end of 2004. Other school security-related initiatives – such as Classrooms of the Future, in which new design ideas for schools are tested in a series of pilot projects – are currently underway.

Classrooms of the Future

Objective

The Classrooms of the Future initiative (*www.teachernet.gov.uk/futureclassrooms*) aims to challenge current thinking about school building design by constructing a vision of future school design, focusing on creating safe, imaginative and stimulating learning environments for students. The projects involve the wider community and many have links to schools and learning centres located inside and outside the United Kingdom. Twelve LEAs are developing 27 pilot projects, at a cost of GBP 13 million. Lessons learned from these pilots will be used to guide future school design.

The project draws on the Children's Manifesto, which describes how 15 000 children would like their schools to be designed. Students reported that they would like:

- **A beautiful school,** with glass dome roofs to let in light, uncluttered classrooms and brightly-coloured walls.

- **A comfortable school,** with sofas and beanbags, cushions on the floors, tables "that don't scrape our knees", blinds that keep out the sun and quiet rooms.

- **A safe school**, with swipe cards for the school gates, anti-bullying alarms, first-aid classes and "someone to talk to about our problems".

- **A school without walls**, "so that we can go outside to learn, with animals to look after and wild gardens to explore".

- A school with drinking water in every classroom, clean toilets that lock, large lockers and a swimming pool.

A selection of schools involved in the project are presented below.

Schools

- *Brunswick Primary, Sheffield*. Acts of vandalism had been occurring at this school outside of school hours. Children were causing serious damage by climbing on the roof.

In the pilot project, the main school building was extended and part of the existing playground used to develop flexible accommodation for two classrooms, with breakout spaces for small groups. The roof of the new building now serves as a playground and assembly space, thus transforming a vandalism-prone area into a recreational space.

• *Telford and Wrekin.* In these two pilot projects, teaching and learning spaces were equipped with extensive information and communications technology and video-conferencing facilities, including a number of breakout spaces. A conservatory was developed at the front of each building, which opens on to the main area through sliding/folding glazed doors, creating a larger space. The doors are closed and protected by discrete mounted roller shutters after school hours. The shutters and small internal grilles at the rear of the building do not have a forbidding appearance. Each classroom is equipped with a smoke generator that will fill the space with harmless smoke if triggered by an intruder.

• *Bournemouth.* The development of a Site of Special Scientific Interest (SSSI) at Hengistbury Head is the only project in Classrooms of the Future that is not constructed on a school site. It can be used by schoolchildren and visitors of all ages, although these two groups do not share the same areas. The main educational space contains three circular hubs, which can accommodate 30 students each. Each hub can be opened up, the combined space housing up to 100 children. The other part of the building, the visitors' centre, consists of one hub. The design allows for the use of hubs in various combinations, without affecting security. For example, if students are only using two hubs, the other can be used by adults, in combination with the visitors' centre, without encroaching on the children's area.

• *Richmond upon Thames.* In this project, new flexible, stand-alone, multi-purpose classrooms spaces were constructed. The aim of this initiative is to prevent graffiti. The spaces are also self-contained, so that people from local communities can use the area without disturbing the rest of the school. Architects encouraged students to help design the spaces. Students were also involved in designing decorations in the form of removable transfers for the external curved walls.

Other projects

Teaching Environments for the Future, which is the follow-up to Classrooms of the Future, is a series of pilot projects involving 18 LEAs that focuses on how design can affect school workforce issues and still address safety and security concerns.

Building Schools for the Future (*www.teachernet.gov.uk/bsf*) is a major new capital programme, which involves replacing or transforming all secondary schools in England over the next ten to 15 years. As part of this project, 11 design teams were commissioned to produce exemplary school designs: five for primary schools, five for secondary schools, and one for a school for three to 18-year-olds. The issue of safety and security is a briefing requirement being addressed in all of the designs.

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CHAPTER

9

THE EDUCATIONAL SECTOR ACTION PLAN FOR NATURAL DISASTERS IN MEXICO

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Abstract: This paper describes the objectives and methodologies of two disaster relief mechanisms developed by federal agencies in Mexico. The Natural Disaster Fund provides emergency financial support to non-insured public infrastructure. The Natural Disaster Preventive Fund supports preventative approaches for buildings located in high-risk zones that have been damaged or repaired as a result of a natural disaster. These funds represent a new integrated approach to disaster management in educational policy in Mexico.

Introduction

Mexico is often threatened by natural phenomena such as earthquakes, flooding, volcanic activity, hurricanes and tropical storms. In Mexico, federal agencies such as the Secretariat of the Interior, Secretariat of Public Education, the Civil Protection Agency and the National Disaster Prevention Centre have developed a number disaster relief mechanisms for federal and state governments, involving the mapping of risk zones for geological, hydro-meteorological and chemical hazards. This paper will focus on two of these mechanisms: the Natural Disaster Fund and the Natural Disaster Preventive Fund. The ministry delegated responsibility for implementing the two programmes to the Undersecretary of Planning and Co-ordination, and technical consultation of the Natural Disaster Fund to the Administrative Committee of the Federal Programme for School Construction (CAPFCE).

Natural Disaster Fund

Objective

The principle objective of the Natural Disaster Fund (FONDEN) is to provide emergency financial support to non-protected public infrastructure – including primary and secondary schools, technical and tertiary institutions, National Institutes of Anthropology and History, and the Institute of Fine Arts – in rural and urban areas that have been affected by natural disasters. The fund provides a temporary resource until the insurance premium is collected, ensuring that damaged property is quickly restored and preventative measures implemented where possible, with minimal disruption to public life.

How FONDEN works

As presented in Table 9.1, in the event of a natural disaster, the Secretariat of the Interior immediately declares a State of Emergency, and the Educational Sector Damage Subcommittee is called to evaluate the most damaged areas. The Ministry of State then issues a Statement of Disaster, which activates FONDEN and the Province or State Evaluation of Damages Committee. At this point, agencies in the education sector in each province or state complete a property damage assessment. According to the 2003 FONDEN Rule Book, when this report is finalised, which takes up to ten working days, the state representative sends a request for budget clearance to FONDEN's General Planning and Budget Area, where school codes and federal and state property status are verified to avoid future administrative problems; this process takes 15 days. The General Planning and Budget Area then transfers the final request to the Ministry of Finance, which responds in five days.

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Table 9.1. Timeframe for FONDEN's actions

FONDEN schedule	Number of working days
Declaration of State of Emergency and activation of the Educational Sector Damage Subcommittee	Variable
Statement of Disaster (Article 40)	1
Activation of the Province or State Evaluation of Damages Committee (Article 43-I)	1
Preparation of final damage report (Article 43-II y 45)	10
Verification of final damage report by FONDEN's General Planning and Budget Area (Article 49-II)	15
Budget clearance by the Ministry of Finance (Policy and Spending Unit) (Article 47)	5
Observations from FONDEN's General Direction Office (Article 54)	2
Operation and exercise of resources (Article 59)	Variable

After budget clearance, FONDEN's General Direction assembles all agencies to review existing documentation for final approval. This process can take between 30 and 40 working days, although in critical cases, it can be completed in 15 days. If granted, funds are issued directly to a state-authorised contractor by the Federal Bank for Public Development (BANOBRAS). State and federal bank accounts are only used in the case of collaboration with the local government. Table 9.2 presents the breakdown of state, federal and municipal participation in FONDEN.

Table 9.2. Proportion of federal, state and municipal agency participation in FONDEN

	Federal participation	State and municipal participation
Buildings (schools and universities)		
Federal	100	0
State	50	50
Municipal	30	70
Furniture and equipment (desks and laboratory material)		
Federal	100	0
State	30	70
Municipal	20	80
Federal District (Mexico City)	20	80

Source: FONDEN Rule Book Article 3.0 on Educational Infrastructure.

When the fund's cycle has ended, a report is prepared for the Educational Sector Damage Subcommittee, which cross-references the initial request with the final damage report and the current status of the project. If federal funds are involved, the report will be distributed to the Interior Ministry's Comptroller's Office. The Educational Sector Damage Subcommittee meets regularly to review the progress of projects. Funding can also be cancelled without penalty if the resources are no longer required. However, once the resources have been used, insurance is required to ensure eligibility for future funding.

Natural Disaster Preventive Fund

Objective

The main goal of the Natural Disaster Preventive Fund (FOPREDEN) is to support preventative approaches – including identifying possible risk situations and developing training and awareness material – for buildings that are located in high-risk zones or that have been damaged or repaired as a result of a natural disaster.

How FOPREDEN works

Application for this fund can be made to the FOPREDEN General Office between January and March every year. All proposals must contain a geographical map, explanations of proposed actions including a technical overview, an annual budget plan and a signed commitment of co-participation from the state governor or federal district mayor. In the case of application by federal agencies or ministries, the signature of the minister or general director is required.

A committee of federal authorities, comprising representatives from the Ministry of Finance, Ministry for Social Development, Ministry of State, National Prevention Centre and National Water Commission, assesses the viability of the project. Two key factors that determine the viability of proposed projects are community interest and commitment and economic cost-benefit. The committee reviews all information by the end of April each year. The application is then sent to the Evaluation Commission, a body consisting of members of the Civil Protection Co-ordination, National Disaster Centre, Civil Protection Head Office, Ministry of Social Development, Ministry of Ecology and Natural Resources, National Water Commission, Ministry of Finance (Policy and Spending Unit), Federal Comptroller's Office, Ministry of State (Comptrollers and Legal Units) and other interested parties. The commission allocates and reviews spending of funds every three months. Once the project has been approved, the Ministry of Finance evaluates the level of funding required.

Conclusion

Programmes such as FONDEN and FOPREDEN represent a new integrated approach to disaster management and policy in Mexico's educational sector. They address infrastructure

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of schools, universities, historical landmarks, artistic buildings and archaeological sites; foster co-operation between federal, state and municipal agencies; use site selection, mappings and other assessment tools to monitor their implementation; and promote community awareness and education of natural disaster issues. Implementing and continually refining these new mechanisms for disaster relief will ensure an increasingly efficient response and recovery of public infrastructure in Mexico in the event of a natural disaster.

PART
IV

COLLABORATIVE APPROACHES

Many problems in schools that impact on students can often be effectively addressed by collaborative, or "comprehensive", approaches to school safety and security. Such approaches involve a broad range of individuals or groups both inside and outside the school, a strategic plan and a range of programmes to promote safety.

This section explores the theoretical underpinnings of this approach and presents a number of case studies. The following questions are addressed:

• How can key partners be identified when promoting collaborative approaches to school safety?

• How have national, regional and local governments worked with schools to develop effective programmes and policy commitments? Are governments training their administrators and school inspectors in school safety education?

• How can raising local awareness and improving communication between schools and all members of a community improve school safety and security?

CHAPTER
10

COMPREHENSIVE APPROACHES TO SCHOOL SAFETY AND SECURITY: AN INTERNATIONAL VIEW

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Abstract: "Comprehensive" approaches to school safety involve collaboration and partnerships between a wide range of actors inside and outside of schools. Using the results of a review of policies and practice on school safety, this paper describes international trends in school safety, including definitions and incidence of problems, programmes and projects in nine countries and general approaches and policies. In the light of recent trends and challenges in this area, the paper concludes by defining the characteristics of comprehensive and non-comprehensive approaches to school safety.

Two Hurt in Teenage Shootout

New Orleans: Two teenage boys shot and wounded each other with the same gun during a fight at their middle school yesterday after a 13-year-old expelled student slipped a weapon to one of them through a fence...Witnesses said the 8th graders had argued before the shootings at the school where students must pass through a metal detector to enter...The boy accused of providing the handgun was arrested...at his home in a nearby housing project...The school recently expelled the boy for fighting. (Associated Press, September, 2000)

Introduction

- In 1997, a secondary school located in an economically depressed area in London, United Kingdom, was beset by problems of racism and violence between ethnic and white students. The area had experienced waves of immigration and the exodus of some of the existing population ("white flight"). Students at the school came from 85 different countries, and there were high levels of learning and behavioural difficulties, absenteeism, truancy and staff turnover. Racial fighting and intimidation occurred in the surrounding streets, with students calling up reinforcements on their cell phones as rival groups met (Shaw, 2001).

- In South Africa in 2001, a reported 30% of rape cases among girls aged 15 to 19 involved a school teacher (Human Rights Watch, 2001). Schools generally experience serious problems of violence, guns and gangs, in a society with historically high levels of violence.[1]

- In the early 1990s in East Hartford High School, Connecticut, United States – with students from 70 countries speaking 40 languages – problems of violence, drug abuse, racial tensions and gangs had overloaded the capacity of the school staff and local social services to respond.

- In 1992, a primary school located in a low socio-economic area of Ontario, Canada, was experiencing high unemployment and population turnover, and increasing problems of crime and family violence. Local businesses were a target of vandalism and crime by students. The school had the lowest academic performance in the region and was proposed for closure.

Safety in school is a microcosm of safety in society: in the surrounding streets, community and neighbourhood, in the home, in other social institutions, and beyond. Comprehensive approaches to school safety involve collaboration and partnerships between a wide range

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of actors inside and outside the school. In each of the cases described above, in the face of overwhelming challenges, these schools have worked collaboratively with local partners and communities to develop a strategy and range of programmes to effectively address their problems: they have used a comprehensive approach.

Review by the International Centre for the Prevention of Crime

The International Centre for the Prevention of Crime (ICPC) is a non-governmental organisation based in Montreal, Canada. The centre was established in 1994 to promote crime prevention and community safety. It is supported by governments, international and national organisations, and cities (*www.crime-prevention-intl.org*).

From 2000 to 2001, the ICPC – at the request of the Bureau of Justice Assistance, United States Department of Justice – carried out an international comparative review of policies and practice on school safety (Shaw, 2001).[2] An international approach, as compared to a national or regional one, permitted a fresh perspective. It provided an opportunity to observe patterns of activity, practice and policy development in other, unfamiliar contexts. Since the publication of the report, the ICPC has undertaken further work on the role of the police in schools, and in November 2002 it organised an international colloquium in Brussels, Belgium, on schools and crime prevention (International Observer, 2003).

Since the completion of the review, much has occurred in the area of school safety in terms of local and international events, and policy and project development. There have been further tragic events in schools in such countries as Australia, Germany, Japan and the United States. Population movements from rural to urban settings, legal and illegal migration, deteriorating social and economic conditions, and transnational organised crime are continuing to create pressures and challenges for national governments, local authorities, and schools and their communities (*e.g.* Ferola, 2002; Kromhout and van San, 2003). These factors can impede the social integration of families, children and youth, and exacerbate crime and victimisation.

