

Comprehensive School Safety: A Toolkit for Development and Humanitarian Actors in the Education Sector October, 2012

This toolkit is intended for education sector planners, policy-makers and program developers as well as humanitarian assistance providers, and advocates of universal education. It is intended to be useful for developing disaster resilience through the core activities of the education sector, as well as humanitarian efforts to respond effectively in order to provide education in emergencies.

The goal of *comprehensive school safety* is to support children's rights to survival, protection, development and participation by promoting the physical protection of children in schools, and planning for educational continuity and education sector recovery in the face of disasters and emergencies. Disaster risk reduction bridges development and humanitarian assistance work. It is an attitude and commitment. Rather than being a separate domain of action, it is about how to do the same job better and more sustainably.



The toolkit includes state-of-the-art tools with an emphasis on general, all-hazards, and global applicability and adaptability of materials. All are free and available online. They have been compiled based on an extensive desk review of available guidance documents, and reviewed by leading experts in school safety, disaster risk reduction and education in emergencies. It is planned that the online version of this toolkit will keep pace with new or revised materials as they are introduced.

Many good practices can be found throughout the world. Users are encouraged to explore the tools here for applicability or adaptability to their own contexts. Also look at the regional supplements where you may also find very relevant materials. While some gaps in needed materials have been identified, it is the feeling of many experts that rather than developing new materials, more effort should be put into adapting and testing existing materials for greater effectiveness. Many more examples can be found in the references of these key documents as well as in the collections described below:

This toolkit provides quick reference to the most widely relevant tools. All of these, and many more, are available online through three main sources:

1. PreventionWeb's Educational Materials Collection (provided by the UN International Strategy for Disaster Reduction). <http://www.preventionweb.net/go/edu-materials/> The collection has more than 2000 items on disaster risk reduction and education, and is current until about 2010. It is intended that this becomes a shared and updated resource, fully-searchable, ratable, and with the ability to record dissemination information. Subscriptions to email alerts and RSS (Really Simple Syndication) feeds are available for notification of updates to the collection. In the future

customizable codes for automatic embedding on your own web-pages will be available through the use of machine-tagging.

2. A crowd-sourced **library of DRR bookmarks** is available for users to access and contribute to at www.drrlibrary.org To register for the first time, go to:

<http://www.drrlibrary.org/registerhidden.php>

3. An extensive collection of Spanish language materials is also available, through **Centro Regional de Información sobre Desastres América Latina y El Caribe (CRID)** at Educación y gestión del riesgo: <http://educacionygestiondelriesgo.crid.or.cr/inicio>. Linkages between these two collections are available as well.

4. Additional resources are often shared through networks such as the **InterAgency Network for Education in Emergencies (INEE)** <http://www.ineesite.org/>, the **Coalition for Global School Safety and Disaster Prevention Education (COGSS&DPE)** <http://www.cogssdpe.org> and the **Edu4DRR Teachers' Network** at <http://www.edu4drr.org>

Using this Toolkit

The tools in this toolkit are divided into the following sections to encompass a comprehensive approach to school safety and to complement implementation of the domains identified in the Interagency Network for Education in Emergencies (INEE) *Minimum Standards for Education: Preparedness, Response and Recovery* <http://www.preventionweb.net/go/5475>.

1. **Education Policy: Comprehensive School Safety**
2. **Safe School Facilities**
3. **School Disaster Management**
4. **Climate-aware Disaster Risk Reduction Education**
5. **Child-Centered and Child-Participatory Approaches**
6. **Teachers And Other Education Personnel**
7. **Supplements:**
 - A. Mainstreamed Resources – DRR in Education in Emergencies documents
 - B. Mainstreamed Resources – Education in Disaster Risk Reduction documents
 - C. Additional Resources for Asia / Pacific
 - D. Additional Resources for the Middle East
 - E. Additional Resources for Africa
 - F. Additional Resources for The Americas and Caribbean

Within each section the tools are organized from shorter to longer documents and from more recent to older documents. Each tool includes a short summary plus a web link to the full tool.

With thanks to the following people for their source materials, suggestions and critical review of this toolkit: John Abuya, Allison Anderson, Sanjaya Bhatia, Patrizia Bitter, Ruth Custode, Lisa Doherty, Nick Hall, Lori Heninger, Stephanie Hodge, Marian Hodgkin, Yasamin Izadkhah, Sae Kani, Anup Karanth, Andres Winston Oreta, Garry Ovington, Marla Petal, Garry de la Pomerai, Ian Rodgers, Eli Waerum Rognerud, Guillaume Simonian, Melinda Smith, Antony Spalton, Matt Stephenson, Sonia Sukdeo, Hoa Tran, Gerry Valesquez, Ellen Van Kalmthout.

I. Education Policy: Comprehensive School Safety

These tools are especially relevant to policy and decision-makers and humanitarian response and development practitioners



Providing Education in Emergencies: The Role of a Minister, UNESCO IIEP. 2p.
<http://www.preventionweb.net/go/15279>

This two sided tri-fold brochure provides a simple introduction to Ministers of Education and their staff about their role in ensuring the right of children to education, developing policies that mitigate the effects of disasters and conflicts, and incorporating disaster risk reduction and conflict prevention activities into the regular planning and programme cycle.



Ahmedabad Action Agenda for School Safety

Gujarat State Disaster Management Authority (GSDMA); Sustainable Environmental and Ecological Development Society (SEEDS); United Nations International Strategy for Disaster Reduction Secretariat (UNISDR). 2007. 4p.
<http://www.preventionweb.net/go/3901>
http://ineesite.org/uploads/documents/store/doc_I_87_Agenda_for_School_Safety.pdf

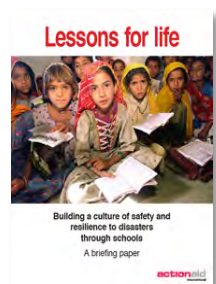
The International Conference on School Safety was held from 18th to 20th January, 2007 in Ahmedabad, Gujarat, India. Reaffirming the priority for Action 3 of the Hyogo Framework for Action 2005-2015, to use knowledge, innovation and education to build a culture of safety and resilience at all levels, the UN Millennium Development Goal 2 to Achieve Universal Primary Education by the year 2015, the participants recognize that every child has both the right to education and the right to safe and sustainable living, hereby set themselves the goal of achieving in solidarity.



Disaster Prevention – A Safe Foundation for Full Inclusion, UNISDR, 2008. 6p.
<http://www.preventionweb.net/go/15281>

Prepared for the International Conference on Education, this brief introductory document identifies disaster impacts that create exclusion from school and recommends key priorities to:

1. Create safe learning environments with safe location, construction and retrofit
2. Maintain safe learning environments with school disaster management
3. Protect educational access with continuity planning
4. Teach and learn disaster prevention and preparedness
5. Build a culture of safety and inclusion



Lessons for Life – Building a Culture of Safety and Resilience to Disasters through Schools, Action Aid, 2007. 16p.

<http://www.preventionweb.net/go/4439>

This briefing paper is based on Let our Children Teach Us! A Review of the Role of Education and Knowledge in Risk Reduction (see Teaching & Learning section below). It lays out practical recommendations for governments to 1. Integrate teaching on local risk and hazards into the curriculum, and 2. Increase the physical safety and resilience of school buildings. It summarizes the Hyogo Framework for Action and Priority 3: To use knowledge, innovation and education to build a culture of safety and resilience at all levels. The brief cites good practices and simple targets for governments to address.



Integrating conflict and disaster risk into education sector planning, UNESCO IIEP, 2012. 122p

Chapter 1 provides an orientation to the planning process and the impacts of conflict and disasters on education. Chapter 2 looks at how to integrate conflict and disaster risk reduction measures into an Education Sector Diagnosis which includes an analysis of context, existing policies, education sector performance, management, capacity, cost and financing. Chapter 3 addresses the policy planning and guidance to addressing disasters and risks. Chapter 4 looks at monitoring and evaluation, and Chapter 5 addresses strategies for costing and financing. An overview of key steps is provided at the end of the document.



Assessing School Safety from Disasters – A Baseline Study, UNISDR TPK&E, Geneva, 2012. 100 p

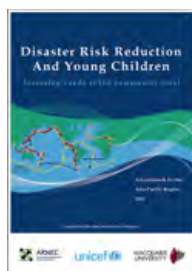
This research report reviews studies and documents produced from 2005 until 2011 on the subject of disaster impacts on the education sector, advocacy efforts. The analysis methodology is described. Sections of the document address approaches to assessment of school safety, assessment of safe school facilities, assessment of school disaster management, and assessment of DRR education in schools. Policy and advocacy recommendations include:

1. Re-focus on outcomes standards and core commitments in each of these areas
2. Align education sector indicators with HFA
3. Develop and monitor policies to safeguard development investments
4. Follow best practices to drive progress
5. Work with and support regional and sub-regional partnerships
6. Develop knowledge management tools for scaling-up
7. Supporting impact research for scaling-up



Disaster Risk Reduction in Education in Emergencies: A Guidance Note for Education Clusters and Sector Coordination Groups, Global Education Cluster, UNICEF, Save the Children, Plan, 2010. P.24

This volume addresses strategies and practical steps to be taken at National, Sub-National, as well as school and community levels; before, and during an emergency.



Disaster Risk Reduction and Young Children: Assessing Needs at the Community Level. A guidebook for the Asia-Pacific Region, Hayden, Jacqueline and Kathy Cologon ARNEC, UNICEF, Macquarie University, 2011.

http://www.arnec.net/ntuc/slot/u2323/publication/Disaster%20Risk%20Reduction3_small.pdf



Applying the INEE Minimum Standards to Ensure Disaster Risk Reduction through Education, INEE 2009. 68p. Simulation session 21p. ToT Workbook 62p.
<http://www.preventionweb.net/go/5475>

This training package for education sector and disaster management actors guides a 3.5-day program. It includes a training guide including detailed session training notes, simulation session and presentations. The materials cover:

- Disaster Risk Reduction and Education – case studies from the region
- Introduction to INEE Minimum Standards
- Applying the INEE Minimum Standards: A Rights Based Approach; Emergency
- Assessment and Design; Monitoring and Evaluation

- Inter-Sectoral Linkages and Cross-cutting issues
- Disaster Risk Reduction through Education: Safe Schools; Teaching and Learning; Participation, Policy and Coordination
- Using the INEE Minimum Standards to Enhance Individual, National and Regional Action Plans.



