

Disaster Recovery Guidance Series Education Sector Recovery





Cover photo: Education Quality Improvement Program. Kart-e-Khurasaan, Mazar Sharif, Afghanistan. Neelaab, a 9-year-old second-grader, is happy that her garments won't get dusty and muddy under the tent anymore. She walks to school every morning with a renewed enthusiasm now. Credit: ABBAS Farzami/Rumi Consultancy/World Bank

Acknowledgments

This Guidance Note was authored by Dr. Ritesh Shah (University of Auckland), Chris Henderson (University of Waikato), and Daniel Couch (University of Auckland). It is the result of a collaborative effort between the World Bank's Education Global Practice and the Global Facility on Disaster Reduction and Recovery (GFDRR). Within the World Bank, this effort was led by Tigran Shmis, Senior Education Specialist, and the Task Team Leaders, Alice Mortlock and Moses Mung'oni, both Disaster Risk Management Specialists.

Colleagues within the World Bank provided valuable feedback and guidance as the Note was being developed by the research team. They include: Peter Darvas (Senior Economist, Education Global Practice [GP]), Ines Kudo (Senior Education Specialist, Education GP), Koji Miyamoto (Senior Economist, Education GP), Hanna Katriina Alasuutari (Education Specialist, Education GP), and Joel Reyes (Senior Institutional Development Specialist, Education GP).

The team is grateful for the leadership and support of Luis Benveniste (Director, Education GP) and Josef Lloyd Leitmann (Team Lead, Resilient Recovery Team) for guiding this Note to conclusion.

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Zanaki Primary School, Tanzania. Photo Sarah Farhat / World Bank

Orientation

A Call to Action

At the national level, the role of education in promoting social cohesion, economic growth, and technological and scientific advancement cannot be underestimated. For individuals, education helps to develop the skills, attitudes and behaviors necessary to lead healthy, productive, and meaningful lives. Yet, it is estimated that each year approximately 175 million children have their schooling interrupted by a disaster (Global Campaign for Education 2016; Nicolai, Hine and Wales 2016). When the education sector is poorly prepared to recover quickly from a disaster, the impact on children and young people can be severe. Potential consequences are outlined in Box 1.

Box 1: The disruptive impacts of disasters on children and youth

- Prolonged education disruption
- Permanent drop out from the educational system
- Poor-quality learning experiences and outcomes
- Long-term psychosocial concerns
- Susceptibility to health problems
- Developmental delays
- Child marriage and pregnancy
- Trafficking and labour exploitation.

Sources: ODI (2015), Shah and others (2016), UNESCO (2016), Global Campaign for Education (2016)

Additionally, apart from the immediate impact that sudden onset disasters have on education systems, there are long-term effects brought about by protracted and/or complex disasters, such as drought, conflict, or sea-level rise. In these circumstances, key resources become scarce, populations are often displaced, livelihoods are interrupted, and insecurity increases. This also impacts on children's ability to access and complete a quality education.

In times of disaster, education has a critical role to play in protecting children and communities from new risks and vulnerabilities that surface in its aftermath. Indeed, education can support recovery and reconstruction objectives at the individual, community and national levels. Educational facilities and personnel often act as an important source of refuge, security and healing during and after the onset of a disaster or conflict. Education enhances people's resilience during disasters and encourages support for and involvement in Disaster Risk Reduction (DRR) actions. For these reasons, it is paramount that national governments respond quickly to restore education provision in the aftermath of a disaster or conflict. The longer-term goal should be to rebuild the system to better prepare for and mitigate against known vulnerabilities and hazards.

Disasters affect populations involved in every level of education. Therefore, education responses must address needs through a wholeof-sector approach. Consideration of each education sub-sector is required at every phase of recovery, response and preparedness. This includes early childhood care and development, and primary, secondary, non-formal, and tertiary education. Each education sub-sector presents important opportunities for individual and national growth, and together they promote cultural, economic, political and social development. These benefits are cumulatively compounded as students' progress through each level of education.

Box 2: The interconnectedness of natural disaster, conflict and inequality

Whether they are natural or human induced, disasters only become such due to insufficient attention to underlying risks and vulnerabilities, or unsuccessful actions to address them. When unaddressed, natural risks and human-created risks cause different kinds of disasters in terms of scope and scale. While the education sector can play a role in mitigating risk and a disaster's potential impact, it can also play a role in exacerbating harm if vulnerabilities are not identified and acted upon.