In response to heightened feelings of insecurity and risk, some countries have renewed calls for reaction and deterrence, exclusion and suspension, and policies of zero tolerance. In some cases, these reactions derived from teaching organisations, which have called for greater staff protection from violent parents (Hayden, 2003). In other cases, responses have been more extreme.[3] Strategies that address the threat of terrorism have been developed and debated in several countries. In the United States, for example, 98% of school resource officers (police working in schools) surveyed in 2002 reported that their schools were vulnerable to terrorist attacks, and 90% reported that students were at greater risk if the school resource officers did not carry guns (NASRO, 2002).

Yet over the same period, knowledge about effective school safety practices has expanded considerably. New collections of exemplary, good or promising practices have been published (*e.g.* Smith, 2003); data have been collected and tools developed that support effective practice (*e.g.* USDOJ, 2003); observatories on school violence have been

established, such as the European Observatory on School Violence in Bordeaux, France; manuals, guides and training materials have been written (*e.g.* USDOE, 2002); and a number of national, regional and international meetings have been organised by bodies such as the Council of Europe, the European Forum for Urban Security and the Australian Institute of Criminology. Each of these developments has reinforced the need to work in more collaborative, comprehensive ways.[4]

International trends

Increasing attention to school safety

Results of the ICPC review (Shaw, 2001) suggested that while incidents of violence in schools have always occurred, they have only recently received the attention of governments and the public. There are three principal reasons for this heightened awareness.

First, publicity surrounding violent school-related events in a number of countries has led to both increased awareness of problems and to over-reaction by the media, public and governments. Although these events are by no means typical – even in the United States, data collected since 1992 indicate that school-related deaths account for less than 1% of total youths killed – they have highlighted the fact that school violence can take place inside or outside the school, in primary, secondary or tertiary schools, and in urban, suburban or rural settings; and that violence may involve students, teachers, support staff as victims or perpetrators, as well as known intruders or complete strangers. In many countries, these highly publicised events have led to new legislation, protocols and directives. Over time, they have also resulted in greater awareness of the problems and their causes. Nevertheless, the media spotlight also distorts the reality of the problems, and has often led to over-reactive and "event-driven" government action.

Second, there has been a general change in attitude towards and increased awareness of the impacts of violent behaviour and victimisation among children and young people, especially bullying, fighting and intimidation. A youth survey in England and Wales, for example, found that 51% of 11- to 16-year-olds had been assaulted, 30% bullied and 29% experienced racism in school (International Observer, 2003). In most countries, these issues were almost totally ignored before the late 1980s. International research over the past ten years has demonstrated the serious short- and long-term effects of victimisation among children and adolescents in school. Dan Olweus's pioneering Norwegian project in the 1980s, for example, demonstrated a 50% reduction in bullying using a "whole-school" approach – *i.e.* using a range of integrated initiatives involving all sectors of the school community. This approach is now being applied in countries outside Europe, including Australia, Canada, Japan, New Zealand and the United States (*e.g.* Rigby, 2002). Taxing, *bullismo*, and *le raquet*, are now well-researched terms in France, Italy and Scandinavia (Smith, 2003).

Third, there has been a consolidation of research and knowledge about the risk and protective factors for offending and victimisation, including school violence, and about effective practices. An increasing number of longitudinal studies in different countries

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have shown the range of risk factors that predict future offending and victimisation, and those that protect children and young people from such involvement (ICPC, 1999; NCP, 1999). These include factors associated with the family, the environment, the individual and the school. Although in the past, few would have contested the important role of the school in mitigating behaviours such as offending, victimisation, truancy and exclusion, and in creating a positive climate and ethos to retain and nurture students, there is now a greater understanding of exactly how schools can decrease risk factors and increase protective factors for their students (Gottfredson *et al.*, 2000).

Given the *range* of social, environmental, familial and personal risk factors involved in offending and victimisation, there is a real need for cross-sectoral preventive programmes to tackle them. A growing body of evidence indicates that carefully targeted and implemented practices, including whole-school bullying programmes, *do* reduce the risks of violence and crime among young people. They are also likely to be cost effective. Many early intervention studies such as "Head Start" yield impressive results in terms of improved life circumstances, as well as providing cost benefits (Debarbieux and Blaya, 2001). In one United States study, for example, the cost of reducing crime by 10% was calculated as USD 228 per household if heavier prison sentences were used, compared with USD 32 per household using incentive programmes for youth to complete school (ICPC, 1999).[5] Preventing young people from entering gangs is far more cost effective than working with gang members. Such knowledge about effective practice has driven much of the current work on school safety and bullying prevention.

The definition and incidence of problems

While these trends explain interest in school safety issues, the review concluded that there was an obvious lack of consensus about what constitutes "school safety" (Shaw, 2001). In fact, it is difficult to compare patterns and trends internationally as few countries – with the exception of the United States (USDOJ, 2003) – regularly collect data.[6] Definitions of terms such as " violence" also vary widely across countries, as do political and historical circumstances. In addition, much of the information, policies and projects on school safety are related to bullying, vandalism and theft in schools, not to serious violence or attacks from outside.

Nevertheless, many countries expressed similar concerns about increasing school violence, especially bullying and aggression. Schools want to be safe from the following:

• Accidents and injury.

• Theft.

• Bullying and intimidation.

• Intrusion.

• Sexual and racial harassment and intimidation.

• Fear of victimisation.

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- Student violence and aggression against students/staff.

- Vandalism and arson.

- Group mobbing, extortion, taxing, drug/gang activities.

- Violence by teachers/staff.

- Violence by parents against students/staff.

Some of these concerns reflect the change in attitudes towards bullying and the increasing use of formal exclusion and various types of zero tolerance policies. Other concerns arise as a result of changing reporting practices. A Swedish study (Estrada, 2001), which compared school records in Sweden from the 1980s and 1990s, showed clearly how changing reporting practices have accounted for apparent increases in school-based aggression. Until the mid-1980s in Sweden, only serious incidents were reported to the police; schools dealt with minor incidents internally. When all incidents were required to be reported to the police, violent incidents increased by 300% since 1993; this increase could be accounted for by acts of minor aggression and not serious patterns of violence. Overall, patterns in several countries suggest that:

- Most countries report problems of aggression, minor assaults and bullying in all types of schools.

- Some countries believe that school violence has increased in recent years; others attribute recorded increases to changing attitudes towards violence, changing reporting systems and greater awareness of its existence.

- Frequent and persistent problem behaviours are restricted to a minority of students, or are widespread in schools in areas with serious social and economic problems.

- A few countries have serious problems of youth violence, with group extortion, racial attacks and harassment, sexual assault, gang activity and weapons and drug use affecting schools located in many cases in heavily deprived inner city or suburban areas.

- Most aggressive and violent behaviours are inflicted by students against their peers, much less often against teachers, and rarely by teachers against students.

- In many countries, reported levels of insecurity about school safety appear to be higher than in the past.

International programmes and projects

In response to these trends, a number of pro-active and preventive school-based programmes and projects have been initiated in recent years. As a national study of delinquency prevention in the United States observed (Gottfredson *et al.*, 2000):

> Schools currently employ an astonishingly large number and variety of programmes and activities to reduce or prevent problem behaviour.

There is a recognised need for a long-term strategy. For example, while zero tolerance policies, expulsion and suspension may bring short-term relief to school staff, they increase the risk of subsequent failure and re-offending. Such policies also serve to transfer the cost of responding to those students to another sector, namely the police and health and social services. However, a number of countries have developed cross-sectoral national, regional or local strategies on school safety, some of which are implemented within the broader context of national crime prevention policies. These strategies recognise the multi-dimensional causes of school safety problems, and the need for preventive, long-term plans that encourage partnerships between schools (teachers, students and support staff), parents, youth, health and social services, housing, employment and the police. They may provide funding for project development and implementation, including training and technical assistance. A number of country examples are provided below.

Australia

In Australia, both Commonwealth and state initiatives have addressed school safety issues (*www.aic.gov.au/conferences/schools/*). National Crime Prevention, in co-operation with other Commonwealth and state partners, is working to develop a consistent approach to school safety across all states, and is investing in long-term projects (*i.e.* eight to ten years) that aim to strengthen the capacity of schools, their staff and communities. The state of South Australia has undertaken a comprehensive review of school-based prevention projects and future policy. Innovative restorative approaches that deal with conflict in schools are being piloted in the states of Queensland and Australian Capital Territory (*e.g.* Morrison, 2002). Work is also being completed on school strategies to deal with gangs (White, 2002).

Belgium

Belgium has developed a series of action plans targeting school drop-out, provision of employment training and the needs of the immigrant community. It is also working to develop stronger links between police and schools.

Canada

Since 1998, the federal government's National Crime Prevention Strategy (NCPS) has conducted considerable research on "whole-school" bullying approaches (NCPS, 2004). It has also funded the implementation and evaluation of a number of innovative school-based programmes. The model comprehensive primary school project "Together We Light the Way" (*www.togetherwelighttheway.com*), for example, is being replicated in a number

of sites across the country. The programme aims to create a safe, respectful and caring community, and foster a sense of ownership that connects the school with its community. The project has resulted in significant reductions in school problem behaviours, such as bullying, and improvements in educational and other outcomes (see Dean, Leithwood and Leonard in this publication).

A number of provinces including Alberta, British Columbia, Quebec and Nova Scotia have also developed school mediation and anti-bullying initiatives.

Denmark

Denmark was the first country to develop a national crime prevention capacity; an integrated system of councils (SSP) has existed in almost all municipal areas in the country for the past 25 years. These councils bring together schools, police and social workers to reduce problems of crime and victimisation. School-based programmes focus on social education and conflict resolution. A series of pilot studies have also been initiated to provide special teacher training with the goal of improving school climate, conflict resolution and mediation skills.

Europe

The European Union has actively supported the CONNECT project, which reports on research, practice and networking on violence in schools in 17 European countries (Smith, 2003; Smith in this publication). The "*Sécucités* City and School" programme, supported by the European Forum for Urban Security, involves seven European cities exchanging their experience and thinking together about different means of optimising collaborative action on school violence (Vanhove and Raynal, 2004). Recently, the Council of Europe urged member states to take steps to promote local-level school partnerships to prevent school violence (COE, 2002).

France

In 1997, the French Government launched a national plan to combat violence in schools, and facilitated the establishment of school observatories that collect data on a range of indicators concerned with the health and safety of schools and their communities. The European Observatory on School Violence at the University of Bordeaux, for example, is now part of an international network of research. It presided over the Second International Conference on School Violence in Quebec in May 2003. As part of the national plan, 7 000 young people, many from areas of high unemployment, were trained to work as social mediators and school assistants; medical and social work staffing was increased in schools in areas of high risk; innovative intervention projects and project evaluation were promoted in the 26 regions most at risk of violence and delinquency; and victim support, citizenship and anti-violence education programmes were initiated in schools. As a result, the incidence of violence and delinquency in a number of regions has reduced.

Netherlands

School safety-related work in the Netherlands has focused on bullying, improved incidence response, safety of premises, social competence training and school capacity

building. The Amsterdam School Safety Project (VIOS, *www.vios-amsterdam.nl*) is a five-year regional project involving some 40 secondary schools. It uses school safety plans, physical improvements to the school, and curriculum and social supports to promote an integrative, preventative approach to school safety in participating schools (Soomeren, Steinmetz and Ruijsendaal, 2002).

South Africa

In South Africa, levels of school violence are extremely high; there are regular reports of serious violence, gang activity, and rape and sexual assault of girls in schools (Human Rights Watch, 2001). The 1999 report *Youth Violence in Schools* established the underlying causes of violence and advocated improvements in school support and care, and student self-esteem, identity, moral grounding and problem-solving skills. It also highlighted the importance of fostering the confidence and involvement of the community. Current approaches focus on targeting schools with the greatest need, using comprehensive safe school programmes. Exemplary projects such as Tiisa Thuto, CRISP and CASS are supported by schools, school authorities, national and local governments, and non-governmental organisations such as the Independent Project Trust (ITP) and Business Against Crime.

- *Tiisa Thuto.* This project involves developing partnerships between schools, parents, local businesses and community organisations, and implementing module programmes that address the needs of the individual school (*e.g.* victim support, life skills). Following a positive evaluation of this project, it will be implemented in schools across the entire province of Gauteng.

- *CRISP.* This programme facilitates the establishment of family resource centres outside schools to help strengthen families. It also organises school safety teams to link parents, schools, local organisations and the police.

- *CASS.* In the 1990s, ITP developed the SMART programme, which provided conflict resolution training to students, teachers and school governing bodies. However, continued violence and gang activity led to the realisation that a more fundamental approach was required. Thus, in 1997, CASS was initiated, which is a comprehensive model involving local community partners. National government developed guidelines and support materials for school managers, educators and safety committees. One innovative approach to school capacity building involved clustering local schools to facilitate sharing experiences, providing support and reducing programme development costs (Roper, 2002).

United Kingdom

In England and Wales, concern about social exclusion and youth crime has led to a number of initiatives to reduce school exclusion, truancy and crime, as well as increased investment in early education and support programmes. Project funding has targeted schools with serious problems, and high-risk groups or areas. In 1998, the Home Office allocated GBP 12 million to the Crime Reduction in Secondary Schools Project (CRISS). In this project, which included local and national evaluation, 103 schools set targets to

reduce bullying, truancy and crime over a two-year period.

In 2002, the Youth Justice Board (*www.youth-justice-board.gov.uk*), in co-operation with the Department for Education and Skills (DfES) and the Association of Chief Police Officers, implemented a Safer School Partnerships project. Police officers were placed in selected schools in high crime areas, and 155 multi-agency youth crime prevention teams were established. All teams have a statutory duty to work with health and education officials, employment and justice agencies, and schools to develop prevention programmes. Mentoring programmes have also been established for elementary school students and for young drop-outs in need of training or employment. Home-school support projects were initiated for 11- to 17-year-olds with the aim of preventing school exclusion; in-school support workers provide student and parent support. A series of nine pilot projects using family group conferencing and mediation were also initiated to reduce social exclusion. A number of anti-bullying programmes and handbooks have been developed and evaluated.