Disaster Prevention for Schools Guidance for Education Sector Decision-Makers (2008). UNISDR. 54p.

<http://www.preventionweb.net/go/7344>

This guidance document aligned to the INEE Minimum Standards for Education was developed by UNISDR and is intended for education administrators at all levels as well as school safety advocates. It introduces:

- Disaster impacts and prevention measures for schools
- Creating safe learning environments
- Maintaining safe learning environments
- Teaching and learning disaster prevention and preparedness
- Educational materials and teacher training, and
- Developing a culture of safety.



Mainstreaming Disaster Risk Reduction into National and Sectoral Development Process – Training Course of the Regional Consultative Committee on Disaster Management (RCC) (ADPC) Training Manual 1. 8p.

<http://www.preventionweb.net/go/13451>

This document describes the training course of the fifth component of the Regional Consultative Committee Program on Mainstreaming Disaster Risk Reduction into Development (RCC MDRD), on capacity building for mainstreaming disaster risk reduction into development policy, planning and implementation in Asia.

Of particular interest for disaster risk reduction education is Session 3.3: Mainstreaming DRR in education sector covering:

- Impacts of disasters on the education sector
- Ways of mainstreaming DRR in school building construction and in the education curriculum
- Building partnerships for mainstreaming DRR in education sector
- Developing plan for initiating mainstreaming of DRR in the education sector.

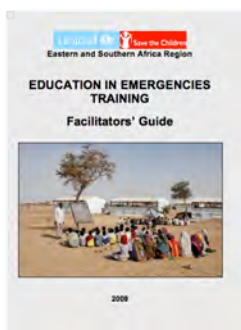


Towards a Culture of Prevention: Disaster Risk Reduction Begins at School: Good Practices and Lessons Learned UN/ISDR, Geneva, Switzerland, 2007. 156p.

<http://www.preventionweb.net/go/3920>

This compilation provides description of 38 good practices submitted from around the world in: Raising Awareness within School Communities, Building a Culture of Prevention, and Making Schools Safer.

Each 3-4 page case study has an abstract, describes the initiative, impacts and results, the good practice and lessons learned. The publication is part of ongoing efforts made under the theme "Disaster Risk Reduction Begins at School", selected for the World Disaster Reduction Campaign 2006-2007, coordinated by UNISDR and UNESCO.



Education in Emergencies Training, UNICEF Regional Office in East and Southern Africa (ESARO), Save the Children 2009.

<http://www.preventionweb.net/go/15305>

The purpose of the Eastern and Southern Africa region (ESAR) Toolkit is to provide education frontline responders at national and local levels with tools to better prepare for and respond to emergencies through implementation of appropriate and comprehensive education activities for emergency-affected children.

ESAR Training Package Materials include:

- ESAR Facilitators' Guide for trainers 263p.
- Power Point presentations for each training session (provided on CD) 264p.
- ESAR Toolkit of tools to guide emergency preparedness and field response 116p.
- Participant's Workbook for training participants

A CD-Rom contains all of these and additional resources and handouts.

Sessions directly related to disaster risk reduction are:

• **Session 15: Rehabilitation and Construction of Schools**

Facilitator's Guide for Trainers p.167-175. Participant Workbook p.110-116. ESAR Toolkit: p. 77-80. This includes: Roles of Stakeholders in School Repair and Construction, School Design and Building Standards, Sample Flow Chart in Prioritising and Assessing School Retrofit Projects, Developing a Plan to Implement School Repair and Construction.

• **Session 19: Disaster Risk Reduction and Education**

Facilitator's Guide for Trainers p.213-223. Participant Workbook p. 143-179. ESAR Toolkit p.98-100.

• **Session 22: Preparedness, Capacity Building and Contingency Planning**

Facilitator's Guide for Trainers p.251-261. Participant Workbook p.168-175. ESAR Toolkit items p.109-112.

This includes: Preparedness and Policy Planning Checklist for Education in Emergencies, Mapping Education Sector Needs at Country and Local Levels, Education Cluster/Sector Contingency Plan Template.

2. Safe School Facilities

These tools are especially for school construction and reconstruction.



Safe and Child-Friendly School Initiative Poster, Save the Children, 2009. 1p.

<http://www.preventionweb.net/go/15308>

This simple poster, of interest to the school community and general public, provides clear graphics to demonstrate disaster-resilient and child-friendly features of a school. This provides a model for bridging the gap in making the school construction experience itself a learning opportunity. Photographs illustrate:

- Earthquake resilient features
- Disaster risk reduction features,
- Child friendly features and
- Hygiene and nutrition features
- Environmentally friendly features



Guidance Notes on Safer School Construction, Interagency Network for Education in Emergencies (INEE), GFDRR World Bank, UNISDR. 2009. 141p.

<http://www.preventionweb.net/go/10478>

Also available in: French, Spanish. Other languages available at <http://www.ineesite.org> additional links can be found at: <http://bit.ly/INEESSCResourceLinks>

The Guidance Note provides a framework with both principles and general steps for context-specific disaster resilient construction and retrofitting of school buildings. **1. General information and advocacy** points briefly address the need and rationale for safer school buildings as well as the scope and intended use of the Guidance Notes. They also feature several success stories and list a number of essential guiding principles and strategies for overcoming common challenges.

2. Suggested steps highlight considerations in planning a safer school construction and/or retrofitting initiatives. Each step describes the processes, important decision points, key issues or potential challenges, and suggests good practices, tools to facilitate the actions.

3. A compilation of basic design principles identifies basic requirements that a school building must meet to provide protection. These principles are intended to facilitate a basic understanding of the measures that can be taken to make a school building more resilient to hazard forces.

References and Appendices guide the reader to more detailed, context-specific and technical information on all aspects of disaster resilient construction and for a full range of hazards.



Educational Facilities Manual, Department of Education, Pasig City, Philippines. 2010. 216p.

In this practical manual Chapter 1 covers Educational Facilities for Basic Education including their importance, basic principles, school mapping, school community relations and a variety of other aspects of structures themselves. It also includes hazard specific risk reduction measures. Chapter 2 covers School Sites including standard requirements, minimum standard requirements, modes of acquisition, and aspects of school site development planning and quality assurance. Chapter 3 covers School Buildings in terms of typology, minimum standards, design, drr measures, and special considerations. Chapter 4 covers School Furniture, Equipment and Other Facilities. Chapter 5 addresses Educational Facilities Management and Chapter 6 addresses Monitoring and Evaluation.



Schools as Shelters; When? How? Why?, UNICEF TACRO, 2010. 50 p.

This volume from UNICEF in Latin America considers the role of education in emergencies, considerations on the vulnerability of children and the importance of planning for educational continuity. It looks at schools as safe places for child development and school preparedness for emergency response. Schools are analyzed as safe places for child development and their role considered in response preparedness, as well as guidance for the use and limitations of schools as shelters. Finally planning for going back to school is tackled practically. An update on this document is being developed by Global Education Cluster partners for release in 2013.



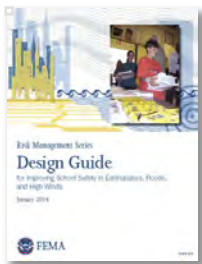
Identifying Earthquake-Unsafe Schools and Setting Priorities to make them Safe, GeoHazards International, Palo Alto, CA. 2005. 40p.
<http://www.preventionweb.net/go/7353>

In response to the January 26, 2001 Gujarat Earthquake in India, 153 schools in Ahmedabad, Baroda and Surat were studied to identify earthquake-unsafe school buildings. A rapid, inexpensive method was adopted to assess the earthquake vulnerability of the school buildings. The report may serve as a model on how to assess the seismic safety of school buildings. The schools included a wide variety of structural types, economic levels, and location.



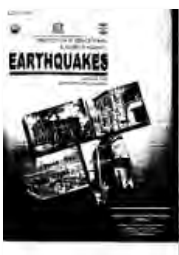
Seismic Retrofitting Quick Reference: School Facilities that Withstand Earthquakes, Ministry of Education, Culture, Sports, Science and Technology (MEXT), Japan. 2006. 46p.
<http://www.preventionweb.net/go/15309>

This illustrated reference for school facilities planners and designers shows examples of seismic retrofitting of junior and senior high school buildings in two prefectures and their performance in earthquakes. Detailed examples of seismic retrofit in elementary and junior high school buildings are shown. This is highly relevant for architects and engineers and can also be appreciated by those who are not technical experts.



Design Guide for Improving School Safety in Earthquakes, Floods, and High Winds (FEMA 424) Federal Emergency Management Agency, Washington, D.C., 2004. 361p.
<http://www.preventionweb.net/go/15313>
<http://www.fema.gov/library/viewRecord.do?id=1986>

This guide for education sector leaders and facilities developers focuses on the safety of school buildings and their occupants. Noting the economic losses and social disruption caused by building damage and destruction, it provides design guidance for the school building required to provide safety of its occupants against natural hazards – earthquakes, floods and high winds. It focuses primarily on grade schools (K-12). The concentration is on the design of new schools, but the repair, renovation, and the extension of existing schools is also addressed. The ICC Performance Code for Buildings and Facilities (2003 ed.) was used for presentation and the criteria for various magnitudes of events. The NFPA 101 Life Safety Code and the NFPA 5000 Building Code were also referenced as design codes for the performance-based design.