A primary driver of conflict is inequality. Where high education inequality exists between ethnic or religious groups, the risk of conflict doubles. Disasters caused by conflict and natural events can become interrelated, leading to complex emergencies (e.g. the case of conflict, and subsequent famine and disease in Yemen). Natural disasters can also trigger inequalityrelated conflict. The event of a natural disaster significantly increases the risk of conflict in nations with medium to high levels of overall inequality

For these reasons, it is important that responses address a disaster's root causal factors in addition to its immediate effects to ensure that: a) the potential for compounding disaster risk factors to develop is mitigated; b) response efforts are sustainable; and, c) the education sector is rebuilt upon a legitimate foundation. While many of the education considerations for DRR and response can be generalized between conflict and natural disasters, each disaster has distinctive dimensions which need to be considered.

Sources: Shah and Lopes Cardozo 2015, Moussa, Omoeva, & Hatch, 2016, Nel & Righarts, 2008

Purpose of this Guidance Note

This Note provides practical guidance to national governments about key priorities for the education sector following a major disaster or crisis. It specifies a set of considerations and actions to help ensure that the education sector can: (1) maintain its core functions in the midst of a crisis; (2) allow for streamlined recovery from shocks; (3) minimize disaster and conflict risks, and (4) improve the sector's adaptation and resilience to future crises. The Note also complements the World Bank's *Recovery and Reconstruction Roadmap for Safer and More Resilient Schools* (GFDRR 2018), an innovative tool that governments can use as a guide to designing and implementing systematic actions to support the recovery, reconstruction, and improvement of education sector infrastructure in the aftermath of a disaster.

A Conceptual Framework for Action

This Guidance Note specifies three distinct phases — disaster response, recovery, and preparedness. However, as presented in Figure 1, these phases are in fact interconnected, cyclical, multidimensional, and often overlapping (UNESCO-IIEP, Global Education Cluster, and UNICEF, 2011, p. 1; Plan International 2013; UNESCO-IIEP 2010; UNICEF (2006, pp. 3-4). There are multiple levels and entry points throughout the disaster cycle during which decision makers must assume their roles and responsibilities. As such, it is vital to understand how a respective phase is informed by, informs, and interacts within and across other phases and domains of action.

This framework is driven by the guiding principle of improved rebuilding ("build back better"). It is also grounded in the crosscutting priorities of safety and protection, and inclusion, which need to be considered and integrated throughout each phase of the disaster recovery cycle and within each domain.

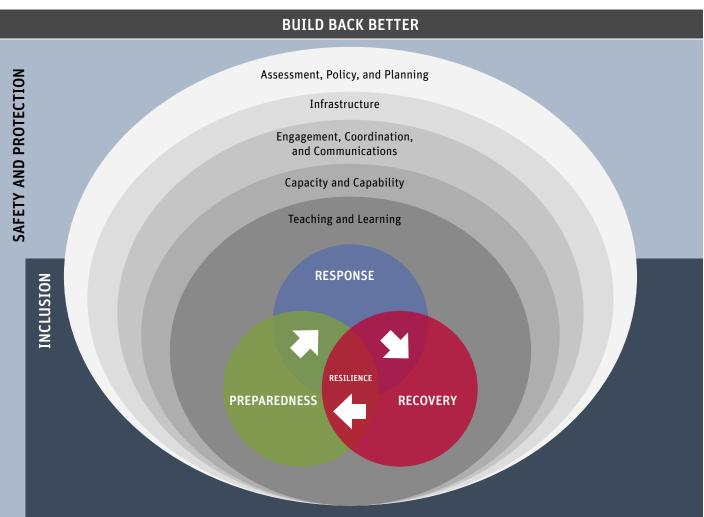


Figure 1. Conceptual framework for education sector recovery

"Build Back Better"

Aligned with Priority 4 of the Sendai Framework for Disaster Risk Reduction,¹ this is the key principle informing this conceptual framework. In the better rebuilding of the education sector, recovery should redress the damage caused by the disaster. At the same time, it should also address resilience-building measures to reduce vulnerability to future shocks including those related to climate change, conflict, and natural hazards (Shah, 2015).

Addressing likely, imminent or current hazard events or conditions reduces the exposure of the system and the population to future risks. With the right measures, medium to longterm outcomes can be improved in terms of access, equity and quality (Moussa and others 2016; and UNESCO-IIEP 2010, p. 43). Doing so requires paying close attention to issues of safety, protection and inclusion.