In 1988, the Scottish Office sponsored the first government-sponsored research into bullying in the United Kingdom. The project was a carried out in ten secondary schools in 1989 using a sample of 942 12- to 16-year-olds. In the 1990s, anti-bullying educational materials were developed for schools, and a number of initiatives started that addressed bullying issues (Mellor, 1997). In 1999, the Scottish Executive established the Anti-Bullying Network at the University of Edinburgh (*www.antibullying.net*).

United States

In the United States, the federal government has funded several major projects that address issues of school safety. The Hamilton Fish Institute in Washington, for example, co-ordinates the development and evaluation of school-based prevention strategies, and provides detailed guidelines on developing comprehensive approaches to school safety (*www.hamfish.org*). The Safe Schools Healthy Students initiative funds local education authorities, which work in partnership with public health officials, police, schools, and students and parents to develop violence prevention programmes (*www.mentalhealth. org/safeschools*). The United States Department of Education's Office of Safe and Drug-Free Schools, which recently published a compendium of exemplary and promising programmes (USDOE, 2002), has supported much of this work *(www.ed.gov/about/ offices/list/osdfs)*. Community Oriented Policing Services (COPS) have also developed a series of major school-based initiatives.

A number of states have initiated similar projects. The Safe Communities, Safe Schools project, which is co-ordinated by the Centre for the Study and Prevention of Violence at the University of Colorado, provides technical assistance and support to local schools and their communities. A Student Assistance Centre that was set up in East Hartford School, Connecticut, has reduced the number of school exclusions, suspensions and drop-outs by combining conflict resolution and peer mediation with a range of external agency supports, ranging from mental health and substance abuse to job training and police support (Meggie, Edwards and Gwozdz, 2001).

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General approaches and policies

In summary, *specific programmes and initiatives* have focused on "whole-school" bullying approaches; early intervention with parent support and training; youth mentoring and support; school-based mediation and conflict resolution; anti-violence and gang education; anti-racism, substance abuse and healthy living programmes; and a range of police-school initiatives. The use of peer mediation and mentoring illustrate the importance of including young people in addressing problems and developing solutions. *Specific structures* – such as school resource centres, school safety committees, local multi-agency teams and school community liaison officers – have also been established to drive, co-ordinate and take responsibility for school safety policies.

On the basis of these country experiences, several characteristics of good, effective school safety programmes can be defined. Such programmes:

- Respond to events pro-actively, not reactively.

- Are socially inclusive, providing support and integration, not creating isolation or exclusion.

- Use school-community partnerships to plan and develop strategies and projects.

- Develop programmes suited to the general school population and to the needs of individual students at risk and their families.

- Target at-risk schools with evaluated, good-practice programmes.

- Involve young people themselves in developing, designing and carrying out projects.

- Use mediation and conflict resolution, and focus on the importance of the school climate.

A comprehensive approach to school safety

These initiatives are pro-active and preventive, but not all of them are fully comprehensive in their approach. Individual programmes may form a part of but not constitute an overall comprehensive strategy.

A comprehensive approach can be defined as including:

- A comprehensive range of short and longer-term programmes and initiatives targeting the specific needs and problems.

- A comprehensive range of objectives, targeting a range of issues and problems according the local context.

- A comprehensive strategic planning approach that incorporates wide-ranging data collection and analysis, a plan of action, implementation and evaluation.

- A comprehensive range of individuals, groups, institutions and organisations inside and outside the school.

The critical elements of a comprehensive approach to school safety are:

- Identifying and mobilising key partners in the school community, including staff and students, parents, local agencies, community organisations and the private sector.

- Undertaking, in partnership, a careful analysis of local school-related problems.

- Developing local action plans.

- Implementing and evaluating short- and long-term outcomes.

- Revising and developing projects to meet changing needs.

Table 10.1 presents some of the differences between comprehensive and non-comprehensive approaches to school safety in terms of their overall characteristics, objectives, partnerships, process, targeted areas and programmes, and theoretical basis.[7]

Recent trends and challenges

As with most areas of prevention, developing school safety strategies is not easy, especially in the current political climate; it requires leadership, energy, experience and finances. What are some of the most positive recent trends and challenges in comprehensive approaches to school safety?

- While schools in many countries have managed to develop good comprehensive polices, at the broader urban level there may still be a tendency for them to be treated "apart" from integrated urban renewal or crime prevention plans. There is a need to move beyond the school in its neighbourhood, and locate safety within the wider city/local government structure, as in the Amsterdam model.

- Networking and clustering schools, taking into consideration local contexts, can help build capacity.

- More community debate is being stimulated on the value of long-term preventive action.

- A model programme does not ensure successful implementation. Work must continue on training and support, since it is people who make programmes work.

- Policy must be viewed in terms of process, not just in terms of outcomes (Casella, 2002).

- The increasing use of restorative, peacemaking and reconciliatory life-skills approaches must be matched by a school culture that is not punitive or retaliatory.

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- Increasing attention must be given to issues of cultural and ethnic differences and unequal treatment.

- Although time consuming, monitoring comprehensive initiatives is not difficult. Evaluating their effectiveness, however, is more complex.

- It is important to maintain a balance between legislative approaches or requirements imposed from "above" and stimulating and facilitating initiatives from "below" (see Hayden, 2003).

Good programme implementation cannot be rushed. Programmes sponsors and policy-makers need to focus more on developing and implementing strategies, in specific contexts, and less on demonstrating short-term effectiveness. The local community also needs to understand that achieving positive and sustained results depends on the time and the efforts invested in the project by the entire community. It is also important to have modest expectations: model projects can over-estimate the effectiveness of an intervention because they are *models*.

In the opinion of the author, the question posed by Eric Debarbieux in the mid-1990s still has a firm and clear answer.

> Should we cut the school off from its environment, protect it from external aggressions? Or should a genuine partnership with the inhabitants of the area be the solution? Should the school be deeply involved in the outside community life or just be a school in a neighbourhood? (Debarbieux, 1996)

The answer is "no". The school should not be cut off, closed down or fenced in for protection. It should work in a genuine partnership and be deeply involved in the life of the community.

Table 10.1. Characteristics of comprehensive and non-comprehensive approaches to school safety

	Comprehensive approach	Non-comprehensive approach
Overall characteristics	- Broad partnerships between school and wider community - Strategic plan - Inclusive, clear policies and guidelines but flexible approach - Short- and long-term goals	- Limited, within-school partnerships only, or one or two external services - Programmes are imposed from "above", without partnership or consultation
Objectives	- Specific objectives, *e.g.* prevent victimisation, offending, truancy, school drop out, vandalism and substance abuse; develop good conflict resolution; inculcate respectful attitudes and behaviours; improve overall health, and school ethos and attainment	- One or two objectives, *e.g.* reduce violence and vandalism; substance abuse; truancy
Partnerships	Teaching staff; administrative staff; students; parents; school board; local residents and business community; local authority services (police, youth, family, and health and social services)	School-based only; no involvement of parents or community, some links with external institutions or services
Process	- Assess extent of issues - Develop plan of action - Implement plan - Establish on-going monitoring and evaluate action - Modify and develop plan	- Apply a programme, collect data, monitor and evaluate to respond to an identified problem, but not as part of a broader long-term strategic plan
Targeted areas	- Inside and outside school, and to and from school and surrounding area - During and after school hours	- School premises only, or to and from school - Only during school hours
Targeted programmes	*e.g.* School resource centre - Conflict resolution procedures and curriculum - Victim support services - Parent support programme - Teacher support and training - Safety plans and situational improvements - Neighbourhood links	Target selected students or general curriculum - Focus on physical security and surveillance and situational responses
Theoretical basis	See school and its ethos, students and families as part of wider social/economic patterns of local environment, be aware of root causes; structural model is central, but rational choice and social learning are also used	Tendency to focus mainly on individual behaviour, using a social learning model, or on rational choice as basis for situational modification

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Notes

1. The murder rate in South Africa in 2001/02 was 48 per 100 000, compared with 7 per 100 000 in the United States (Leggatt, 2003).

2. Due to restrictions caused by language and by availability and accessibility of publications and other materials, the scope of work focused on developing countries, or on translations and secondary reviews describing work in other regions and countries.

3. For example, a school in Detroit, United States, requires all students to wear transponders around their necks; and following the murder of two school girls, a mother in the United Kingdom inserted an electronic chip in her daughter's arm to "ensure" her safety.

4. Council of Europe conference "Local Partnerships for Preventing and Combating Violence at School", Strasbourg, December 2002; European Forum for Urban Security seminar on "*Sécucités* City and School" programme, Paris, February 2003; and Australian Institute of Criminology conference on "Schools and Crime Prevention", Melbourne, September 2002.

5. The original study was undertaken by the RAND Corporation (see Greenwood, *et. al.*, 1995).

6. For example, the United States Department of Justice (2003) publish indicators of school crime and safety annually. However, the accuracy of these data has been disputed (NASRO, 2002).

7. See Casella (2002) for a discussion on policy implications of different theoretical explanations of school violence.

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CREATING SAFE AND CARING LEARNING COMMUNITIES IN CANADA: TOGETHER WE LIGHT THE WAY

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Abstract: Together We Light the Way is a comprehensive school-based model that aims to prevent anti-social behaviours. Its overall objective is to create safe and caring learning communities by encouraging municipal officials, business leaders and members of community groups to work in partnership with school staff, students and parents. This paper describes the sociological underpinnings of the model, and its objectives and framework. It also presents an evaluation of the model, which was implemented in four pilot schools.

Background

Defining the problem

Studies by James Coleman (1966) and others have revealed that the socio-economic status (SES) of families explains more than half of the variation in student achievement across schools (Rutter *et al.*, 1979). Socio-economic status is highly related to other student-related effects such as violence, school drop-out, entry to post-secondary education, and adult employment and income levels (Dill and Haberman, 1995; Englert, 1993). Schools serving low SES families often find themselves in an "iron circle" that begins with the family's economic conditions, which may be a consequence of unemployment, cultural, racial or linguistic diversity, recent immigration, high mobility or family break-ups (*e.g.* Dillard, 1995; Gezi, 1990). These conditions often give rise to what Shaw (2001) identifies as family "risk factors": harsh or erratic parenting skills; poor parental supervision; low family income, poverty and isolation; family violence, abuse and neglect; and parental conflict. Low SES families are more likely to have low expectations of their children's school performance.

A family's SES, however, is a symptom, rather than a direct cause, of violence and other difficulties that a student may experience at school. In fact, SES is a relatively crude proxy for a set of family and community conditions and interactions, which are considerably more direct in their impact on student success (Lee, Bryk and Smith, 1993). Together, these conditions and interactions, which can vary widely across families, constitute the family's "educational culture", at the core of which are the assumptions, norms and beliefs held by the family about intellectual work in general and school in particular. The behaviours and conditions resulting from these assumptions have been shown to relate to school success (Bloom, 1985; Finn, 1989; Rumberger, 1987; Scott-Jones, 1984). On the basis of such evidence, Walberg (1984) concluded that the basic dimensions of family educational cultures are family work habits, academic guidance and support provided to children, and stimulation to think about issues in the larger environment. Other dimensions include academic and occupational aspirations and expectations of parents or guardians for their children, and the provision of adequate health and nutritional conditions and physical settings in the home that are conducive to academic work. Communities are able to supplement and sometimes substitute for some dimensions of family educational cultures.

Finding a solution: Social capital in children and youth

Family cultures only account for one part of the explanation for variation in student success. The primary mechanism that links particular types of family educational cultures

with student success is "social capital". Variation in the strength of family educational cultures matters for students' success, both inside and outside school, because it exerts a powerful influence on their access to and acquisition of social capital.

Our understanding of "social capital" is informed by treatments of the concept found, for example, in Coleman (1987, 1989) and most recently in Driscoll and Kerchner (1999); it is the "assets" people accrue by virtue of their relationship with other individuals and networks of people. Depending fundamentally on the existence of high levels of trust, Driscoll and Kerchner suggest that these assets may take a number of forms: reciprocal obligations and expectations of one another held by members of a social group (*e.g.* the obligation a child feels to work hard at school in return for the obligation a parent feels to provide a happy, secure and stimulating home environment); the potential for information that exists in social relations (*e.g.* a relative's knowledge of whom to contact to be considered for a job); and the existence of effective norms and sanctions that encourage some forms of behaviour and discourage others (*e.g.* norms held by the family about what constitutes respectful behaviour towards teachers, and appropriate disincentives for disrespectful behaviour).

There is another type of social capital that is especially important in accounting for a child's success, which consists of the habits and dispositions evident in family members' individual and collective responses to intellectual and other everyday problems. When such habits and dispositions are productive, and when the form they take falls into what Vygotsky (Cole *et al.*, 1978) calls the child's "zone of proximal development", they constitute a valuable resource for children. Once acquired, such habits and dispositions serve not only instrumental problem-solving purposes, but also contribute to the child's sense of self-efficacy. Considerable evidence suggests that a robust sense of self-efficacy generates persistence in the face of the challenges presented by the school curriculum, which represents a key explanation for differences in the child's success (Bandura, 1986).

Objectives of the model

The National Crime Prevention Centre sponsored a three-year study of the Together We Light the Way model as part of a larger initiative to support, assess and disseminate information about effective interventions to reduce youth anti-social behaviours and to build resiliency in at-risk children and youth. Together We Light the Way aims to build resiliency and responsibility in children and youth aged four to 14 by increasing protective factors and minimising the risk factors associated with crime.

- *Protective factors* are school success, increased academic achievement, a sense of self, a safe and secure environment, a healthy lifestyle, positive family and school relationships, respectful and caring relationships, and a connection to caring adults.

- *Risk factors* are a lack of success in school and thus low academic achievement, unsafe and insecure environments, victimisation, bullying and fighting, poor nutrition, family stress and a lack of attachment to caring adults.

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The model involves the entire community: schools, businesses and communities work together to create safe, caring, stable and effective learning environments. It therefore relies on the commitment and involvement of school leaders, teachers, parents and the community for its success. The model aims to enhance the success of children by helping them to develop a sense of self, respect and responsibility; it also aims to connect children and youth to their communities in meaningful ways, thus helping children to develop the resilience and capacity to overcome challenges and assisting them to lead productive, meaningful and happy lives. Together We Light the Way encourages a caring and interdependent relationship between the school and its community, envisioning the school as the heartbeat of its community.

The Together We Light the Way model has five explicit objectives for students:

• To develop respect for themselves and others.

• To become motivated to obtain high levels of academic achievement.

• To interact and play co-operatively with peers.