Protection of Educational Buildings Against Earthquakes: a manual for designers and builders, Bothara, Jitendra Kumar; Guragain, Ramesh; Dixt, Amod
 National Society for Earthquake Technology (NSET); USAID Office of Foreign Disaster Assistance, UNESCO. Kathmandu, 2002.
<http://www.preventionweb.net/go/7544>

This manual presents in simple illustrated form, ways to protect educational buildings from the disasters effects of an earthquake. It is or for use at the community level as a guide for the construction of earthquake-resistant educational buildings.

A Manual for the Use of Schools and Communities in the Maintenance of Primary School Buildings, Nigel Wakeham, 2003. 39p
<http://www.preventionweb.net/go/15315>

This easy-to-understand maintenance guide for local school implementation includes detailed instructions for school building maintenance, designed for Africa but applicable elsewhere. It is targeted towards any personnel or volunteers with responsibility for school facilities maintenance. The outline provides a valuable model for similar guidance: Part One: Managing Maintenance covers: 1. Introduction 2. General Rules For Those Using The School 3. Daily & Weekly Maintenance Routines 4. Monthly Maintenance Checks 5. Annual Maintenance Checks 6. Tools List. Part Two: Remedial Repairs & Maintenance covers: 1. Introduction 2. Painting 3. Roof Coverings 4. Roof Structures 5. Steel Structures 6. Roof Fascias, Bargeboards & Exposed Roof Timbers 7. External Ceilings 8. Internal Ceilings 9. Walls 10. Floors 11. Doors & Windows 12. Electrical Installations 13. Plumbing Installations 14. School Grounds.

3. School Disaster Management

These resources are especially for implementation by school districts and schools.



School Disaster Reduction and Readiness Checklist – Risk RED, 2010. 2p.
<http://www.preventionweb.net/go/15316>

This quick two-page checklist for school administrators and school disaster management committees provides 5 simple action steps:

1. Convene local school safety committee.
2. Assess & Plan.
3. Implement the plan.
4. Communicate and coordinate.
5. Hold regular drills

Checklist items are divided into 3 spheres of action:

- Assessment & Planning
- Physical & Environmental Protection
- Response Capacity Development: Skills & Provisions.



Guidance Notes – School Emergency and Disaster Preparedness, UNISDR Asia and the Pacific, 2010. p.30
<http://www.preventionweb.net/go/15734>

This guidance, developed to support the campaign for 1 million safe schools and hospitals, provides a straightforward introduction for school administrators and teachers. Brief sections cover all the basic steps of school disaster and emergency preparedness.

1. Create a school emergency and disaster preparedness committee,
2. Design a school emergency and disaster preparedness plan,
3. Know the responsibilities of stakeholders, and
4. Conduct emergency drills and exercises.



Disaster and Emergency Preparedness Guidance for Schools, IFC – International Finance Corporation, World Bank, 2010. 63p.
<http://www.preventionweb.net/go/13989>

This handbook for school administrators, school personnel, and involved parents and disaster managers addresses School Disaster Management for both K-12 and universities, in the context of comprehensive school safety. Addenda provide several checklists to guide the process.

1. Assessment and Planning

- Establish or empower your school disaster and emergency preparedness committee
- Assess risks, hazards, vulnerabilities and capacities
- Contingency planning for educational continuity
- Communicating your plan

2. Physical and Environmental Protection

- Structural safety maintenance • Non-structural safety • Local infrastructure and environmental safety

3. Response Capacity Development

- Response organization using Incident Command Systems • Standard operating procedures • Response skills
- Response provisions

4. Practicing, Monitoring, and Improving

- Hold simulation drills to practice, reflect upon and update your plan
- Monitoring indicators for school disaster preparedness

Appendices include forms for Comprehensive School Safety; School Disaster Readiness and Resilience Checklist; Risk Assessment Matrix; School Building Safety Checklist; Family Disaster Plan; Drill Scenarios; Drill Preparedness Checklists; Class Status Report Form; Student-Family Reunification Form; Emergency Provisions Checklists.



Guide for School Emergency Operations Plan – Maldives, Ministry of Education, Republic of Maldives, 2009. 92p.
<http://www.preventionweb.net/go/15317>

This comprehensive national policy for the education sector addresses the rationale, and provides guidance for emergency planning for schools:

- National level multi-sectoral school planning, preparedness, emergency response.
 - School level emergency response and planning provides guidelines for management, planning/intelligence, operations, logistics and finance/administration. It also guides the site-based emergency planning committee in membership, structure, roles and responsibilities.
 - Hazard and risk assessment covers structural and non-structural hazards and emergency resources.
- Preparedness and emergency response addresses the type and level of emergency, determining immediate response actions including: duck and cover, shelter –in-place, evacuate building, off-site evacuation, shut-down and all-clear. Emergency procedures address: fire, explosion, flooding and sea swell, utilities failure, transportation accidents, earthquakes and tsunamis.
 - Implementing the School Emergency Operations Plan includes emergency drills for fire, earthquake, flood and tsunami.
 - Appendices include a Sample School Emergency Operations Plan with sections for School Profile, Emergency Management, Hazard & Risk Assessment, Preparedness & Emergency Response, and Implementation Strategies.



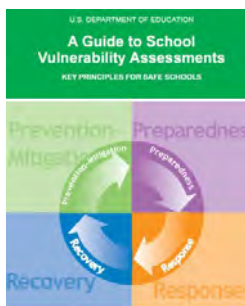
School Safety, Arya, A., Padmanabhan, G. & Karanth, A. New Delhi, India: Government of India, Ministry of Home Affairs, National Disaster Management Division, 200_. 43p.
<http://www.preventionweb.net/go/3974>

This is a handbook for administrators, education officers, emergency officials, school principals and teachers in developing a School Safety Program to create a safe learning environment for the children.



National Guidelines for School Disaster Safety, Ministry of Education of Sri Lanka, 2008. 51p.
<http://www.preventionweb.net/go/7542>

This document provides the principles and guidance to promote a culture of safety in the schools of Sri Lanka. Seven steps in school disaster safety planning are delineated: 1. Establish the school safety core team 2. Create awareness among the school community 3. Identify hazards and resources 4. Establish and train the school disaster safety team 5. Prepared the school safety plan document 6. Disseminate the plan and conduct mock drills 7. Evaluate and update the plan. The document addresses government and counter part actors, delineates “Do’s and Don’ts” before and during disasters, provides a school disaster safety plan example and indicators and monitoring tools.



A Guide to School Vulnerability Assessments: Key Principles for Safe Schools US Department of Education, Office of Safe and Drug-Free Schools, Washington, D.C., 2008. 90p.
<http://www.preventionweb.net/go/15318>
http://rem.s.ed.gov/views/documents/VA_Report_2008.pdf

This volume targets school authorities and school administrators. Vulnerability assessment is the ongoing process for identifying and prioritizing risks to the individual schools and school districts. Examples, case studies and lessons learned are provided. Rather than step-by-step instructions, the authors describe the key elements to be considered when selecting an assessment tool appropriate for school environments and provide guidance for conducting an assessment that will inform school emergency management activities.



School Disaster Response Drills: Model and templates, Risk RED for Earthquake Country Alliance, 2009. 40p.
<http://www.preventionweb.net/go/15319>

These templates guide schools in planning, conducting and evaluating full earthquake simulation drills. Forms include:

- Principals Survey for Emergency Assignments
- Emergency Contacts and Emergency Supplies Letter to Parents
- School Preparedness Self-Evaluation Checklist
- Earthquake Drill Announcement Memo to Faculty & Staff including instructions and implementation forms.
- Incident Command Response Procedures & Duties
- Responsibility Matrix
- ICS / SEMS Post-Drill Self-Evaluation Forms
- Post-Drill Summary Evaluation.



School Disaster Readiness - Lessons from the First Great Southern California ShakeOut 2008, Risk RED 2009. 70p.
<http://www.preventionweb.net/go/14873>

The Great Southern California ShakeOut on November 13th, 2008 The Great Southern California ShakeOut on November 13th, 2008 initiated the largest community-wide earthquake drill in U.S. history with 5.5 million participants including 80% of Southern California students in Kindergarten through 12th grades (4 million). This document reports on: background policies, procedures and safety measures in California Schools, preparedness survey findings in assessment and planning, physical and environmental risk reduction and response capacity development; post-drill survey findings on drill frequency, procedures and implementation of standard emergency management systems.

The on-site study team reports also reports on school-site observations, a case study of a simulation drill at one public high school and a post-drill debriefing. Conclusions discuss next steps. There is a full Reference list. Appendices include: School Disaster Reduction & Readiness Checklist; PostDrill Self Evaluation Form; International Resources for School Disaster Management; and ShakeOut Blog Comments.

An Investigation of Best Practices for Evacuating and Sheltering Individuals with Special Needs and Disabilities, National Clearinghouse for Educational Facilities, USA, 2008. 5p.
<http://www.preventionweb.net/go/15321>

Summary of the results of a comprehensive literature search to identify resources and best practices for accommodating people with disabilities with respect to: Evacuation; Shelter; and Communication.



Headstart Disaster Preparedness Workbook, D. Riopelle, K. Harrison, S. Rottman, K. Shoaf, UCLA Center for Public Health and Disasters, 2004. 131p.
<http://www.cphd.ucla.edu/headstart.aspx>

This comprehensive and easy-to-follow guide is intended for center-based early childhood education programs is a comprehensive resource for disaster prevention and preparedness, covering:

- I. Setting the Stage-Disasters and the Importance of Preparing
- II. Assessing Your Head Start Program's Risks and Resources
- III. Developing and Implementing a Disaster Plan
- IV. Communicating Important Information to Staff, Volunteers, Parents, and Others
- V. Building Teams and Training for Effective Disaster Response
- VI. Recovering After a Disaster

In addition a toolbox provides forms, worksheets and logs and an appendix provides additional resources.

4. Climate-Smart Disaster Risk Reduction Education

Tools especially for curriculum developers and teachers



Family Disaster Plan, Risk RED 2008. 2p.
<http://www.preventionweb.net/go/6653>

The Family Disaster Plan is a recommended handout for all school personnel and students' families. This two sided checklist covers three major areas of action for disaster risk reduction at the individual and household level:

- Assessment and Planning
- Physical Protection
- Response Capacity Development



Adaptation and Localization – Guidelines for Development of Disaster Risk Reduction Public Education Materials, Risk RED 2008. 2p.

<http://www.preventionweb.net/go/15323>

This brief guide is for those planning to adapt or develop educational materials for disaster risk reduction. It describes the What, Why, Who and How to go about adapting and localizing DRR educational materials in order to make best use of preceding efforts and to achieve legitimate, appropriate and high impact education, information and communication materials.



Disaster Risk Reduction in the School Curriculum: Case Studies from Thirty Countries, UNESCO, UNICEF Geneva, 2012. (Kagawa, F. & D. Selby)

The case studies in this report are described by an Overview. Introduction, curriculum development, integration, pedagogy, student assessment, learning outcomes, competencies, teacher professional development, guidance, policy development and implementation. References are also provided.

Technical Guidance Tool for Integrating Disaster Risk Reduction into the Curriculum, 2012 UNESCO, UNICEF, Geneva, 2012 (forthcoming)

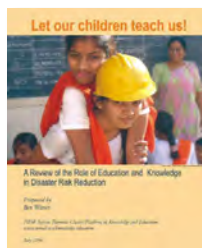
Disaster Preparedness Education for Preschool Children - Manual for Teachers, Plan International, 2010. 30p.
Available in English and Bahasa Indonesia
<http://www.preventionweb.net/go/15336>

This manual developed for preschool teachers/caregivers to introduce disaster preparedness education for young children from 4 to 6 years olds in Indonesia. Guidance is provided for the teachers/ caregivers to incorporate disaster preparedness to existing curriculum using games and play, including: storytelling, group games, singing, role playing and drawing.

Topics covered are:

- 1.Introduction to signs and causes of earthquake, tsunamis, flood and landslides, and strong winds.
- 2.Preparedness and survival skills.

In order to develop this module a week was spent in initial field assessment to understand local hazards, the knowledge and skills of early childhood care givers in disaster risk reduction, the knowledge and skills of young children and the media and curricula that young children are most receptive to. The draft module was tested in local context and feedback from caregivers and young children incorporated into the final version.



Let our Children Teach Us! A Review of the Role of Education and Knowledge in Risk Reduction. Wisner, B. UNISDR, 2006. 148p.

<http://www.preventionweb.net/go/3929>

This strategic review examines good practices to reduce disaster risk through education, knowledge and innovation throughout the world. It examines: Formal education: curriculum and teaching practice in primary, secondary and tertiary education and protecting school infrastructure. It also looks at training courses, informal education and communication, knowledge management and action globally. It looks critically and strategically at current activities in order to identify gaps, opportunities in the form of synergisms and partnerships, and centres of innovation.



Public Awareness and Public Education for Disaster Risk Reduction: a guide, IFRC, 2011. Geneva. 76 p.
http://www.ifrc.org/Global/Publications/disasters/reducing_risks/302200-Public-awareness-DDR-guide-EN.pdf

Public Awareness and Public Education for Disaster Risk Reduction: key messages, IFRC, 2012. Geneva. 60 p.
http://www.ifrc.org/Global/Publications/disasters/reducing_risks/302200-Public-awareness-DDR-keymessages-EN.pdf

These companion volumes cover approaches to public education and public awareness as well as a set of consensus-based Key Messages for household and family disaster prevention that is intended for adaptation and localization. These key messages then allow a focus for curriculum development as well as public education.



What's the Plan, Stan? New Zealand Government, 2009.
<http://www.preventionweb.net/go/4453>

A full supplementary curriculum addresses earthquakes, floods, storms, tsunamis, and volcanic eruptions, fires and pandemics. The goal of the materials is to promote understanding of what causes these hazards and knowing what to do to be better prepared when they happen. Program website provides links to materials for teachers, students and families.

Teacher materials include:

- Teacher's Guide
- Unit plans, inquiry model and templates
- Disaster activities and fact sheets
- Simulation and practice activities
- What's the Plan Stan stories
- What's the Plan Stan CD-Rom



Disaster and Emergency Preparedness Activity Guide for K to 6th Grade Teachers
 International Finance Corporation, 2010. 63p.
<http://www.preventionweb.net/go/13988>

This booklet for classroom teachers and informal education facilitators is a companion to IFC's "Emergency and disaster management guidance for schools". It provides educational activities for classroom and community involvement. Sections cover:

1. Hazards and disasters in our community
2. Measuring our environment
3. Disaster prevention
4. Emergency response
5. Promoting disaster prevention in your community.



Teaching Disaster Risk Reduction with Interactive Methods: Book for Head of Class Teachers Grades V-IX, National Curriculum and Assessment Center & UNICEF, Georgia, 2012
http://www.preventionweb.net/files/22730_22730headteachersguideengncac1.pdf

Climate change, children and education for sustainable development: A child-friendly school approach to adaptation and risk reduction (CCEERP), UNICEF, Earth Child Institute, forthcoming.

5. Child-Centered and Child-Participatory Approaches



Children's Charter for Disaster Risk Reduction

<http://www.preventionweb.net/go/19894>

The Children's Charter was developed by children, who were asked about the impacts of disasters on their lives, the networks that exist in their communities to tackle disasters and their priorities for DRR going forward. This abbreviated version presents five points selected based on the priorities identified by children themselves, grouped together according to the most common themes. It aims to raise awareness of the need to put children at the heart of efforts to prepare for disasters before they strike, and calls for stronger commitment from governments, donors and agencies to take appropriate steps to protect children and utilise their energy and knowledge to engage in DRR and climate change adaptation.



Children and Disaster Risk Reduction: Taking stock and moving forward, Back, E., Cameron, C. and Tanner, T., UNICEF, Children in a Changing Climate, 2010. 44p.

<http://www.preventionweb.net/go/12085>

This report reviews child-focused and child-led disaster risk reduction approaches and techniques and documents case studies across a range of interventions, covering: Knowledge, Voice and Action. Trends in child-focused and child-led DRR suggest that when children and youth have knowledge and voice, they are able to impact policy through 3 forms of action: Action to Protect, to Influence, and to Transform.



Children and Disasters: Understanding Impact and Enabling Agency, Children in a Changing Climate, Seballos, F., et. al., May, 2010. 60 p.

http://www.childreninachangingclimate.org/database/CCC/Publications/IMPACTS%20and%20AGENCY_FINAL.pdf

Key policy recommendations arise from research into disaster impacts on child welfare and development including results from seven countries. The enabling environment is examined in terms of drr and child-centered practice.

Children's Proposal by Ishinomaki City, Yamada Town and Rikuzen Takata City, Save the Children Japan, 2010

<http://www.savechildren.or.jp/jpnem/eng/pdf/news/Proposal%20of%20children%20for%20the%20world.pdf>



Children on the Frontline: Children and Young People in Disaster Risk Reduction, Plan International & World Vision, 2009. 40p.
<http://www.preventionweb.net/go/15327>

Children can and do play invaluable roles in planning and implementing disaster risk reduction (DRR) and climate change adaptation activities, but are largely excluded from resilience-building activities. Key findings are that:

- Children and young people are not satisfied with what is being done
- Adults aren't satisfied either
- An enabling environment for children's inclusion is lacking, but education and knowledge as a foundation are of critical importance.
- Where children's contributions are embraced there is more likely to be progress in the Hyogo Framework for Action.

Survey findings are discussed in terms of priorities for action, recommendations and good practices, and conclusions in 6 areas:

- Governance
- Risk Assessment, Monitoring & Warning
- Knowledge and Education
- Underlying Risk Factors
- Disaster Preparedness and Response
- Crosscutting Issues



The benefits of a child-centred approach to climate change adaptation, UNICEF, Plan 32p.

This document makes the case for a child-centered approach based on the impacts of climate change on children, and based on good economics.



A Child Centered Approach to Climate Smart Disaster Risk Management, Plan International, 2011 28p.
<http://community.eldis.org/.59e0d267/SCR%20DRM.pdf>

This document addresses 3 pillars in a child centered approach to climate smart DRM with guiding questions and indicators:

1. Tackling changing disaster risk and uncertainties (collaborate, assess, integrate, inform).
2. Enhance adaptive capacity (experiment, learn, be flexible, plan)
3. Address poverty and vulnerability and their underlying causes (challenge, advocate, empower, develop)

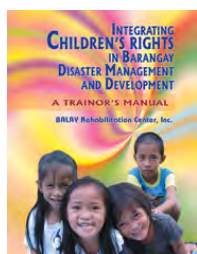
Pointers and facilitators guide for an introductory workshop, complete with exercises with children are provided.



Child-Centred Risk Reduction Toolkit, Plan International, 2010. 176 p.
<https://plan-international.org/files/global/publications/emergencies/DRR-toolkit-English.pdf>

This volume provides modules and activities for training children. Modules include:

1. DRR through hazard, vulnerability and capacity assessment (HVCA)
2. Planning, monitoring and evaluating child centered DRR framework and tools
3. Action planning with children on disaster risk reduction
4. Advocacy with children on disaster risk reduction



Integrating Children's Rights in Barangay Disaster Management and Development – A Trainer's Manual, BALAY Rehabilitation Center, Inc., Save the Children-UK, Quezon City, 2006. 208p.

<http://www.preventionweb.net/go/15374>

This trainer's manual is designed for community council leadership, service providers, health workers, healers, teachers, parents and youth leaders involved in the implementation of child rights-based disaster management and development programs or activities. Training is organized around four modules:

1. Rationale for Integrating Children's Rights
2. Child Rights-Based Disaster Management and Development Framework
3. Children-Oriented Participatory Risk Assessment
4. Child Rights-Based Disaster Management and Development Action Planning

Child-Led Disaster Risk Reduction: A Practical Guide, Benson, L. & Bugge, J., Save The Children. Westport, CT, 2007. 121p.

<http://www.preventionweb.net/go/3820>



This handbook guides action that recognizes children's right to participate in the things that affect their lives, the leadership roles that they can play, and the increased resilience and greater sense of control and security that can be achieved through child-led DRR.