• To understand the importance of a healthy lifestyle.

• To interact respectfully with members of the community.

Framework of the model

The Together We Light the Way model consists of a series of guiding principles, pillars, cultural components, specific programmes and overlaying strategies. District leaders, principals, teachers, parents and community partners are trained using an extensive set of curriculum and audio-visual materials.

Guiding principles

• Everyone is unique and has a contribution to make.

• Everyone has strengths to be nurtured and supported.

• Everyone has the right to be respected and the responsibility to respect others.

• Service to others performed with caring and love makes a difference.

Pillars

• *Academic*. To ensure students reach the highest level of academic achievement.

• *Respect*. To cultivate in students a strong sense of self-respect, personal responsibility and respect for others.

• *Teamwork*. To enable students to work as effective team members in the school and community.

- *Leadership.* To provide opportunities for students to be innovative and to take responsibility for themselves, their school and their community.

Cultural components

- *Partnerships.* Individuals from businesses and communities should work with students, school staff and parents.

- *Starting from strengths.* Individuals must be recognised as unique with strengths that are valued, recognised and nurtured.

- *Sharing leadership.* Individuals should be encouraged to demonstrate initiative and to take responsibility for their own education and well-being.

- *Growing personally and professionally.* Personal strengths and accomplishments make individuals unique. Honouring a person personally and professionally brings a tremendous strength and energy to the team.

- *Respect.* All actions and interactions in the school should be based on the guiding principle that "every person has the right to be respected and the responsibility to respect others".

- *Assessment and evaluation.* Information about programme implementation and student growth and achievement must be used to make informed, objective decisions.

- *Service.* Service to others must be recognised as contributing to building stronger and safer classrooms, schools and communities.

- *Celebrating success.* Individual and school success should be recognised, honoured and celebrated.

Specific programmes

- *Circles of Love* involves reading together to encourage a love of books and reading.

- *The Choice Is Yours* demonstrates how making positive choices can have a positive impact on a person's life.

- *Celebrating Our Stars* recognises and honours students for their accomplishments in academic life, respect, teamwork, leadership and service.

- *Healthful Happenings* teaches students about the importance of nutritious foods and healthy living, and their relationship to learning and well-being.

- *Parent Rap* facilitates meaningful parental involvement.

- *Respect* teaches students how to respect themselves and others in the classroom, school, family, and local and global communities.

- *Connections: Classroom and Community* shows students how learning at school is relevant to life outside the school.

Overlaying strategies

- *Partnerships* involving parents, businesses and community partners.

- *Goal setting* or establishing priorities and measuring success.

Evaluation of the model

Data collection

This model was implemented in four pilot schools. To evaluate progress towards achieving the project objectives and implementation by teachers of the Together We Light the Way programmes in classrooms, data were collected by an external evaluation team once or twice a year over a three-year evaluation period – either from the same class of students in September and June or in successive cohorts of students each September. Data were also collected on incidents of bullying and academic performance, and interviews were conducted with a number of stakeholders.

Achieving project objectives and implementing programmes

Results of the external evaluation indicated that the programme is making considerable progress, particularly regarding four of the eight project objectives: enhanced learning and employability skills and habits, the development of non-violent responses to anger, improved attitudes, values and behaviours towards school, and the creation of productive partnerships.

In addition, 40% of the project's programmes were carried out within the first year, 1999-2000, and the implementation of these programmes is steadily increasing under the direction of the project's advisory group. Classroom, social skills development and community integration activities were defined as priority areas.

Incidents of bullying and academic performance

An analysis of the data revealed that incidents of bullying decreased in all pilot schools between 1999 and 2002 (Figure 11.1). A longitudinal study of academic results, which was conducted using the Canadian Test of Basic Skills, showed that the academic performance

Figure 11.1. Incidents of bullying between September 1999 and June 2002

■ 1999-2000 ■ 2000-2001 ■ 2001-2002

Number of incidents
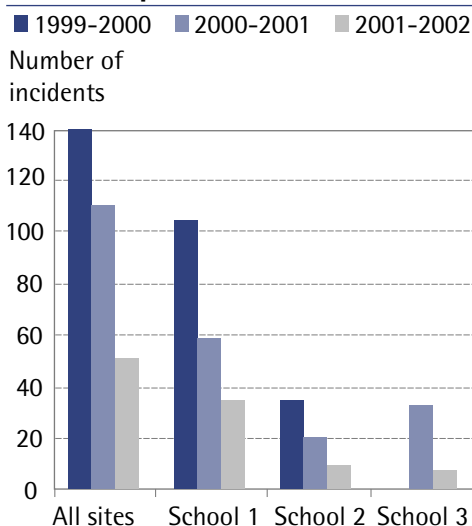
of all students enrolled in the programme over the study period met or exceeded expected grade equivalent growth (Figure 11.2). It can be concluded that focusing on increasing protective factors and decreasing risk factors created a behavioural foundation of safety and caring that fostered academic achievement and the development of a culture of respect within the school community, resulting in fewer bullying incidents.

Figure 11.2. Actual vs. expected academic results of students involved in the programme (1999-2002)

Interviews with key stakeholders

A number of themes emerged from interviews conducted with principals, staff and parents in the four pilot schools:

• A culture of respect was built in the school and community through the use of a common language of respect and shared beliefs in the Together We Light the Way guiding principles.

• A school-wide focus on the use of the goal-setting process helped students to achieve their goals and articulate their learning, growth and development.

• The increased involvement of parents, businesses and community partners had a positive impact on the behaviours of students and others involved in the programmes.

• Shared leadership resulted in students, teachers, non-teaching staff, parents, businesses and community partners all taking responsibility for the education and well-being of the students.

• Teachers and administrators viewed the data collection and assessment components as "user-friendly" tools for making informed decisions.

Conclusion

The evaluation of the Together We Light the Way project highlighted a number of important points. First, Together We Light the Way has made important contributions to schools and communities, particularly to children and their families. All those involved in the project expressed a positive view of the models and its effects. Second, the programme provides a comprehensive approach to addressing the problems and issues in schools today. It is a creative and helpful tool for creating respectful relationships among and between students and adults, thus making a crucial contribution to a civil society. Together We Light the Way also shows considerable potential for addressing many of the

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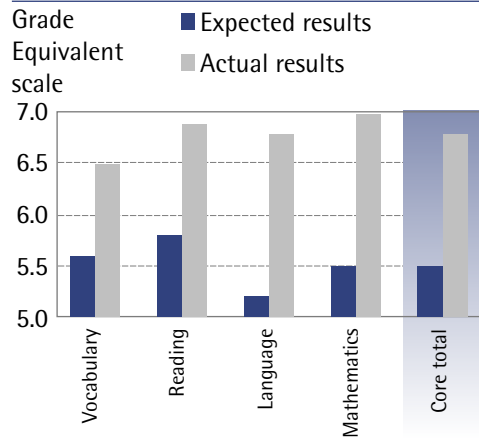
factors associated with youth anti-social behaviours. It can attract the community into the school and engage parents more fully in the education of their children.

This programme will continue to yield positive outcomes in the future, aiming to facilitate long-term improvement in a school's capacity to optimise the achievement of students, especially those with special needs and most at risk of failure.

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CHAPTER
12

STRATEGIC TRIPARTITE ALLIANCE IN ESTABLISHING A SAFE SCHOOL PROGRAMME IN MALAYSIA

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Abstract: This paper describes the Safe School Programme, which was established by Malaysia's Ministry of Education in 2002 in response to growing concerns about safety and security in schools. It presents previous measures used to address problems such as school violence, in addition to the objectives, the elements, the role of schools, families and communities, the procedures and the recommendations for the current Safe School Programme.

History of school safety in Malaysia

In Malaysia, schools have a legal responsibility to ensure the safety of students under the common law doctrine of *in loco parentis*. However, school safety is a growing problem in both primary and secondary schools; the number and severity of incidents of school violence, vandalism, theft and gangsterism, and general student discipline and misconduct problems are increasing. Widespread media coverage of these incidents has exacerbated the problem.

Traditionally, preventative measures were used to address negative behaviours: school circulars were disseminated by authorities (Ministry of Education, 1975), school rules posted in every classroom, staff room and on school notice boards, and school bags, equipment and grounds checked by teachers and prefects. All teachers were required to recognise and understand the various ordinances and circulars related to school discipline. School rules were enforced using a system of surveillance, penalties and punishments (*i.e.* suspension, expulsion, alternative school placement and arrest) (Purkey, 1999), although fines were not imposed on parents or guardians.

Recent incidents have forced the Ministry of Education to re-evaluate school discipline policies and practices. In 1999, in response to public demand for safer schools in Malaysia, the Educational Planning and Policy Research Division of the Ministry of Education conducted a study on Gangsterism in Daily Secondary Schools (1999). Results of the study indicated that students' involvement in delinquent activities is influenced by their ethnicity, peer group and place of residence. Students with low parental income who live in densely populated areas, new villages, apartments or temporary public housing, for example, are most at risk. At-risk students have a tendency to rebel and break rules and regulations; to desire to be the centre of attention; to have low academic achievement; to receive little parental attention; and to be susceptible to negative peer influence.

The Safe School Programme

To create a safe school environment, the Ministry of Education established a committee to examine and formulate a strategy to minimise violence in schools. It developed a blueprint for a Safe School Programme in Malaysia, known as the *Safe School Concept and Manual: Implementation Guide to Create a Safe School, Community and Family for Children* (Ministry of Education, 2002). The aim of the blueprint, which called for the support of families and local communities, was to reduce school violence and contribute to a safe school culture and environment.

Defining the problem

The committee considered the following elements as impeding the provision of a safe school environment:

- General lack of attention to school safety issues.

- Need for a formal policy to address the inter-related physical, social, emotional and technical elements that contribute towards school safety problems.

- Lack of collaboration and co-operation on safety issues between the family, society and educational institutions.

- Limited ability of the school to solve safety issues without family and community support.

Objectives

The specific objectives of the Safe School Programme are to:

- Improve understanding of safety-related procedures, such as emergencies, accidents and disasters.

- Develop strategies for planning and incorporating safety-related issues in school activities.

- Foster a school environment that is safe, healthy and conducive to learning.

- Protect the rights of each individual in the school.

- Enhance the quality of teaching and learning.

- Prepare guidelines for each action.

- Increase the focus on study and work in the school community.

- Encourage all involved to make a positive contribution towards the school.

Elements

The Safe School Programme focuses on the following elements:

- Awareness-raising in the community.

- Partnerships with external agencies, local authorities, corporate sectors and the media.

- School regulations.

- Management of emergencies and natural disasters.

- Eradication of truancy.

- Prevention of drug and alcohol abuse, and smoking.

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- Socio-cultural awareness.

- Student leadership.

- Family and community participation.

- Special community programmes.

- Crime prevention through safe school building design.

- Extra-curricular and recreational activities.

- Identification of background of staff and students.

- Staff development.

- School safety control.

- Social services.

- School health services.

- Transport.

- Legislation.

- Assessment and monitoring.

Safe School Committee

A Safe School Committee will be established in each school. The role of the committee is to:

- Prepare a code of ethics and responsibilities for the school community and other individuals.

- Actively promote the code of ethics within the school and local community.

- Educate and train teachers, school staff and community members on safety procedures.

- Ensure that all parties are aware of issues related to the programme.

- Implement, assess and re-examine all of the programme's policies and procedures regularly.

The role of schools, families and communities

A strategic alliance of schools, family members and community representatives must be established to achieve the objectives and ensure the effectiveness of the Safe School Programme.

The formal duties of the *school* in the Safe School Programme are to:

- Establish a Safe School Committee, prepare a Safe School Policy Guide and enforce all school regulations.

- Provide information and copies of the school regulations to all relevant parties.

- Prepare an action plan to overcome problems related to school safety.

- Establish a crisis management plan.

- Identify early warning signs and address them.

- Incorporate elements of safety in teaching and learning.

- Encourage students to report cases related to safety.

- Record all incidents concerning safety violations.

The role of the *family* in the Safe School Programme is to:

- Support all school policies and regulations.

- Actively participate in school and community activities.

- Strengthen religious/moral values among children.

- Communicate regularly with children, their peer group and parents.

- Participate in organisations that seek to address safety issues.

- Educate children on ways to protect their own safety.

The role of the *community* in the Safe School Programme is to:

- Involve all community leaders in the process of making schools a safer place.

- Support all school policies and regulations.

- Provide expertise and materials to services governing school safety.

- Support and participate in organisations that improve school safety.

- Actively participate in school activities, and assist in identifying and solving school security-related problems.

- Establish a monitoring system in the school to prevent crime.

- Narrow the gap between the younger and older generations.

Procedures for reporting safety issues

In the Safe School Programme, each individual is responsible for reporting safety-related cases. The programme has thus established a formal procedure to resolve safety issues, which encourages transparency, accountability and responsibility. The principles governing the procedures for resolving safety issues are:

• Each complaint must be given serious attention.

• Immediate action must be taken, involving an independent third person such as a counsellor. A meeting with the school principal or other representative must be arranged to ensure that the complaint is investigated. If the complaint proves to be true, the appropriate punishment must be meted out and the complainant informed.

• The feelings of each individual involved must be considered.

• All parties should be treated equally and fairly.

• A case is not considered solved if both parties remain in conflict.

• Information on policy and procedure must be simple.

• Procedures must be understood by all parties.

Recommendations for the Safe School Programme

At present, a number of elements in the programme could be improved:

• *A checklist* that assesses security should be developed. The model checklist described by Stephens (1995) addresses aspects of physical security and emergency preparedness procedures.

• *A written crisis management plan* should be prepared to address the needs of schools located in different areas; a school located on a congested road, for example, has different needs to a school situated in a rural, seaside community.

• *Regular risk assessments* should be undertaken.

• *Teachers' professional training* should be established to ensure that teachers know and understand approved school safety-related policies and practices, such as how to deal with cases of bullying, child abuse and sexual harassment.

• *An Incident Profile Form* – which records the exact nature, time and location of an offence, with descriptions of the offender and victim as well as actions taken by the school (Blauvelt, cited in Gaustad, 1999) – would help to monitor the effectiveness of the programme.

• The effectiveness of the programme could be enhanced by seeking the *co-operation of law-enforcement agencies*. Richards (1997), for example, suggested that school

staff, parents, students, communities and law-enforcement officials could contribute towards the establishment of a *security checklist* that meets the specific needs of the school district.