The framework for these programs involves:

- I. Context and Partnerships
- II. Capacity-Building and Awareness Raising
- III. Program Implementation/Activities
- IV. Monitoring and Evaluation / Learning and Documentation
- V. Advocacy

Straightforward guidance includes practical tools and methods for implementing a child-led program. Examples show the varied, productive and leading roles children can play in disaster risk reduction (DRR). Appendices support these with background enabling policy documents, additional resources, and hands-on tools.

These steps are recommended for governments and the international community:

- Make child protection an integral part of every humanitarian response.
- Incorporate child protection programming into the delivery of all services including food, shelter, health and water and sanitation
- Recognize education as an important means of protection
- Ensure that all nation states recognize children are central to the security agenda and should play a central role in DRR
- Provide adequate resources to assist local communities to integrate children as social actors in all their preparedness and response activities
 - Advocate for communities and local authorities to support children in taking their place as active citizens who contribute significantly to community wellbeing and self-protection in the face of potential and actual disasters
- Establish child-led community based disaster risk reduction programs globally.



Child-oriented participatory risk assessment and planning: a toolkit, Buklod Tao, CDP, Philippines. (Mayfourth Luneta) 2007 p.

This brochure contains a dozen simple activities to introduce COPRAP.

6. Teachers and Other Education Personnel

Tools especially for teachers and other education personnel



Self-Care for Teachers, LSU Health Sciences, USA 2005. 2p.
<http://www.preventionweb.net/go/15326>

This two-sided tri-fold brochure addresses the stressors that teachers face following Hurricanes in the US. It reviews common symptoms of distress after a disaster, what people can do to cope, what adults can do to help children to cope, and when people should seek more help.

7. SUPPLEMENTS

- A. Mainstreamed Resources – DRR in Education in Emergencies documents**
- B. Mainstreamed Resources – Education in Disaster Risk Reduction documents**
- C. Additional Resources for Asia / Pacific**
- D. Additional Resources for Africa**
- E. Additional Resources for the Middle East**
- F. Additional Resources for the Americas and Caribbean**

A. Disaster Risk Reduction in Education in Emergencies

These documents are general and basic references for education in emergencies. While none of these are primarily tools for disaster risk reduction, all integrate the concept, to a greater or lesser degree.



Core Commitments for Children in Humanitarian Action, UNICEF, 2010. 55p.
<http://www.preventionweb.net/go/15168>

The Core Commitment for Children begins by addressing Framework, principles and accountability. It then addresses programme commitments across all sectors as well as operational commitments. Explicit strategies to reduce disaster risk are referred to throughout. However, DRR is not mentioned in the context of resource mobilization.

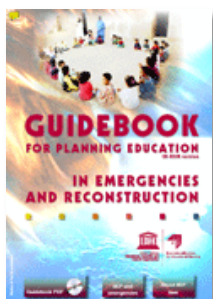


Minimum Standards for Education: Preparedness, Response, Recovery, 2nd Edition. Inter-Agency Network for Education in Emergencies. New York, NY, 2010. 78p.
<http://www.preventionweb.net/go/4546>
 Available in: English, French, Spanish, Russian, Chinese, Arabic from <http://www.ineesite.org>

The INEE Minimum Standards for Education is intended for education sector personnel, humanitarian responders and development personnel. Through an extensive national, sub-regional and regional and on-line consultation process, the Inter-Agency Network for Education in Emergencies (INEE), an open global network of practitioners and policymakers, has developed these international standards to safeguard children's rights to quality education and a safe learning environment at all times. The standards were developed through an extensive national, sub-regional and regional and on-line consultation process. Through memorandum of cooperation, the handbook also serves as the education sector part of the SPHERE standards for humanitarian assistance.

INEE's minimum standards are intended for use in building and training humanitarian agencies, governments and local populations to enhance the access, effectiveness and quality education provision. The handbook covers Standards and Guidance Notes for five domains:

- 1: Foundational Standards - Community Participation; Coordination; Analysis
- 2: Access and Learning Environment - Equal Access; Protection and Well-being ; Facilities and Services
- 3: Teaching and Learning - Curricula; Training; Professional Development and Support; Instruction and Learning Processes; Assessment of Learning Outcomes
- 4: Teachers and Other Education Personnel - Recruitment and Selection; Conditions of Work; Support and Supervision
- 5: Education Policy - Law and Policy Formulation; Planning and Implementation

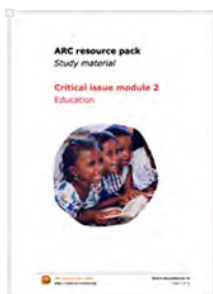


Guidebook for Planning Education in Emergencies and Reconstruction. IIEP-UNESCO, 2006. 720p.
<http://www.preventionweb.net/go/8401>

The guidebook is organized in 6 sections:

- I. Basics
- II. General Overview
- III. Access and inclusion
- IV. Teachers and learners
- V. Curriculum and Learning
- VI. Management Capacity.

This guidebook focuses on ensuring access to quality schooling at primary and secondary levels and is addressed primarily at staff of ministries of education, including national, provincial and district level planners and managers, in countries affected by conflict or natural disasters, or hosting refugees from a neighbouring states. It incorporates conflict prevention and disaster preparedness (though not disaster prevention).



Action for the Rights of Children Resource Pack, ARC, 2010.

<http://www.preventionweb.net/go/15329>

<http://www.arc-online.org/arc/criticalissue/education.html>

This comprehensive package for children's rights advocates contains seven Foundation modules. Introductory slides provide an overview of the module. Each topic includes valuable training exercises and handouts. Particularly relevant to disaster risk reduction are: Foundation Module 1: Understanding Childhoods (Section 3 – The impact of emergencies on children and families and Section 4 – Programming for resilience) and Critical Issues Module 2: Education. Other modules on participation, advocacy and community mobilization are also valuable. Exercises and handouts support learning. Specific physical and environmental risk reduction measures are not elaborated.

Training material for each modules covers five topics:

1. The issue for children - includes handout on Natural Disasters and their initial impact.
2. The law and child rights - includes exercise and handout with summary of INEE minimum standards
3. Assessment and situation analysis - includes role playing exercises.
4. Planning and implementation - includes an exercise in Emergency preparedness and disaster risk reduction drawing distinctions between the two.
5. Monitoring evaluation and learning.



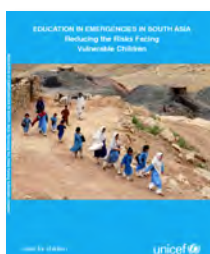
Guidance Notes on Teaching and Learning, INEE 2010. 82p.

<http://www.preventionweb.net/go/15328>

Designed to accompany and supplement the INEE Minimum Standards, this guidance for educational sector administrators and personnel provides detailed for meeting minimum standards in teaching and learning by elaborating on analysis, content and methodology, supervision, monitoring and evaluation and resources in four areas:

1. Curricula
2. Training, Professional Development
3. Instruction and Learning Processes
4. Assessment of Learning Outcomes

DRR is referred to throughout, however, there is no reference to teachers need for the knowledge of how to protect themselves through structural, non-structural and infrastructure safety and the importance of teaching these in schools.



Education in Emergencies in South Asia: Reducing the Risks Facing Vulnerable Children, UNICEF, 2009. 146p.

<http://www.preventionweb.net/go/15340>

In this volume intended for education sector humanitarian and development actors, there are Country Studies for eight Asian countries. Emergencies, vulnerabilities, strategies and issues provide the context for addressing:

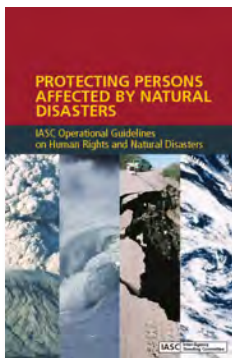
- Complex Vulnerabilities
- Learning Spaces
- Matrix of Strategies
- Conclusion – Potential Innovations



UNESCO Strategy for the Second Half of the United Nations Decade of Education for Sustainable Development, UNESCO, March 2010.

<http://www.preventionweb.net/go/15341>

This document provides an overview of the global context of the UN Decade of Education for Sustainable Development (DESD). It reviews key regional challenges and opportunities and key areas of strategic action for the 2nd half of the DESD. Throughout the document, disaster risk reduction is included as a key consideration posing both challenges and opportunities.



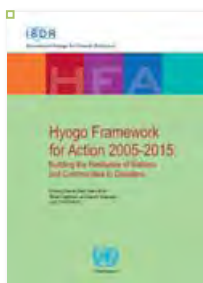
Protecting Persons Affected by Natural Disasters – IASC Operational Guidelines on Human Rights and Natural Disasters, UN Inter-Agency Standing Committee, Brookings-Bern Project on Internal Displacement, 2006. 32p.
<http://www.preventionweb.net/go/15342>

These Operational Guidelines are addressed to intergovernmental and non-governmental humanitarian actors when they are called upon to become active just before or in the aftermath of a natural disaster. The Operational Guidelines focus on what humanitarian actors should do in order to implement a rights-based approach to humanitarian action in the context of natural disasters. They call on humanitarian actors to look beyond their core mandate and to have a holistic vision of the needs of the people they have been asked to serve. While these Guidelines have been drafted with the consequences of natural hazards in mind, they are also relevant to other kinds of disasters.

One of seven general principles included in the IASC Operational Guidelines is related to disaster risk reduction: All communities affected by the natural disaster should be entitled to easy accessible information concerning: (a) the nature and level of disaster they are facing; (b) the possible risk mitigation measures that can be taken; (c) early warning information; and (d) information on ongoing humanitarian assistance, recovery efforts and their respective entitlements. They should be meaningfully consulted and given the opportunity to take charge of their own affairs to the maximum extent possible and to participate in the planning and implementation of the various stages of the disaster response.

Operational Guidelines cover: C.I. Education: C.I.I The return of children, whether displaced or not, to schooling should be facilitated as early and as quickly as possible after the disaster. Education should respect their cultural identity, language and tradition.p.26

B. Education in Disaster Risk Reduction Documents



UNISDR, **Hyogo Framework for Action 2005-2015: Building the Resilience of Nations and Communities to Disasters**, International Strategy for Disaster Risk Reduction, 2005. (English, French, Spanish, Chinese, Arabic, Russian).

<http://www.preventionweb.net/go/1037>

Summaries in English, French, and Spanish

<http://www.preventionweb.net/go/8720>

At the 2005 World Congress for Disaster Reduction Conference in Hyogo, 168 countries endorsed The Hyogo Framework for Action, as the key instrument for pursuing disaster risk reduction. It underscores the need for, and identified ways of, building the resilience of nations and communities to disasters.

The framework addresses 5 priority areas for action:

1. Ensure that disaster risk reduction is a national and a local priority with a strong institutional basis for implementation
2. Identify, assess and monitor disaster risks and enhance early warning
3. Use knowledge, innovation and education to build a culture of safety and resilience at all levels
4. Reduce the underlying risk factors
5. Strengthen disaster preparedness for effective response at all levels



Words Into Action: A Guide for Implementing the Hyogo Framework, UNISDR, 2007 165p.

<http://www.preventionweb.net/go/594>

This guide helps national governments and their subsidiary local governments, including decision makers, leaders and practitioners, and other civil servants to operationalize the Hyogo Framework for Action by looking at each of the 5 priorities for action in depth throughout national planning. Chapter 3.2 specifically addresses building a culture of safety and resilience through disaster risk reduction in the education system (p.64-70).



Integrating Disaster Risk Reduction into the Common Country Assessment (CCA) and United Nations Development Assistance Framework (UNDAF) – A guide for UN Country Teams, United Nations Development Group (UNDG) 80p.

<http://www.preventionweb.net/go/15346>

<http://www.undg.org/index.cfm?P=1093&SO=NAME>

This guide identifies critical steps for integrating DRR into the analytical and strategic planning process and will help UN Country Teams (UNCTs) to:

- Analyze disaster risk
- Review how disaster risk interacts with development
- Examine national capacities and risk reduction options
- Identify priorities for intervention
- Agree on the most appropriate areas for UNCT support
- Include DRR as an integral part of the UNDAF monitoring and evaluation process.

Part 1: UN Cooperation at Country Level

Part 2: Country Analysis

Part 3: Strategic Planning

Part 4: Monitoring and Evaluation

The document focuses primarily on disasters caused by vulnerability to natural hazards rather than those related to conflict or civil unrest. Because of the close relationship between climate change and disaster risk and the fact that DRR is an essential element of climate change adaptation, the guidance note will also be helpful to UNCTs wishing to address climate change impacts in their analysis and future plans. It will also be useful for UNCTs dealing with related risks, like food insecurity and technological risk.

C. Additional Resources for Asia Pacific

Bangkok Action Agenda, UNISDR, Bangkok, Thailand, 2007. 7p.
<http://www.preventionweb.net/go/15376>

The Bangkok Action Agenda was adopted at the Asia Pacific Regional Workshop on School Education and Disaster Risk Reduction by more than 300 participants from 24 countries in the region. Mindful of the need to build on existing key on-going global and regional processes on disaster risk reduction (see Annex) and to adopt a gender-sensitive perspective, the workshop took stock of initiatives, good practices and processes developed by Governments, in-country actors and regional partners in the area of disaster risk reduction education and came up with key recommendations, addressed to all stakeholders, on the following priority areas for action:

1. Integrating Disaster Risk Reduction into School Education.
2. Strengthening Disaster Risk Reduction Education for Community Resilience
3. Making Schools Safer
4. Empowering Children for Disaster Risk Reduction

National and regional approaches are advocated and elaborated.

Asia-Pacific regional strategy for mainstreaming disaster risk reduction in education
 UNICEF Asia and the Pacific Shared Service Center, Dec. 2010. Bangkok.



Integrating Disaster Risk Reduction into School Curriculum: Mainstreaming Disaster Risk Reduction into Education, Asian Disaster Preparedness Center, Pathumthani, Thailand, 2009. 23p.
<http://www.preventionweb.net/go/4006>

The document asks Why Teach Disaster Risk Reduction in School? It asserts that integrating DRR is possible and that good practices already exist in many RCC member countries. Key approaches for mainstreaming are identified and steps suggested for undertaking Priority Implementation Partnerships for this purpose. Long-term activities are recommended for institutionalization.



Mainstreaming Disaster Risk Reduction into Education Sector, Rego et al. Pathumthani, Asian Disaster Management News, 13 (3) ADPC, Thailand, 2007. 42p.
<http://www.preventionweb.net/go/3928>

The education sector is a priority under Regional Consultative Committee (RCC) program on mainstreaming DRR into development policy, planning and implementation in Asia. This Asian DM News issues issue provides a wide variety of good practices:

- integrating DRR into formal and informal school curriculum
- safe school construction
- school emergency planning and management.
- education & awareness raising on disaster
- tools for risk reduction

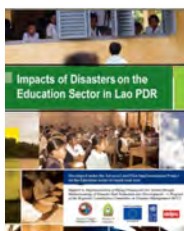


Natural Disaster Preparedness and Education for Sustainable Development, UNESCO, Bangkok, 2007. 84p.
<http://www.preventionweb.net/go/3927>

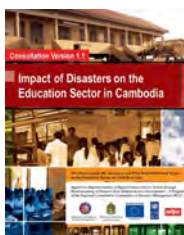
This project report from UNESCO provides details of the work completed under the “Educational materials for education for natural disaster preparedness in Asia-Pacific in the context of education for sustainable development” project. Details of the development of culturally appropriate and locally relevant educational material for natural disaster preparedness are provided. The goal is to develop and strengthen a regional network to implement and further ESD initiatives throughout the region.

The report covers country reports from Maldives, Thailand, Indonesia, India, as well as from Bangladesh Red Crescent Society and Asia/Pacific Cultural Centre for UNESCO. It introduces

activities, lessons learned and the way forward for education in natural disaster preparedness and sustainable development. Insights are provided into effective techniques to develop locally relevant educational materials, and some of the challenges faced. A bibliography of resources is also provided.



Impacts of Disaster on the Education Sector in Lao PDR (2008). Urban Research Institute, Ministry of Communication, Transport, Post and Construction, Government of Lao PDR. And ADPC. Bangkok, Thailand, 65p.
<http://www.preventionweb.net/go/4004>



Impacts of Disasters on the Education Sector in Cambodia. (2008). Economic Institute of Cambodia and ADPC. Bangkok, Thailand, 58p.
<http://www.preventionweb.net/go/15375>

These studies on impacts of disasters on the education sector in Lao PDR, Philippines and Cambodia builds an evidence-based rationale to raise awareness on integrating DRR concerns into education policies, programs and plans and to advocate for changing practices in school construction especially in incorporating disaster risk resilient features in new school construction

These studies on impacts of disasters on education sectors aim to build an evidence-based rationale to raise awareness on integrating DRR concerns into education policies and to advocate for changing practices in school construction especially in incorporating disaster risk resilient features in new school construction. The methodology used for this study was mainly based on secondary data and discussion with involved authorities. The methodology includes review of secondary materials from Ministry of Education and other sources and interviews with key informant officials from Ministry of Education and other agencies.

In Lao, the study focused mainly on urban fire, flood, windstorm and earthquake. In Cambodia the focus was on floods.

Under the ADPC facilitated Regional Consultative Committee (RCC) on Disaster Management umbrella, this collaborative (ECHO-UNDP-ADPC) project was implemented as a major contribution to the implementation of the Hyogo Framework for Action. The project was designed with the primary focus to assist the Ministry of Education in three RCC countries to implement a Priority Implementation Partnership (PIP), working with the National Disaster Management Organizations, to undertake integration of DRR into the secondary school curriculum and to promote resilient construction of new schools using research on the past impact of disasters on the education sector.



Mainstreaming Disaster Risk Reduction in the Education Sector in Cambodia (2008)

Asian Disaster Preparedness Center (ADPC); European Commission Humanitarian Aid (ECHO); Ministry of Education, Youth and Sport, Cambodia - gov; National Committee for Disaster Management (NCDM), Cambodia - gov; United Nations Development Programme (UNDP) 101p.
<http://www.preventionweb.net/go/8196>



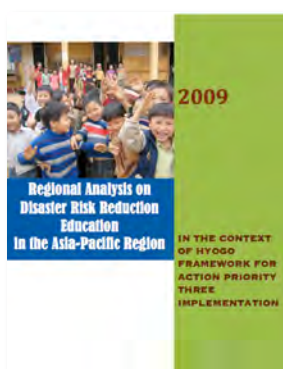
Mainstreaming Disaster Risk Reduction in the Education Sector in Lao (2008)

Asian Disaster Preparedness Center (ADPC); European Commission Humanitarian Aid (ECHO); Ministry of Education (MOE); National Disaster Management Office (NDMO), Min of Labour and Social Welfare; United Nations Development Programme (UNDP) Bangkok, Thailand, 116p.
<http://www.preventionweb.net/go/8196>



Mainstreaming Disaster Risk Reduction in the Education Sector in the Philippines (2008).

Luna, E., Bautista, M & Guzman, M., ADPC, Asian Disaster Preparedness Center (ADPC); Department of Education of the Philippines (DepEd); European Commission Humanitarian Aid (ECHO); National Disaster Coordinating Council (NDCC), Philippines - gov; United Nations Development Programme (UNDP) Bangkok, Thailand, 160p.
<http://www.preventionweb.net/go/8196>



Regional Analysis on Disaster Risk Reduction Education in the Asia-Pacific Region in the Context of Hyogo Framework for Action Priority 3 Implementation (April, 2009).
Hoa Phuong Tran. United Nations International Strategy for Disaster Reduction Secretariat - Asia and Pacific (UNISDR - AP)
<http://www.preventionweb.net/go/12081>

This regional analysis reviews progress in the Asia-Pacific region towards achieving the expected outcomes of the Hyogo Framework for Action (HFA)'s Priority 3. The analysis reflects national assessments of HFA implementation and takes a critical look at progress made in Asia-Pacific by UNISDR and its partners in implementing the Bangkok Action Agenda. Significant progress is noted in regional and national advocacy for policy change, development of tools and guidelines, documentation of good practices, strengthening regional networks, mainstreaming disaster risk reduction into the formal education system, teacher training, curriculum development and delivery and production of materials.