• School safety management would be more effective with the participation of the *Education District authorities and State Education Department.* The Safe School Programme does not currently assign a role to these bodies.

Conclusion

> Children have human rights, regardless of their behaviour or the school setting. The Convention on the Rights of the Child sets the basic, minimum standards for juvenile justice procedures, children's access to education, their rights to bodily integrity and mental health, and the provision of other resources to enable children to become healthy and productive adult citizens. One of the main tenets of the Convention is that children's human rights rest on a bedrock of their right to be heard, to be listened to, and to participate in the decisions and environments that affect their lives. (Beyer 1997)

While schools are required to maintain a violence- and crime-free environment, they are not expected to guarantee safety; accidents and violence will inevitably occur. Gold and Szemerenyi (1997, cited in Raymond, 1999) pointed out that "schools do not have an obligation to do the impossible but only to work in a competent and reasonable manner". Beyer (1997) also asserted that schools have the right to pro-actively isolate and reduce perceived causes of school violence. Thus, such incidents can be prevented with due care and a recognised code of practice.

The Safe School Programme in Malaysia represents a comprehensive approach to school safety. It promotes active involvement of and co-operation between communities, teachers, parents and students. It also informs school administrators and teachers about their responsibilities concerning safety management and planning. Although schools in Malaysia remain susceptible to violence, implementing the Safe School Programme represents an important step towards providing a safer teaching and learning environment.

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CHAPTER
13

VISIONARY – A EUROPEAN INTERNET PORTAL ON VIOLENCE PREVENTION IN SCHOOLS

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Abstract: The VISIONARY project is a European Commission-sponsored activity involving five European countries to create international and country-specific Internet portals on violence prevention in schools. This paper describes the structure of the Internet portals, which contain information on definitions, prevalence and sources of violence in schools in participating countries, a database of links to Web sites, current news and a discussion forum. It also describes a publication on the VISIONARY project, which presents an overview of Internet sources on violence and violence prevention in schools.

Introduction

In many countries, violence in schools and juvenile violence and crime have become major concerns. Incidents such as the massacre in Erfurt, Germany in 2002, in which 18 people were killed, and teenage suicides due to bullying in Scotland in 2002, have increased public awareness of these issues.

In recent years, substantial efforts have been made – by the European Commission (EC), national governments, communities, public institutions, schools and others – to develop and implement programmes and activities that address school bullying and violence. International initiatives include the EC CONNECT UK-001 project on violence in schools (see Smith in this publication; Smith, 2003) and the Nature and Prevention of Bullying project by the European Training and Mobility of Researchers Programme (TMR) (Goldsmiths College, 1998). A number of national programmes have also been launched. Practitioners now have access to a wide range of approaches, materials and experience in this area.

The Internet adds another dimension to the issue. It not only provides greater access to information and materials, but also allows users to interact with one another through the use of discussion forums, mailing lists and chat rooms. The challenge is *not* to locate information, but rather to synthesise the huge range of concepts, programmes and materials available.

VISIONARY project

The VISIONARY project was supported by the EC as part of the Socrates/Minerva programme (The Minerva Action, n.d.). The purpose of the project was to create an international Internet portal for violence prevention in schools in each country participating in the project: Denmark, Finland, Germany, Portugal and the United Kingdom.

The objective of this project was to collect and structure information available on the Internet and to facilitate the search for relevant information, *not* to develop new concepts or approaches on violence in schools. A book on violence and violence prevention in schools in all five participating countries was also published, with a focus on resources available on the Internet (Jäger, Bradley and Rasmussen, 2003). The VISIONARY Internet portal and publication are two complementary components of a dissemination strategy. While Web sites are scanned for information and can be regularly updated and accessed by a number of users, books can provide a useful springboard for further research into relevant areas.

The broad aim of the project is to use these two media to create an environment that enables users and readers in different countries and with different experiences to learn from one other. The Web site provides users with a comprehensive collection of information, which can serve as a starting point for their own work or further searches of information. National and international dialogue and interaction are also encouraged through discussion forums and mailing lists.

VISIONARY Internet portal

The international VISIONARY portal is available at the following addresses:

- *www.violence-in-school.info.*

- *www.violence-prevention-in-school.info.*

Country-specific URLs are:

- *www.mobs.dk* (Danish site).

- *www.gewalt-in-der-schule.info* (German site).

- *www.violence-in-school-uk.info* (United Kingdom site).

The VISIONARY portal is divided into four main sections – background, information, communication and VISIONARY – each of which comprise several sub-sections. The principal areas of the site are available in Danish, Finnish, German and Portuguese, and contain links that enable users to browse easily from one language to another. Table 13.1 presents an overview of the Web site's structure.

Table 13.1. Structure of the VISIONARY Internet portal

Background	Information	Communication	VISIONARY
Violence in schools	News	Discussion forum	Project
	Link collection	Mailing list	Partners
	Categories	Contact us	Evaluation report
	Search engine		Sponsors
	The VISIONARY book		

A description of some of the sections and sub-sections of the Web site are presented in greater detail below.

Background

The "Background" section reveals the differences and similarities between the five participating countries. It presents an overview of common tendencies in terms of the definitions, prevalence and sources of violence in schools based on national and international studies (*e.g.* Pfeiffer, 1998; Schäfer and Korn, 2001), as discussed in greater detail below. Excerpts from the articles are presented in the "International" sub-section of the background section (Figure 13.1).

Figure 13.1. "Background" section of the VISIONARY Web site
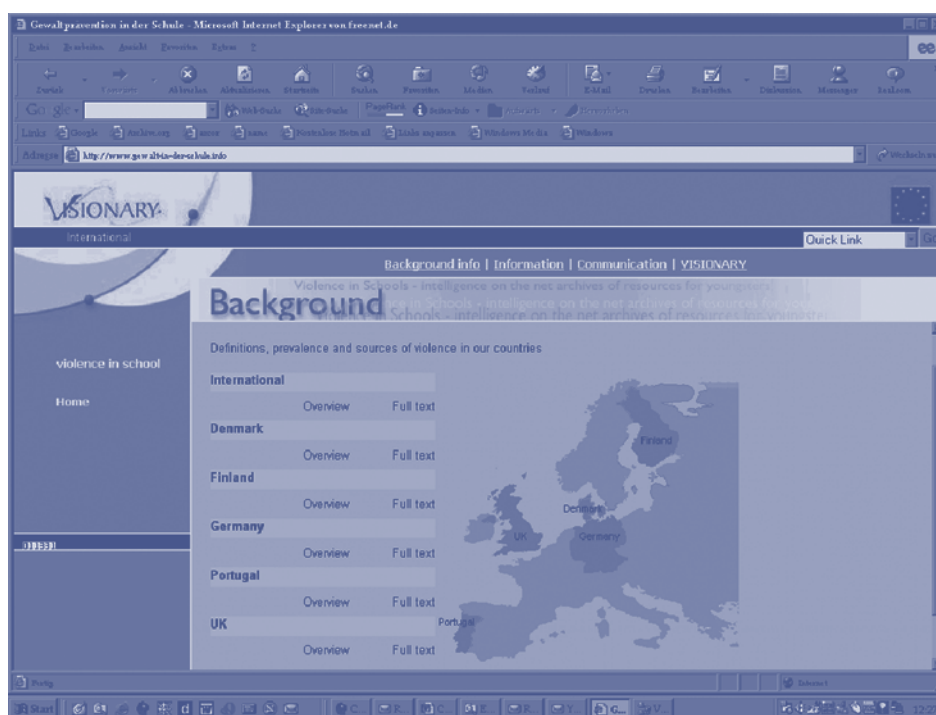
Definition of violence in schools

- There is no common definition of violence in schools in participating countries.

- "Violence" is often used with other terms describing similar phenomena, such as "bullying" or "aggression". It represents a specific kind of disciplinary problem in schools; many problems emerge in a pedagogical context and are related to rules, teaching methodologies and group management.

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Prevalence of violence in schools

● National differences concerning definitions, instruments and methodologies permit few comparisons between countries.

● Although there has been a clear increase in juvenile violence, the level of violence in schools has only slightly increased, if at all.

● The most typical form of violence in schools is verbal aggression, and serious incidents rarely occur.

Sources of violence in schools

● A number of studies reveal that the development of both violent behaviour and behaviour that puts students at risk of victimisation do not derive from one but several sources that interact in a complex way. Thus, programmes or activities that combat aggressive or violent behaviour in schools should focus on multiple rather than single sources.

● Violent behaviour is associated with such factors as parental violence, a low socio-economic background, violent peer groups and ineffective schools.

● Common characteristics of potential victims include restrictive education, isolation in class and defensive behaviour.

Link collection

The international and national link collections (Figure 13.2) contain links to Web sites on violence and violence prevention in schools. Users can locate information using a search engine, which scans international and national databases, or using a system of categories.

The number of Web sites on this topic is constantly growing, making it increasingly difficult to obtain an overview of the projects, materials and practical advice available. To present links in a coherent way, a system of categories was developed. Although these categories are not exhaustive, six top-level categories serve to orientate the user. Lower-level categories and other country-specific categories are also used.

The national link collection contains links to Web sites in each country's national language. The international link collection contains links to selected Web sites from all over the world; it is available in English and at least one other language.

The following categories are available in the international link (IL) and national link (NL) collections:

● *Basics*. Research and science (IL), interviews (NL) and other introductory texts (NL).

● *Experts, community programmes, organisations*. Conferences (IL), organisations/associations/charities (IL), community programmes (for specific regions/cities) (NL), experts (NL) and integrated approaches (NL).

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Figure 13.2. "Link collection" sub-section of the VISIONARY Web site
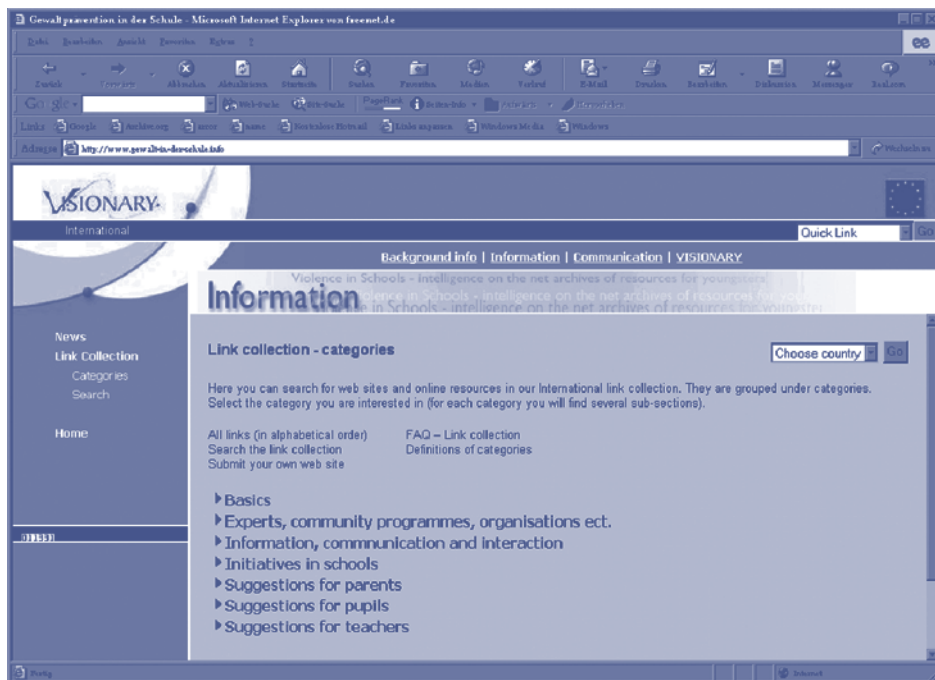
- *Information, communication and interaction.* Audio-visual materials (IL), link collections (IL), portals (IL), publications and literature (IL), calendar of events (NL), communication channels (NL), games (NL) and news (NL).

- *Initiatives in schools.* Measures to enhance the school climate (IL), mediation (IL), networking (IL), whole-school projects (IL), monitoring and supervision (NL), rules and sanctions (NL), surveys (NL), advice for bullies (NL), advice for students in high-risk groups (NL) and advice for victims of violence (NL).

- *Suggestions for parents.* Literature and materials (IL), help and advice (NL), communication channels and on-line sources of information (NL), and courses and training (NL).

- *Suggestions for pupils.* Literature and materials (IL), help and advice (IL), communication channels and on-line sources of information, and courses and training (NL).

- *Suggestions for teachers.* Literature and materials (IL), help and advice (IL), communication channels and on-line sources of information (IL), lesson plans and teaching concepts (IL), and courses and training (NL).

News

The "News" sub-section (Figure 13.3) includes the latest news items on violence and bullying in schools, juvenile violence, crime, and related fields from the search results of international news portals such as Yahoo!, Worldnews.com, Reuters, BBC and CNN, and of national news portals such as idw-online in Germany. It thus presents current national and world-wide discussions and trends in violence prevention. The "News" sub-section also has an on-line registration form so that users can post their own contributions.

Figure 13.3. "News" sub-section of the VISIONARY Web site
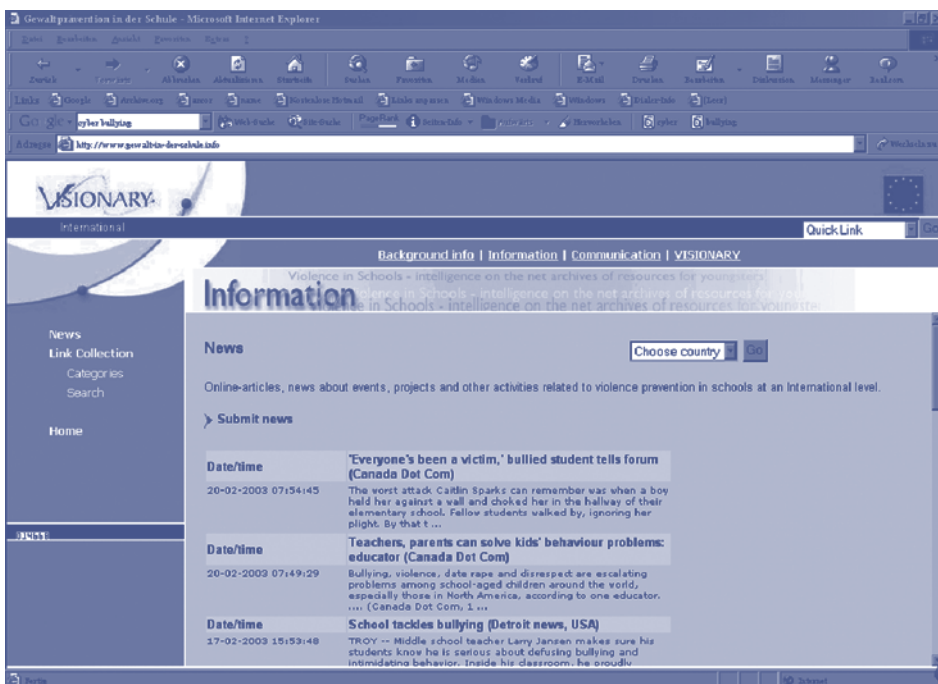
Discussion forum

A discussion forum was set up on both international and national Web sites (Figure 13.4). The concept, target group and issues discussed in the different national forums vary across countries, depending on such factors as users' needs and the existence of other forums in the country. For example, the German forum addresses teachers, as a number of forums already exist for students. It also directs users wanting to discuss more specific problems to other discussion forums.