Critical gaps remain: how to ensure information and research results on disaster management, risk reduction and early warnings reach local authorities and communities. Mobilization of community members, especially women and children, the very poor and most vulnerable as well as those with disabilities remain important. Non-formal education approaches and activities require more emphasis. Public-private partnerships are needed, and most importantly, each country needs its own national strategic plan for disaster risk reduction education, ensuring coherence, synergy and impact.



Disaster Risk Reduction in Education Resource Pack, Myanmar Education Recovery Programme (MERP), UNESCO, 2010.
<http://j.mp/d8ObqW>

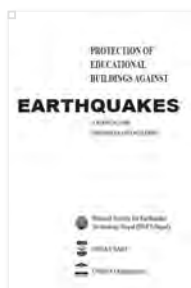
This comprehensive multi-stakeholder information and training package is designed to support a 3-day training program for education sector actors. It includes seven training modules (30-50p. each) glossary and awareness materials activity book and posters.

- Module 1. Introduction to Disaster Risk reduction in Education
- Module 2. Localising Disaster Risk Reduction in Education
- Module 3. Identifying, Assessing and Monitoring Disaster Risks in the Education Sector
- Module 4. Building a Culture of Safety through DRR Education
- Module 5. Reducing the Underlying Risk Factors in the Education Sector
- Module 6. Preparing for Effective Emergency Response and Recovery in Education
- Module 7. Implementing Community Based Disaster Education

Educational Planning and Management in the Earthquake Affected Areas / Workbook for Teachers / Resource Book for Training of Teachers, Provincial Institute of Teacher Education, Pakistan, UNESCO, 2006.
<http://www.preventionweb.net/go/5126>

UNESCO and its partners developed this comprehensive in-service training program in disaster recovery for more than 15,000 education sector personnel in the earthquake-affected areas in Pakistan. Sessions include earthquake preparedness, psychosocial support, multi-grade teaching and child protection. Disaster risk reduction is explicitly taught during one day of the 4-day program. Modules related to disaster risk reduction include:

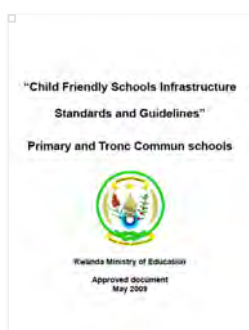
- Module 3: Management of Recovery and Reconstruction program. Training materials includes: Introduction to Disaster Management; Disaster Preparedness Planning; Working with communities. Trainer's Notes p.32-38 Workbook p.23-36
- Module 4: Introduction to Education Project Planning and Management includes Practical steps in ensuring a rights-based approach. Trainer's Notes p. Workbook 47p.
- Module 5: Training of teachers in earthquake affected areas.



Protection of Educational Buildings Against Earthquakes: A Manual for Designers and Builders, Bothara, Jitendra Kumar; Guragain, Ramesh; Dixt, Amod, NSET, USAID-OFDA, UNESCO 2002. 75pp
<http://www.preventionweb.net/go/5126>

This manual prepared for community-based education sector facilities planners in Nepal, provides a basic introduction to seismic-resistant construction, explaining earthquake mechanisms and measurement, earthquake effects, design considerations, site considerations, materials and quality of construction, masonry buildings, reinforced concrete frame buildings, floor and roof construction, safety assessment and retrofitting of masonry buildings.

D. Additional Resources for Africa



Child Friendly Schools Infrastructure, Standards and Guidelines - Primary and Tronic Common schools, Hirano, S., Rwanda Ministry of Education, 2009. 37p.
<http://www.preventionweb.net/go/15377>

This document developed for the Ministry of Education in Rwanda and outlines the Schools infrastructure standards that are expected to be met by all Primary and Tronic Common schools in the Republic of Rwanda. Through this document the Ministry of Education of Rwanda sets out clearly the level of acceptability as a standard and gives guidance on how to achieve them to ensure a common understanding of acceptable levels of school infrastructure between all of those involved in the planning, monitoring, designing, procuring, constructing and rehabilitating school infrastructures. The document describes:

1. Standards Framework
2. Planning
3. Standards – guidelines
 - A. Appropriate, sufficient and secure buildings
 - B. Healthy, clean, secure and learner-protecting environment
 - C. Child-friendly, barrier-free environment which promotes inclusive access and equal rights of every child
 - D. Adequate and appropriate equipment that supports the level of education.

E. Additional Resources for the Middle East



Earthquakes and Safety, F. Parsizadeh, Y.O. Izadkhah and V. Heshmati, IIEES, Teheran. 2007. 42p.

The booklet considers both the capacity of children and the experience and creativity of the teachers and therefore can be regarded as an effective tool in understanding the definition of an earthquake, learning the safety measures, and performing appropriate actions during an earthquake. Appropriate reactions can lessen the disastrous consequences of the earthquake and provide psychological relaxation for the children by reducing their fear. The booklet also provides some scientific information about earthquakes, and the vulnerability of children living in the most active tectonic regions of the world. It emphasizes the importance of the parents' cooperation with the teachers in the kindergarten for improving the children's process of learning about disasters.

F. Additional Resources for the Americas and Caribbean

For a wide selection of materials in Spanish please see:

<http://educacionygestiondelriesgo.crid.or.cr/>

Note: For materials currently available in Spanish only list English titles in parentheses.



A National Report Card on Protecting Children from Disasters, Save the Children, USA 2010 5p.

<http://www.preventionweb.net/go/14756>

This document grades the US 50 states on four criteria of preparedness in case the community encounters a disaster such as floods, earthquakes, wildfires and terror attacks. Progress in meeting four basic standards for protecting children:

1. A plan for evacuating kids in child care: licensed child care facilities to have a written plan (less than 1/2 meet this standard)
2. Reunifying families after a disaster: state requires licensed child care facilities to have a written plan (less than 1/2 meet this standard)
3. Children with special needs: state requires licensed child care facilities to have a written plan (less than 2/3 meet this standard)
4. Evacuation plan for schools: state requires schools to have a disaster plan that accounts for multiple hazards (11 do not meet this standard).

Less than 1/4 of all states meet all 4 basic preparedness standards.

The report is the second disaster preparedness report released by Save the Children's U.S. Programs. The 2010 year report found that 38 states and the District of Columbia did not meet all four basic standards, and seven states met zero. Only 12 states meet all four standards, including Mississippi and Alabama, which is five more than in the 2009 report.



Simulacros Escolares – Una Guía Para Su Preparación (School Drills – A Guide for their Preparation School Drills – A Guide for their Preparation), CECC/SICA, DipECHO, UNICEF, 68p.

<http://www.crid.or.cr/digitalizacion/pdf/spa/doc18032/doc18032.htm>

www.eird.org/cd/toolkit08/material/Inicio/escuela.../anexo_1.pdf

This guide provides:

1. Background knowledge on risk identification and drill types
2. Planning the school drill (including forms for preparation of specific drills)
3. Implementing school drills

It also includes a wide variety of references.

En esta guía se establece lo siguiente:

1. Conocimientos previos sobre la identificación de riesgos y tipos de simulacros.
2. Planificación de la simulacros de la escuela (incluidos los formularios para la preparación de los ejercicios específicos)
3. Simulacros de aplicación de la escuela

También incluye una amplia variedad de referencias.



Educación en emergencias: cómo incluir a todos (Education in emergencies: how to include everyone), INEE, UNICEF - Oficina Regional para América Latina y el Caribe. Ciudad de Panamá; . 2010. 40p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17811/doc17811.htm>



Modulo: Educación para la gestión del riesgo de desastre: herramientas conceptuales y metodológicas para su incorporación en la curricula (Module: Education for disaster risk reduction: conceptual and methodological tools for incorporation in the curriculum), Comunidad Andina. Secretaría General; Proyecto Apoyo a la Prevención de Desastres en la Comunidad Andina (PREDECAN) 2009. 144p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17789/doc17789.htm>

This module addresses the process of integration of disaster risk reduction including: motivations, experiences, interests and knowledge of teachers and officials. It develops basic concepts concerning participation of stakeholders in the education process for risk management, policy and regulatory frameworks, the challenges for risk management and the proposed institutional education, systematization of processes, and practical experiences.

 El proceso formativo a partir de las motivaciones, experiencias, intereses y conocimientos de los docentes y funcionarios. Se desarrollan los conceptos básicos y la participación de los actores sociales en el proceso de educación para la gestión del riesgo, los marcos políticos y normativos, los retos para la gestión del riesgo y la propuesta de educación institucional, sistematización de procesos y experiencias concretas



Guía para la seguridad escolar (Guide for school safety), Ministerio de Educación (MINED). Unidad Técnica de Enlace. Managua, Nicaragua, 2008. 50p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17832/doc17832.htm>

School organization for emergencies and disasters guides the formation of school safety committees, design and development of emergency plans, structure and functions of the brigades and the evaluation of the plan with the educational community

 La organización escolar para emergencias y desastres orienta la conformación de los comités de seguridad escolar, el diseño y la elaboración de planes de emergencia, la estructura y funciones de las brigadas y la evaluación del plan con la comunidad educativa



Guía metodológica para la inserción de la gestión de riesgo en las instituciones educativas. Rengifo García, Francisco, Lima; Intermediate Technology Development Group (ITDG); 2008. 31 p
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17333/doc17333.htm>



Guía metodológica para incorporar la gestión de riesgos en instituciones educativas (Methodological guide for incorporating risk reduction in educational institutions). Oxfam Internacional; Fundación Esperanza y Fraternidad (ESFRA); Instituto para la Superación de la Miseria Urbana (ISMUGUA). Ciudad de Guatemala / Centro e Estudios y Prevención de Desastres (PREDES) Lima, 2006 139p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc16742/doc16742.htm>



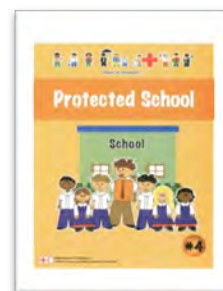
Mantenimiento Comunitario de Escuelas (Community Maintenance of Schools)
63p.
<http://www.preventionweb.net/go/3877>



Manejo de albergues temporales (Handbook for Temporary Shelters)
45p.
<http://bit.ly/CRIDAlbergues>



Plan Familiar / Better be prepared: prepared family
29p.
<http://preventionweb.net/go/8408>



Escuela Protegida Protected School
51p.
<http://www.preventionweb.net/go/8412>
<http://bit.ly/CRIDEscuela1>
<http://bit.ly/CRIDEscuela2>



Modulos / Better Be Prepared Modules

Federación Internacional de Sociedades de la Cruz Roja y de la Media Luna Roja (IFRC), Panama 2006.

Developed by IFRC and OAS, with support from ProVention Consortium, developed this set of 6 non-technical manuals aimed at promoting community-based disaster risk reduction activities. The modules are revised and updated versions of material originally drawn up by the International Federation of Red Cross and Red Crescent Societies in 1994; from that time to the present date, there has been support from international organizations which include: the Provention Consortium; UNICEF, PAHO/WHO, UDSMA/OAS and universities.

Module 4, **Protected School**, facilitates drawing up a school security plan which includes the participation of administrative personnel, teachers, students, neighbors of the school as well as ensuring coordination with other institutions involved in risk management. This document is easy to understand and suited for young children.

The content is organized into work units: 1. Theoretical aspects of emergency, disaster prevention, mitigation, early warning, preparedness and response; 2. The steps to develop the plan for school safety; 3. Steps to identify the threats, the ability school and how to make maps; 4. Evacuation procedure in an emergency; 5. Systematization of the plan and drills; 6. Sharing experiences.

La FICR y la OEA, con el apoyo del Consorcio ProVention, desarrollado esta serie de 6 manuales no técnica destinada a fomentar en la comunidad actividades de reducción de riesgo. Los módulos se revisan y versiones actualizadas de material originalmente elaborado por la Federación Internacional de Sociedades de la Cruz Roja y la Media Luna Roja en 1994, desde esa época hasta la presente fecha, ha habido apoyo de organizaciones internacionales que incluyen: el Consorcio ProVention, UNICEF, OPS / OMS, UDSMA / OEA y universidades.

Módulo 4, **Escuela Protegida**, facilita la elaboración de un plan de seguridad escolar que incluye la participación del personal administrativo, maestros, estudiantes, vecinos de la escuela, así como asegurar la coordinación con otras instituciones implicadas en la gestión de riesgos. Este documento es fácil de entender y apta para niños pequeños. El contenido está organizado en unidades de trabajo: 1. aspectos teóricos sobre emergencia, desastres, prevención, mitigación, alerta, preparativos y respuesta; 2. Los pasos para elaborar el plan de seguridad escolar; 3. Pasos para identificar las amenazas, la capacidad escolar y cómo hacer mapas; 4. Procedimiento de evacuación ante una emergencia; 5. Sistematización del plan y los simulacros; 6. Compartiendo experiencias.



Manual de gestión de riesgo en las instituciones educativas (Manual for risk reduction in educational institutions), Olivera, Jorge; Mariscal, Jorge; Ferradas, Intermediate Technology Development Group (ITDG). Oficina de Asuntos Humanitarios de la Comunidad Europea (ECHO). Movimiento por la Paz, el Desarme y la Libertad (MPDL). Pedro. Lima, PE. 2005, <http://www.crid.or.cr/digitalizacion/pdf/spa/doc16227/doc16227.htm>

Develops conceptual framework of the theme of risk. Emphasis is on the right of children to attend school and considering the school as a social space to solve problems and challenges that arise in the environment. Children at school developed the ability to adapt and to act with autonomy in the resolution of situations. It is a right to participate in prevention, assistance or response. Organization is a necessary condition and can range from the educational council, the town school, civil defense education, school brigades, community, teachers, and parents association.

Desarrolla como punto de partida el marco conceptual de la temática del riesgo. Explicación de algunas variables como amenaza, vulnerabilidad, emergencia, desastre, la prevención, mitigación, preparativos. Enfatiza en el derecho de niños y niñas a participar en la escuela desde la adquisición del conocimiento en materia del riesgo hasta la adaptación al entorno complejo, considerando la escuela como espacio de socialización para resolver problemas y retos que se presentan en el entorno. Los niños y niñas en la escuela desarrollan la capacidad de adaptación y de actuar con autonomía en la resolución de situaciones. Es un derecho participar en acciones de prevención, auxilio o respuesta. La organización es una condición necesaria y puede ir desde el concejo educativo, el municipio escolar, la defensa civil educativa, brigadas escolares, comunidad docente, asociación de padres de familia



Plan de protección escolar: Orientaciones para su elaboración (School protection plan: Guidelines for development), El Salvador. Ministerio de Educación. San Salvador; El Salvador. Ministerio de Educación; ago. 2006. 54 p
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17746/doc17746.htm>

The school security plan provides the guidelines for public and private schools in prevention, mitigation and response to emergencies. Develop the content of the legal foundations that underpin the plan and its importance and steps for the development aspects of information and awareness, organization, mapping, preparation and evaluation

El plan de protección escolar presenta los lineamientos para los centros educativos públicos y privados en materia de prevención, mitigación y respuesta ante situaciones de emergencia. Desarrolla los contenidos de los fundamentos legales que sustentan el plan y su importancia y los pasos a seguir para la elaboración en aspectos de información y sensibilización, organización, elaboración de mapas, preparativos y evaluación



Guía del maestro para la gestión de riesgos (Teacher's guide for risk reduction) UNICEF, a Paz. 2007. 36p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17790/doc17790.htm>



Guía metodológica de educación para la reducción del riesgo (Methodological guide for education for risk reduction), Oxfam Internacional; Fundación Esperanza y Fraternidad (ESFRA); Instituto para la Superación de la Miseria Urbana (ISMUGUA), Ciudad de Guatemala 39p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc18013/doc18013.htm>

Preamble / Methodological guidelines

1. National Coordinator for Disaster Reduction (CONRED)
2. Knowing the threats and how it affects my community
3. What is vulnerability?
4. What are the capabilities?
5. What is risk and how it is presented at the school and community?
6. Preparedness measures to reduce vulnerability in the family, school and community
7. Developing the Family Disaster Response Plan
8. Rainfall monitoring system in the metropolitan area of Guatemala

Glossary / Bibliography

List of worksheets Education Methodological Guide for Reducing Risk

Preámbulo / Orientaciones Metodológicas

1. Coordinadora Nacional para la Reducción de Desastres (CONRED)
2. Conociendo las amenazas y cómo afecta en mi comunidad
3. ¿Qué es vulnerabilidad?
4. ¿Qué son las capacidades?
5. ¿Qué es Riesgo y cómo se presenta en la Escuela y Comunidad?
6. Medidas de preparación para disminuir la vulnerabilidad en la familia, escuela y comunidad
7. Elaborando el Plan Familiar de Respuesta a Desastres
8. Sistema de Monitoreo de lluvia en la zona metropolitana de Guatemala

Glosario / Bibliografía

Anexo: Hojas de trabajo de Guía Metodológica de Educación para la Reducción del Riesgo



Plan escolar para la prevención de riesgos: Una herramienta para estar preparados ante una emergencia (School plan for risk prevention: A tool to prepare before an emergency), Centro Regionale di Intervento per la Cooperazione (CRIC), Quito: Centro Regionale di Intervento per la Cooperazione (CRIC), European Commission. Humanitarian Aid (ECHO), 2005. 66p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17884/dc17884.htm>

The guide provides basic elements to promote a culture of prevention and emergency preparedness. It sets out the steps to follow to identify threats at school and aspects of vulnerability to threats, how to shape the school emergency committee, guidelines for carrying out simulations and actions for prevention and response plan.

La guía proporciona elementos básicos para fomentar una cultura de la prevención y preparación ante situaciones de emergencia. Establece los pasos a seguir para identificar las amenazas en el entorno escolar y los aspectos de vulnerabilidad frente a las amenazas; cómo conformar el comité de emergencia escolar; lineamientos para elaborar simulaciones y las acciones para la prevención y respuesta del plan.



Catálogo de herramientas y recursos de información sobre preparativos para desastres en educación. Centro Regional de Información sobre Desastres para América Latina y el Caribe (CRID).

San José; Centro Regional de Información sobre Desastres para América Latina y el Caribe (CRID); 2009. 80p.

<http://www.crid.or.cr/digitalizacion/pdf/spa/doc17921/doc17921.htm>



Guía técnica para la planificación, diseño, construcción y mantenimiento de establecimientos educativos seguros en la República de Panamá, Santamaría Díaz, María Magnolia; Urbano Hanson, Sussana María, iudad de Panamá; Panamá. Ministerio de Educación (MEDUCA); UNICEF, 2010, 123p.
<http://www.crid.or.cr/digitalizacion/pdf/spa/doc18018/doc18018.htm>

This document is intended to establish minimum recommendations for carrying out direct actions to reduce vulnerability of existing educational infrastructure and construction. This document sets some minimum recommendations for carrying out direct actions to reduce vulnerability in existing educational infrastructure.

El presente documento pretende establecer unas recomendaciones mínimas para la realización de acciones directas de reducción de la vulnerabilidad sobre la infraestructura educativa existente y por construirse. El presente documento pretende establecer algunas recomendaciones mínimas para la realización de acciones directas para la reducción de la vulnerabilidad en la infraestructura educativa existente y por construirse.