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Other sections of the Web site

Figure 13.4. "Discussion forum" sub-section of the VISIONARY Web site
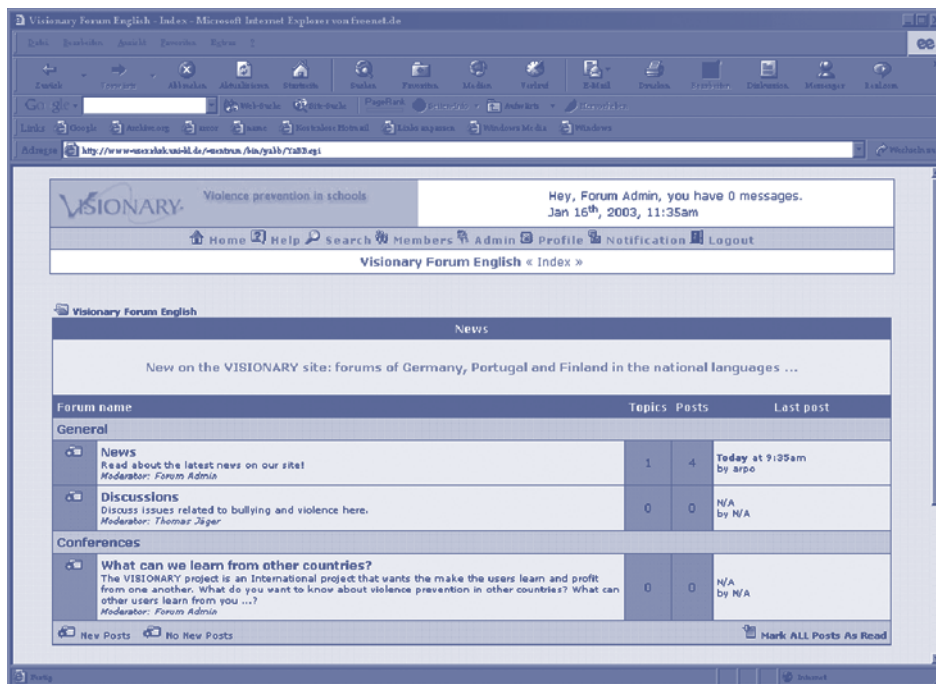
The main VISIONARY portal comprises the following sub-sections:

- A mailing list is available for all registered users.

- "Project" describes the background, aims and future work of the project.

- "Partners" provides information about the institutes involved in the project and other project members.

- "VISIONARY book" provides a short description of the publication's contents, in addition to a list of all links mentioned in the book. As existing Web sites are constantly changing, new sites are created and others are taken off-line, this sub-section is updated regularly and often archived.

VISIONARY book

A sub-section of the VISIONARY Web site is dedicated to the book *Violence Prevention in Schools Using the Internet: A European Perspective*. The VISIONARY publication (Figure 13.5) provides an overview of violence and violence prevention in schools in

participating countries, with an emphasis on sources that can be found on the Internet. The aim of the book is to provide readers with a starting point and to stimulate them to continue their research on violence prevention in schools on the Internet, preferably on the VISIONARY Web site. As mentioned above, in each chapter of the book, links to the national and international collections are cited.

Users of the portal

Since its release in autumn 2002, the sites of the VISIONARY portal have had more than 300 000 hits from users from more than 100 countries. The majority of users are from English-speaking countries (mainly the United States) and the five partner countries, Denmark, Finland, Germany, Portugal and the United Kingdom. In fact, the German version of the VISIONARY portal is one of the most important and successful Web sites on violence prevention in schools (Weber, 2003).

Feedback from users and evaluation data indicate that the VISIONARY portal is mainly used by teachers, parents, students, researchers and experts. Tracking data also reveal that the portal is widely used by universities, national and local governments, schools, and companies.

An on-line questionnaire of 139 users was also conducted. When asked about their primary motivations for using the VISIONARY portal, 86 users responded that they did so to "get a general overview about the topic",

Figure 13.5. The VISIONARY publication

Thomas Jäger,
Claire Bradley &
Marlene Rasmussen (Eds.)
Violence Prevention in School
using the Internet: A European Perspective

49 replied to "search for specific information/concepts/materials etc.", 39 responded to "find up-to-date news about events, new publications, etc.", 38 to "communicate with other users" and 32 to "find concrete help and advice in order to solve problems".

Tracking data also revealed that most users – of both international and national link collections – are interested in the link collection and the news sections. Other sections of the portal, such as the mailing lists, and the on-line-registration form, have not been visited often. The areas most frequented tend to be those to which national teams have devoted the most time and energy. In the German version of the VISIONARY portal, for example, the most visited sections are the German link collection and the news section. Other teams, such as Denmark and Finland, have focused their work on encouraging

communication between users. Therefore, in the Danish and the Finnish versions of the VISIONARY portal, forums are more frequently used than the news section.

In summary, the VISIONARY portal serves most often as an information platform for users searching for links to Web sites or news on violence prevention in schools. A considerable number of users – especially in Denmark and Finland – are also interested in using the portal as a communication tool.

One of the most interesting user issues concerned the use of national versions of the VISIONARY portal by other countries. Tracking data revealed that users of the Danish and Finnish portals mainly come from countries where the respective language is spoken or understood. The German portal is mainly accessed by people from Austria, Germany and Switzerland, although a considerable number of users were from Denmark, Luxembourg and the Netherlands. The Portuguese portal was mostly accessed by users in Portugal, and some from Brazil. The United Kingdom and international portals (in English) were accessed by people from all over the world.

Tracking data and feedback from users suggest that a broad international audience is interested in learning more about other countries' approaches. An important long-term goal of the VISIONARY project is to include more countries and make the portal available in other languages. A Spanish or French version of the VISIONARY portal, for example, would create an even larger audience.

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CHAPTER
14

VIOLENCE IN SCHOOLS:
A EUROPEAN PERSPECTIVE

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Abstract: This paper presents the CONNECT UK-001 initiative on violence in schools in European Union countries. It describes the organisation and structure of the project's country reports, and summarises the reports' main issues and findings. Also examined are the comparability of definitions of "school violence", the nature and availability of data sources, and local, national and other initiatives to reduce violence. The paper discusses how project evaluations, financial support and the use of cross-disciplinary approaches could improve knowledge and action in this area.

Background to the CONNECT UK-001 study

Violence in schools is recognised as a major social problem that not only affects the well-being and educational achievement of students, but can undermine democratic values and education for citizenship. Since 1998, the European Commission (EC) has supported a number of initiatives that address the problem of violence in schools. This is part of its programme of research activities aimed at assisting European integration by linking different European partner groups and enhancing the nature of education and educational opportunities in states in the European Union. The CONNECT UK-001 project was one of six school violence-related activities funded by the EC between 1998 and 2002.

The main objective of the CONNECT UK-001 project was to produce *country reports* on the situation regarding violence in schools in the 15 EC member states and two associated states at the time of the study (2001). Thus most European states participated in the project, with the exception of Liechtenstein, which was not included in the study due to its small size, and non-member or candidate-member states such as Malta, Switzerland and the eastern European countries. This coverage afforded a good view of activities across 17 countries in north, west, south and central Europe.

The project also selected *three existing intervention projects* in different member states – peer support schemes in Italy, a broad approach used in the Gran school in Norway and the "Checkpoints for Schools" initiative in the United Kingdom – for enhanced support and independent evaluation. The projects were evaluated by partners in Finland, Ireland and France, respectively.[1]

Preparation of country reports

Organisation of reports

To facilitate the compilation of country reports, each country organised two partner teams. In most cases, the first team comprised an academic department or research institute; while the second team consisted of teachers, parent-teacher organisations and government department officials. Reviews of other national or European-level work on school violence, such as the report compiled for the Council of Europe on school violence by Vettenburg (1999), were also conducted.

In April 2001, a symposium was held at Goldsmiths College in London. Draft country reports were circulated and discussed in small groups in order to obtain consistent reporting formats across countries. The reports were finalised in August 2001, and posted

on the project Web site in largely unedited form, in English, with summaries (and a few full reports) in French, German and Spanish.

Structure of reports

A standard format for country reports was used:

- *Background.* This section provided the context for the report. It contained a brief description of the country (*i.e.* population, major regional areas, major languages, major ethnic groups and minorities); school system (*i.e.* ages of compulsory and optional education, organisation of schooling by age and type of school, length and organisation of the school day, special schools and ways of coping with children with behavioural disturbances at the school level, relevant curricular information); linguistic/ definitional issues; and relevant historical background (*i.e.* developments relevant to current understandings, actions and policies concerning violence in schools).

- *Knowledge about school violence.* This section included recent national or regional statistics on the incidence of violence in schools; information on different types of violence, according to different dyads (*i.e.* student–student, student–teacher, teacher– student), age trends and gender differences; effects of factors such as ethnicity, socio- economic status and special needs; and information relating to variations by school type and school ethos.

- *Action to reduce violence in schools.* This section covered national-, regional- and local-level policies on school violence and bullying. Countries were asked to provide information on the nature of the initiative or programme; evaluations carried out to assess the programmes' effectiveness; and school or other small case studies that demonstrate interesting or successful approaches to the problem, which may be applicable on a wider scale.

Main issues and findings from reports

All reports were edited to ensure consistent coverage, updated until the end of 2001 or early 2002, and published in *Violence in Schools: The Response in Europe* (Smith, 2003). In addition, commentators from Australia, Israel and the United States were invited to respond to the country reports, in the light of the situations in their own countries. Some of the main issues and findings are presented below.

Definitional issues

In order to compare issues across countries, it was important to reach some consensus on what constitutes "school violence". The study covered thirteen different languages, each of which had slightly different understandings of the term. The English word *violence*, for example, is similar to the Italian *violenza*, but very different from the Greek β*i*α or Icelandic *ofbeldi*. Interestingly, the report from Spain highlighted a concept opposite to violence, *convivencia*, which means living together in harmony. In the background section of country reports, countries were asked how "school violence" was defined, described or

delimited, for example using national statistics or school regulations.

The initial definition proposed in this study was that used by Olweus (1999), who defined "violence" or "violent behaviour" as "aggressive behaviour where the actor or perpetrator uses his or her own body or an object (including a weapon) to inflict (relatively serious) injury or discomfort upon another individual". Thus, violence refers to the use of physical force or power; it *does not* include verbal aggression or relational/indirect aggression, such as rumour spreading or social exclusion (Underwood, 2002). It *does* include physical bullying, in which the aggression is repeated against a less powerful individual, and fights between equals, which is not considered bullying. Some report authors, such as Denmark and Germany, were satisfied with this definition.

Broader definitions of violence are also widely used. The World Health Organisation (WHO) defines "violence" as "the intentional use of physical and psychological force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, mal-development, or deprivation". The emphasis on threatened *and* actual violence justifies the inclusion of *feelings* of insecurity, which is used in France.

Some definitions include institutional violence and violence due to inequalities. Thus, school violence – as defined in France, Greece and Italy – can be seen as retaliation. In addition, although both the Olweus and WHO definitions imply that the consequences of violence can be harmful, reports from Belgium and France made a strong case for including incidents of "micro-violence" or "incivilities", which are relatively minor incidents of impoliteness and infringements of rules that might not count as "violent acts" according to the usual definition, but which may be important in understanding the origins and nature of school violence.

These differences were discussed at the symposium in April 2001, but no consensus was reached. It was recognised that disciplinary and country differences account for the different definitions of "violence". Each team was asked to clearly explain definitions used, particularly for reported data on violence.

Data sources and availability

The most common type of data collection instrument is the student self-reporting questionnaire. A well-known example is Olweus' bully/victim questionnaire (Olweus, 1999). Other data sources include victim surveys, structured interviews, teacher reports and observations of violent behaviour. Although statistics on violence in schools are available in most countries, many reports cited a lack of systematic data gathering and time series data. Other countries reported the absence of data on violence: in these cases, countries provided data that fell outside the accepted definition, for example on physical types of bullying (*e.g.* Greece, Iceland, Ireland and Italy); accidents caused by violence (*e.g.* Denmark); criminal statistics based on legal definitions, such as "anti-social behaviour", "juvenile delinquency" and "vandalism", which included damage to property, drug taking and other activities that are not necessarily considered "violent" (*e.g.* Belgium, Iceland, Italy and Norway); and school exclusion data (*e.g.* United Kingdom).

Most countries provided data on student-student violence, although other dyads were reported less frequently. Austria, Germany, Ireland, Norway and the United Kingdom did provide some data on student-teacher violence. With the exception of Ireland, few data were reported on teacher-student violence. Similarly, limited data were available on adult-adult violence, although statistics in Ireland and the United Kingdom were collected from research conducted on workplace violence.

Many reports discussed the influence on school violence of factors such as the region of the country and socio-economic circumstances; the type of school; and student characteristics such as age, sex, ethnicity, social class, family background and special educational needs. While the likelihood of being a victim of violence often decreases with age – perhaps as potential victims become stronger and more skilled at avoiding encounters – the age of perpetrators of violence increases in mid- or late adolescence, as norm-breaking and risk-taking behaviours generally become more common and more sanctioned by the peer group (Arnett, 1992). Gender differences are also evident, especially when statistics are restricted to physical forms of violence, as boys have much higher levels than girls. Some statistics are available on sexual harassment.

The opening sections of most reports mentioned the increase in the number of students from immigrant groups over the last decade. Racial tensions are prominent in many countries, and these can be reflected in schools. Ethnic minority and immigrant children can experience racial harassment, and young people themselves may bring different expectations and experiences of deprivation and frustration into the school.

Those countries reporting time-series data were able to address the common and often incorrect perception that violence is increasing over time (Pearson, 1983). Some countries reported little change or only a slight increase in violent incidents in schools (*e.g.* Germany and Norway), others a curvilinear increase then decrease (*e.g.* Italy), and others mixed findings, depending on type of violence (*e.g.* Austria).

Initiatives to reduce violence in schools

Most national education ministries require that schools provide "an environment of respect for others". However, only Belgium, Finland, France, Germany, Ireland, Luxembourg, Sweden and the United Kingdom have specific legal requirements to prevent violence or bullying on the school premises (Ananiadou and Smith, 2002), which may involve developing a whole-school approach or policy to deal with violence or bullying. While such pro-active policies can provide a framework, assign responsibilities, and suggest sanctions for non-compliance, they may be ineffective in preventing violence unless combined with other initiatives. A number of national, regional, local and school-level initiatives are also described in the reports.

Large-scale actions are often well-developed programmes that may include curriculum work, individual work with at-risk students and other measures (Smith, Pepler and Rigby, 2004). For example, the Olweus anti-bullying programme, which is widely used in Norway together with other initiatives, has also been implemented in Austria, Finland and Germany, and is being considered in Iceland; the Safe Schools Programme has been used widely

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in Portugal; the SAVE programme has been developed in the Andalucia/Seville region of Spain; and the Farsta programme is often used in Sweden. These programmes are well documented and have a standardised format, with booklets and materials for teachers and students. Many other reported initiatives to reduce violence are less standardised.

A number of initiatives reported do not focus directly on violence, but on other related factors:

• *General preventative approaches.* A number of initiatives aim to improve preventative factors, such as a good school climate and a sense of student responsibility. The report from Denmark, for example, describes a Parliament Day, in which students can discuss and vote on school-related concerns, what to improve and how. Such activities can encourage a general sense of participation and citizenship, and provide some practical suggestions on addressing issues of school violence. Parliament Days have also taken place in France and Sweden.

   o *Promoting a good school climate.* Some country reports describe general work to improve the climate of schools and classes through teacher education, peer support systems, and enhanced personal and social education. The Life Skills programme in Iceland is one example. Some trends in the Netherlands and Norway suggest that a general programme approach may be more promising than programmes that focus specifically on bullying. Measures to improve the school environment, including the physical environment, were discussed in the report from Luxembourg. Smaller class sizes, smaller schools and greater provision of (non-competitive) sports facilities were also suggested.

   o *Encouraging a sense of student responsibility.* Some preventative interventions focus on individual students. Austria reported on a social competency training programme, and Belgium described a Positive Report Card scheme. A number of countries are developing peer mediation and conflict resolution skills (*e.g.* Austria, Italy and the United Kingdom) and finding ways of raising students' self-esteem (*e.g.* Pathways Programme in Ireland). The Nuutinen slide show in Finland aims to change attitudes by "shocking" students about the acceptability of violence.

• *Security approaches.* Some initiatives focus more on dealing with violence when it happens, or providing less opportunity for incidents of violence. In several countries (*e.g.* Austria, Spain and the United Kingdom), telephone help lines have been set up so that students can seek advice anonymously. In other countries, vulnerable students have been issued with alarm bracelets, which can be activated if threatened or attacked (*e.g.* Finland); a rapid response system has been established to deal with violent incidents when they occur; school guards have been employed (*e.g.* Safe Schools Programme in Portugal); and general school security has been strengthened regarding weapons and unauthorised entry, often using video surveillance. These "security" responses may be necessary in some situations, but risk being counter-productive in efforts to improve school climate and *convivencia.* The report from Portugal on the Safe Schools Programme describes how an early security-based focus evolved into a more pedagogical approach that encourages students' self-esteem and responsibility.

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- *School-based approaches.* In some countries, (*e.g.* Austria and the Netherlands), class rules have been written to deal with violence and to foster positive behaviours. Other reports (*e.g.* United Kingdom) place greater emphasis on whole-school policies. Teachers have a vital role in developing class rules and school policies. Support for teachers is an important theme in intervention work. Although all members of the school community share the problem of school violence, teachers are generally in the forefront of dealing with actual incidents or reporting of student-student violence. A good whole-school approach would clearly define the role of the teacher, other school personnel and parents.

- *Training.* A number of countries report organising specific teacher training to deal with violence (*e.g.* Ireland and Spain) and providing information and materials for teachers (*e.g.* anti-bullying pack in the United Kingdom). Other countries provide teachers with education assistants, such as *aide-éducateurs* (*e.g.* France) or learning mentors (*e.g.* United Kingdom). However, little attention has been given to the role of non-teaching staff – such as playground supervisors, janitors, cooks and school nurses – and parents in reducing school violence.

Evaluations of actions to reduce school violence

A recurring theme in many reports was the lack of evaluation of many initiatives: the Austrian report noted that there are "a wealth of materials but [none] are based on empirical research", the Swedish report described the lack of independent evaluation of the Farsta method, and the Portuguese report cited that no independent evaluation of the effectiveness of the Safe Schools Programme had ever been published. The few evaluations that were completed contained basic data on percentage reductions, and no analysis on the cost-effectiveness of interventions.

The quality of the evaluation can be influenced by a number of factors:

- *Evaluation team.* Independent evaluations of actions to reduce school violence are highly desirable. Usually, evaluations are completed by those who designed the intervention (Smith, Pepler and Rigby, 2004). However, evaluations are best undertaken by an objective third party that does not have a vested interest in the outcome of the evaluation.

- *Data sources.* Some evaluations are based on teacher reports. While these reports have some value, data can be subjective and provide only an indication of what the students themselves may be experiencing. Other evaluations based on school discipline records, expulsions and incident reports may appear more objective, but a number of factors also influence incident reporting. Evaluations based on student reports (*i.e.* self reports, victim reports, reports of peers) can have greater validity. Observational data is also more reliable, although time-consuming and expensive to obtain on a large scale.

- *Scale of the evaluation.* Some evaluations are large-scale, covering many schools and thousands of students. These studies allow for the analysis of variation between schools and school classes, and can provide an indication of the likely effectiveness of the

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intervention in other schools. If documented sufficiently, the cost-effectiveness of the intervention can also be estimated. However, unless multi-level analysis is undertaken and more qualitative evidence obtained, it is difficult to understand the processes that contribute to an intervention's success or failure.

- *Use of quantitative vs. qualitative methods.* Large-scale, multi-level, pre-post test designs could be supplemented by more qualitative approaches and single-participant designs. Qualitative methods, such as detailed interviews and focus groups, may better elucidate the reality of violence as perceived by different actors, the different pathways in and out of violence, the timing of involvement in violent behaviours, and the motivations behind them. Such insights are not unavailable to quantitative researchers, but they are often neglected. Quantitative analysis aggregates different types of individuals and can thus produce a misleading null result if certain individuals or sub-groups are not distinguished.

The author and his colleagues (Cowie, *et al.*, 1994) have combined quantitative and qualitative methods to examine the effects of co-operative group work curricula in middle school classrooms. Formal pre- and post-test procedures and open-ended interviews were conducted with individual students and teachers. Results were mixed: students either actively liked or disliked co-operative group work. While victims of bullying and aggression often gained confidence and made friends, aggressive and bullying children disliked group work for these same reasons. The latter group also felt that their actions might be challenged and often tried to "sabotage" group work. The point here is that some overall trends (*e.g.* for liking of co-operative group work, or reduction in aggression) might be concealed or oversimplified if different individuals' experiences are not recognised; this is an area where qualitative methods have a particular strength. Similarly, "single-participant research design" (Morgan and Morgan, 2001) investigates the experiences and process of change in students on a case-by-case basis. In effect, this may involve case studies of highly aggressive students, their experiences of school and how school-based interventions impact on them.

Ways forward

What are the ways forward? The CONNECT UK-001 country reports highlighted a number of areas for improvement.

- *Definitions.* Agreement is required on the range of actions and behaviours that constitute "violence". Comparative statistics could be collected on the basis of definitions that are based on *behaviours,* rather than words on which there is only partial agreement, such as "violence" or "bullying".

- *Data.* A database of evaluated interventions in European Community countries – which, despite differences, share some cultural heritage and are working towards economic and educational integration – would be an invaluable resource for the future. The establishment of "observatories of school violence" (*e.g.* France and the United Kingdom) has afforded a broader database on the problems of school violence generally.

- *Financial support.* While there are many examples of good practice in some countries, in others the problem is largely ignored. In all European countries, regional and national authorities need to provide resources for schools to tackle violence, especially for teacher training initiatives, which have been largely neglected at the national level. Although helping teachers and schools is important, providing support for the communities in which schools are located is also a critical part of the solution. While the extent to which "walled-in", school-based solutions can work independently of the wider community and society is a matter of debate and research, there is little doubt that broader factors do have an impact.

- *Evaluation.* All initiatives should include an evaluation component. Funding needs to be provided for researchers to evaluate initiatives, and teachers, head teachers and education advisors must facilitate the evaluation process.

- *Cross-disciplinary approaches.* To achieve a greater understanding of the issues, researchers need to cross disciplinary boundaries. A psychologist, for example, would consider individual factors such as violent peers, temperament and family factors. While there is some utility in this approach, it is easy for psychologists to ignore the wider social factors. More sociologically-oriented perspectives, for example, argue how violence could be perceived as justified if society, the community, and the school itself are also violent. Changes over time and differences between countries in rates of violence may reflect not only changes or differences in school systems, but also in patterns of violence in society, and the attention and respect given to violence in media presentations.

In many countries, rates of school violence are not increasing, and serious violence in schools is infrequent. Often, rates of violence are higher outside than inside school. Nevertheless, schools should be safe places. The reports from the project described here show that many schools are not as safe as they should be. Much can be done to improve the situation, making school life safer and happier, and increasing *convivencia*. In recent years, knowledge of this problem has advanced considerably, and with organisation and funding, even more can be accomplished.

Note

1. For details about the five other projects on school violence and the CONNECT initiative in general, including evaluation reports, see the Web site *www.gold.ac.uk/connect/*, the FI-006 *CONNECT Proposal for an Action Plan to Tackle Violence at School in Europe* (*www.health.fi/connect*) and the European Observatory of School Violence Web site at *www.obsviolence.pratique.fr.* The UK Observatory is at *www.ukobservatory.com.*

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PART V

EDUCATION, TRAINING AND SUPPORT

How well schools respond in times of crisis is largely dependent on the extent to which teachers and students have been prepared and trained. Students and teachers must know evacuation procedures, and they must understand how to respond to different situations from both inside and outside the school, whether it be a school fire, an incident of bullying or a chemical spill in a nearby neighbourhood. Teachers must be trained to respond to a range of student behaviours that can occur before, during and after an incident that has threatened the safety of a school.

This section explores how the provision of training, education and support to teachers and students on school safety and security issues can minimise safety and security risks.

- How have schools in different countries developed their own programmes to address safety and security issues? How can the effectiveness of these initiatives be measured?

- How are schools in different countries training teachers to address school safety and security issues?

- How are school safety and security issues integrated into the curriculum and other school activities?

- How can individual student support address issues of school safety and security?

CHAPTER
15

EDUCATION AND TRAINING IN EMERGENCY MANAGEMENT IN AUSTRALIAN SCHOOLS

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Emergency Management Australia

Abstract: In Australia, national and state bodies are responsible for emergency management. This paper describes a workshop on "Emergency Management in Schools" conducted by Emergency Management Australia to identify how this federal body can best provide educational support and resources, especially those related to education and training, to state schools and other agencies. A number of national issues and strategies emerged from the workshop, including the use of a comprehensive approach to emergency management, professional development, curriculum programmes, planning, and communication and dissemination.

Background

In Australia, schools are one of the safest places in the community for children and young people. School jurisdictions are working hard to provide a safe and supportive school environment. The recent publication of the "National Schools Framework" provides Australian school sectors with strategies that can inform practice, thus enhancing students' physical, social and emotional well-being. The framework also contains a set of guiding principles and related key elements and approaches on how schools can provide a safe and supportive learning environment.

In the Australian Constitution, the eight state and territory governments have primary responsibility for protecting life and property in Australia. Thus, each state and territory has its own police, fire, ambulance and emergency service agencies. Similarly, states and territories each have responsibility for schooling their citizens. The federal government is committed to assisting states and territories to develop their emergency management and educational capacities.

Emergency Management Australia (EMA) is responsible for federal emergency management. It conducts education and training activities at the Emergency Management Australia Institute at Mt. Macedon, Victoria. Part of EMA's role is to train emergency managers and provide a forum for exchanging ideas on best practice in emergency management, including finding ways to mitigate incidents and disasters through education and preparation.

It is EMA's firm belief that schools are key focus centres for communities and that any incident impacting on school also impacts on the wider community. Schools tend to be a focus as gathering points and shelters for the community in the event of a disaster.

"Emergency Management in Schools" workshop

In September 2003, EMA convened an "Emergency Management in Schools" workshop. The workshop provided a forum for consultation and information-sharing for school principals and emergency managers from all states and territories on emergency management support and resources available to schools across the country. Its purpose was to identify how EMA could provide further assistance to schools as part of their emergency management obligations. More specifically, the aims of the workshop were to:

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- Share examples of good practice with participating agencies.

- Consider the current and possible future applications of risk management as a tool for improved emergency management in schools.

- Obtain feedback on the EMA publication *Emergency/Disaster Planning for Principals.*

- Examine other ways in which federal and state governments can contribute to improving emergency management in schools.

Some of the issues and outcomes of this workshop are presented below.

Common threads

Although each state and territory in Australia has developed different emergency management systems, there are a number of common national issues and strategies.

Comprehensive emergency management

How is *emergency management* defined in Australian communities? Emergency management is not emergency services (*i.e.* uniformed police, fire-fighters, emergency service personnel), nor is it managing emergencies and responding to crises.

A comprehensive approach to emergency management comprises four phases: *preparation*, *prevention*, *response* and *recovery*. It encompasses a range of measures to manage risks in communities and the environment. Emergency management involves establishing and implementing plans and structures, and co-ordinating the work of government and voluntary and private agencies to better deal with the whole spectrum of emergency needs. Emergency management is the responsibility of all: governments, communities, emergency services and schools. Australian school communities recognise that emergency management in schools is not a specialised subject area; it must be integrated into the mainstream curriculum and education policy. This is reflected in many schools, where a whole-school approach is used to promote the learning, health and well-being of all students and staff through established policies, programmes, practices and partnerships, and where emergency management programmes are perceived as an important part of the fabric of the school community.

The role of emergency managers is to carry out any tasks before, during or after a disaster or emergency that provide for the community's safety from natural, man-made or technological disasters. By definition, emergency managers include police, fire-fighters and State Emergency Service personnel, doctors, shire engineers, teachers, social workers, public health employees and land use planners.

Risk management

Adopting emergency risk management as a tool has helped communities and emergency managers move away from a hazard-based view of disasters. It has also significantly changed the perception of emergency management by all sectors of the Australian

community, including the school community. All schools have organised training programmes for staff to apply the risk management approach; education and training plays an essential role in preparing for all possible contingencies.

Responsibilities

All states and territories have a directorate within the state government Department of Education that is responsible for overseeing, co-ordinating and assuring the quality of emergency management in schools. Each directorate is structured differently. In the state of New South Wales, for example, the Safety and Security Directorate has three units, which are responsible for delivering a range of programmes to school communities throughout New South Wales: the School Response Unit, the Discipline and Attendance Unit and the School Security Unit.

Professional development

Most states run workshops on effective emergency management in their schools for newly appointed principals. Emergency management directorate officials also attend principals' conferences to advise on developments, policies and support mechanisms available to principals. In some states, scenario-based training using agency simulators and equipment is provided to principals, staff and departmental officials by local emergency service agencies. In many cases, full days are spent solving problems and managing critical incidents.

Curriculum programmes

The Crime Prevention Workshop Programme is a good example of an effective curriculum programme. It was delivered by police officers and teachers to students in New South Wales schools, and addressed issues such as responsible use of local public space, theft, and drug and alcohol use. The programme was recently evaluated by an independent agency. The assessment indicated that prior to the workshop, students were ambivalent about involving themselves in offending behaviour. After the workshop, about 70% of surveyed students reported that they would not involve themselves in that type of behaviour even if pressured by peers.

Incorporating disaster studies in compulsory curriculum, such as mathematics and social studies, increases the awareness of students and teachers about the contexts in which such events can occur in their school or neighbourhood. The EMA Web site (*www.ema. gov.au*) provides a number of links to relevant curriculum material.

Collaboration

Many school programmes have involved the collaboration of students, staff, parents, families, emergency service employees and the wider community. Such an approach is effective in creating a sense of connectedness and belonging that is vital to successfully mitigate emergencies. In all states, a number of strategies are used to facilitate this consultative approach, from including students in emergency planning committees, to organising regular meetings between senior state police, fire fighters, emergency service officers, principals and departmental officers.

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Most schools and departmental officials establish formal links with emergency service agencies. Activities such as Fire Truck Day, bushfire preparation and Emergency Service Cadet programmes are frequently organised for schools. Departmental officials often give and receive advice regarding programmes and activities.

Planning

As with all emergency management activities, the planning process is as important as the final plan. Executing the plan – which does not mean simply fire drill evacuation practice – further reinforces the process. Many schools have moved past the traditional natural hazard-based planning and practice used for fires, storms and earthquakes by recognising the need to plan and practice for a range of emergency scenarios, even small events. Regular training provides effective practice for an event, and ensures that all parties become familiar with the procedures and the environment in which emergency events may occur. Training can also provide a sense of comfort and support to students.

Culture

Australia is a multi-cultural nation. Australian emergency management programmes for schools consider the cultural environment in which the country, region and community lives and works. Thus, programmes are structured to identify and respond to local community needs and priorities and to environmental and cultural values. In Australian society, children are generally not exposed to such traumatic events as drive-by shootings. Yet, security guards are often employed in some Jewish and Muslim schools. For some immigrants, any authority figure in uniform can evoke negative memories and responses. These must be taken into account in programmes.

Communication and dissemination

Communication and dissemination are central to successfully implementing safety programmes in Australian schools. Many schools' emergency management plans are available on the school's Web site and intranet; some schools use emergency management information as screen savers and wallpaper.

Regular meetings are organised with all stakeholders to ensure that information is shared and decisions are transparent. Bulletin board notices, home newsletters and announcements at school assemblies are all traditional but effective means of communicating safety-related messages to the school and community. Again, the involvement of emergency service personnel in this process ensures the credibility and engagement of all parties. Regular newsletters and information bulletins are shared between schools, departmental authorities and emergency service agencies.

Conclusion

This paper outlined some of the programmes undertaken in Australian schools to enhance their emergency management capability. Emergency management involves the *entire* school community. Thus, different programmes have been developed to serve the wide range of schools and communities in different areas of Australia. While strong co-

ordination arrangements are in place in each state and territory, significant variation exists between individual schools and regions. Recent measures taken to co-ordinate these different approaches bodes well for future work towards the ultimate objective: providing a safe environment for our children.

CHAPTER
16

TRAINING STUDENTS TO RESPOND TO EMERGENCIES IN ARMENIA

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Abstract: This paper presents the work of the European Interregional Centre for Training Rescuers, which provides training to schools, staff and local communities in Armenia. It describes the types of educational materials prepared by the centre, the recommendations developed to ensure the safety of students inside and outside the school, and training courses run by the centre.

The European Interregional Centre for Training Rescuers

The European Interregional Centre for Training Rescuers (ECTR) was established in 1995 by the Council of Europe Committee of Permanent Correspondents for the Open Partial Agreement on the Prevention of, Protection against, and Organisation of Relief in Major Natural and Technological Disasters and the government of the Republic of Armenia.

The ECTR develops, implements and updates training courses and methodological materials for students, teaching staff, administrative executives and parents on recognising and responding to emergencies. In so doing, the centre aims to reduce the number of emergency-related casualties and accidents, in addition to increasing the self-confidence of trainees and fostering an atmosphere of mutual understanding and awareness in schools and communities.

The centre has organised school training courses on recognising and responding to over 30 types of risks, including explosions in the streets and in confined spaces; behaviour in crowded places and during street protest marches and meetings; kidnapping children and hostage-taking; sky-jacking and jacking of other vehicles; and survival in zones of armed conflict. It has also conducted training programmes in secondary schools on The Science of Risks as part of the Safety and Survival Programme, in co-operation with the Armenian Anania Shirakatsi National College and other educational institutions, including schools in rural cross-border areas.

In 1988, the Spitak earthquake destroyed more than 1 000 school buildings and killed more than 25 000 people, many of whom were schoolchildren. In response to this tragedy, the ECTR initiated a project on safe school furniture design.

Collaboration with other agencies

The ECTR is involved in a number of joint research projects with the Council of Europe EUR-OPA Major Hazards Agreement and European Union training centres in Nicosia, Cyprus; Ravello, Italy; Sophia, Bulgaria; and others. A number of municipal and rural schools in Armenia also receive risk prevention training as part of their involvement in the Euro-Mediterranean network.

This collaborative research has focused on the following areas:

- Preparing *educational materials* for students, teaching staff, school administration and parents on recognising and responding to a terrorist attack or similar event.

- Preparing *recommendations* on safety for students in their own homes; safety of school buildings; provision of school medical services; storage of food and water in case of

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a biological or chemical attack; design of school furniture with protective features; safety of school vehicles; and fire safety.

- Developing *training courses* for students and teachers. These courses address:

  o Student responses to being watched or followed by strangers, to kidnapping and hostage situations, and to hostage release operations.

  o Safety precautions for students in crowds, during street protest marches and in other potentially dangerous situations outside the school.

  o Procedures for dealing with explosive objects found by students in the street, in the school and or on school grounds.

  o Procedures to be used by teachers to deal with an emergency situation inside or outside the school.

  o First-aid training for school bus drivers, who also receive training on responding to the hijacking of a school vehicle.

MAJOR HAZARDS EDUCATION IN FRANCE

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Abstract: This paper presents two school safety training programmes that have been widely implemented in schools at national and regional levels in France. The SESAM plan (School Emergency Standardised Answer in the case of Major accident) is used in schools throughout France, and the "Prevention – First Gestures" fire safety programme has been delivered to several thousand students in the Grasse area in the south of France.

Background to the SESAM plan

In the early 1990s, a national network of instructors was created by the Ministry of the Environment in France to provide resource staff, including teachers and specialists, in the area of major hazards education. Staff were assigned to all 30 *academies* or school districts in France to foster a risk awareness culture in the educational sector over the period of compulsory education. These resource staff report to a school district co-ordinator, who is trained and appointed by the *recteur* or head of the school district.

In 1995, a crisis management tool for school principals, known as the SESAM plan (School Emergency Standardised Answer in the case of Major accident), was developed by a working party of emergency specialists within the network of instructors. The plan was subsequently approved by the French ministries of the Environment, Education and Home Office. In 1998, the French Institute of Instructors in Major Hazards and Environmental Protection (IFFO-RME) was established by the Ministry of the Environment to facilitate implementing SESAM and to train instructors.

The plan has two principal objectives:

- To introduce risk awareness into civic culture through education and training for students, staff and the educational community.

- To help schools develop a strategy to ensure the safety of students and staff in the event of a major emergency.

The SESAM plan defines the role of each member of the emergency team, who are chosen by the school principal and are responsible for implementing the plan. It also describes the steps involved in carrying out the emergency plans. The SESAM plan framework can be found on the IFFO-RME Web site at *www.IFFO-RME.fr*.

In 2002, the main elements of the SESAM plan were incorporated into each school's safety plan (PPMS or *plan particulier de mise en sûreté*); the PPMS were made compulsory in national education the same year. The PPMS is tailored to the specific circumstances of each school (*e.g.* school environment, number of students, type of buildings), to the type of classroom activity at the time of the emergency (*e.g.* lessons, break times, sports or cultural activities off the school premises), and to the specific risk to which the school may be exposed (*e.g.* natural or technological hazards, conflict, fire). It contains procedures for evacuation to a shelter and containment of an emergency.

Implementing the SESAM plan

A number of strategies are currently used to facilitate the national implementation of the SESAM plan:

- *Training.* The aim of SESAM is to provide safety education and training for the educational community. Teaching and non-teaching staff – teachers, nurses, management and maintenance staff – can participate in vocational training courses. Initial training is also provided for school district administrators. In addition, a number of specialised courses have been organised, including initial response training for students and teaching staff, which encourages responsible behaviour based on mutual respect and assistance.

- *Establishment of a working party.* A working party was set up with the purpose of identifying risks, resource staff, appropriate containment areas, school access and evacuation routes, and logistical resources.

- *Civic education.* Issues of risk awareness and individual and community behaviour and responsibilities are an important part of the education process.

- *Dissemination.* Information about the plan will be disseminated in a standardised format by schools to parents, supervisors and emergency services.

- *Evaluation.* A full-scale evaluation exercise will be undertaken to ensure than plans are updated each year to meet new specifications.

The SESAM plan is an effective education and training instrument for students, staff and others. The SESAM plan has been adopted in all schools in the principality of Monaco, and translated into Bulgarian, English and Turkish. It has also been discussed in the context of the Council of Europe EUR-OPA Major Hazards Agreement. A number of countries have adapted the plan's methodology to other types and areas of risk, such as sports stadiums, libraries and leisure centres.

Prevention – First Gestures programme

The Prevention – First Gestures programme is organised by the local fire and rescue services in the Grasse area in the south of France, in co-operation with the national education PPMS plans, police, local councils and other partners. The objective of the programme is to build community awareness of risk prevention by teaching adults and students how to evaluate hazards in a variety of situations, such as on the school bus, at school and at home. The programme encourages all individuals to actively participate in improving their own security and to increase the security awareness of others. Thus, all training programme participants understand the importance of watchfulness, can facilitate the intervention of the fire brigade and general dissemination of information to the public on major risks, are informed about rates of domestic and road accidents, and are able to initiate steps to reduce community panic.

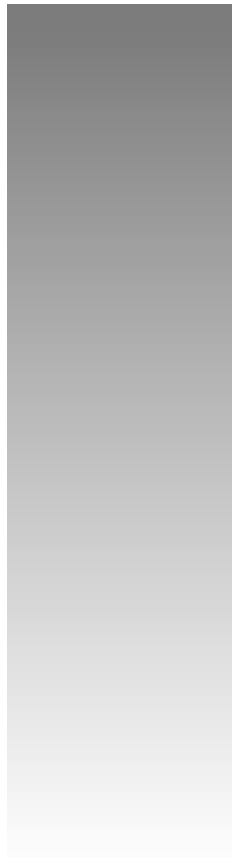The programme builds community awareness using a four-step approach:

- *Level 1* focuses on *identifying individual's knowledge* in terms of recognising hazard and understanding one's own reactions to hazard.

- *Level 2* focuses on *moving towards an understanding of hazards;* the "first gestures" can be acquired in 90 seconds.

- *Level 3* focuses on *assimilating the principles of hazards*, which involves appraising foreseeable and unforeseeable hazards.

- *Level 4* represents the "ideal", which is the creation of a *culture of risk prevention*. This can be achieved through permanent training and appraisal.

The seven-hour programme has been designed for students in secondary, primary and pre-primary education. In secondary education, each school is assigned a "correspondent" for the programme, who may be a teacher or parent; and four students from each class are trained as "prevention assistants", who are responsible to the "referee teacher". The assistants' role is to assist the teacher in case of a problem and increase awareness of the principles of the Prevention – First Gestures programme among fellow students. Assistants must also organise an exhibition on local risks. In primary schools, the referee teacher trains students on how to respond and behave in an emergency. In pre-primary schools, the correspondent instructs students to watch adults and practice the "first gestures".

Between 1996 and December 2002, more than 6 200 people in the Grasse area have participated in the Prevention – First Gestures programme. Since 1999, over 3 300 students have been involved in the programme, including 663 prevention assistants, 153 referee teachers and 166 school classes. More than 5 000 students and 300 adults have participated in training programmes about school buses.
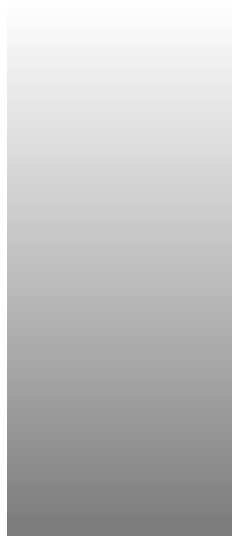
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