Safety and Protection

To be safe and protected is to be free from all forms of abuse, emotional, physical and social threat, exploitation, and violence. In an education setting, students, teachers, and other educational personnel should be informed about and actively protected from known and potential risks and hazards, including, but not limited to, poorly constructed buildings and facilities, environmental hazards, health-related issues (that is, communicable and preventable diseases), exploitation and so on.

Safety and protection are particularly important during and immediately following disasters, where children are particularly prone to increased risks of abuse, exploitation, neglect, and/or violence (Global Campaign for Education 2016; INEE 2016). In this context, women and girls often experience and absorb the worst socioeconomic and physical shocks from disaster, as their vulnerabilities significantly increase. Providing "safe spaces" for children in educational settings can ensure that they do not suffer more and can begin to recover (see Box 3) (Burde, Guven, Kelcey, Lahmann, and Al-Abbadi (2015).

Box 3. Safe spaces for children

Safe Spaces are an emergency intervention to protect children during a crisis. They protect children by providing a physical space where children are safe from dangers and threats to their physical, emotional and psychological wellbeing. Because they are places where children congregate, adults working in Safe Spaces can identify vulnerable and 'at-risk' children who may need additional assistance.

Source: Madfis, Matryis and Triplehorn (2010)

Safe Spaces can be resource and referral hubs for children who are separated from their families, sick, malnourished, abused or traumatized. They can support these children by connecting them to appropriate agencies and caregivers. At the same time, children attending a Safe Space can interact with peers, and the programme team can identify, reach out and recruit marginalized children who are not yet participating.

¹ Priority 4. Enhancing disaster preparedness for effective response and to "Build Back Better" in recovery, rehabilitation and reconstruction.

Inclusion

The principle of inclusion is founded on the premise that all children should be able to access and enjoy the benefits of a quality education regardless of ability, ethnicity, gender, language, religion, and/or state and socioeconomic status (INEE 2010a, p. 57). However, often in conflict or disaster events, those who are most marginalized often face the greatest exposure to adverse risks, including disruptions to education services. Indeed, such events impact those groups who are least able to cope with and recover from adversity (Hallegatte, Vogt-Schilb, Bangalore, and Rozenberg 2017). As such, the differential impact of disaster on various groups of students must be addressed across all domains.

Phases and Domains of Action

This Guidance Note separates each phase into key domains of action, as defined in Figure 2. These domains, while presented as distinct, are acknowledged as operating in tandem and coordination with others, as noted in Figure 1. They provide an overview of the phases and respective domains of action during and after a crisis.

Figure 2. Phases and domains of action within the education sector during and after a crisis

Phases of Action

Response (immediate)

Restore educational access to all affected students

Recovery (short-term)

Restore the basic functions of the education system

Preparedness (medium-term)

Development and planning to improve and sustain education sector resilience

Domains of Action

Assessment, Policy, and Planning

Ensuring that structures, systems, and conditions are in place to address education sector needs

Infrastructure

Ensuring that all education facilities are accessible, safe, and protect students from hazards and all potential forms of harm

Engagement, Coordination, and Communication

Ensuring roles and responsibilities are understood, and stakeholders are positioned to deliver on agreed actions

Capacity and capability

Ensuring sufficient resources are allocated to needs, and that stakeholders have the skills to deliver them

Teaching and Learning

Ensuring education sector leaders and teachers build knowledge, skills, and behaviors that reduce risk and prevent potential harm to all students.

Actions for Education Sector Recovery After a Disaster

The next section provides the basis for developing and operationalizing appropriate education-sector actions following a disaster. It begins by providing an overview of priority actions for each phase, and their corresponding domain of action in Table 1. Specifically, Table 1 aims to guide policymakers on the key focal areas across each domain and phase of the disaster cycle.

Subsequent pages provide the detail for each phase and action domain. For each of the three phases, a series of key considerations and priority actions are presented in a series of tables. Priority actions are based on a current understanding of best practice and offer evidence-based recommendations rather than prescriptive actions. As each disaster impacts education sector stakeholders in unique and variable ways, key considerations and priority actions are not listed in sequential order. Rather, the order and urgency with which actions are carried out is dependent on assessments of situational hazards and corresponding vulnerabilities.

The focus should be on leveraging and strengthening existing national systems, and on enabling effective coordination between and across various sectoral responses. Additionally, the assets, strengths and capacities that stakeholders bring to education response, recovery and preparedness/prevention actions are invaluable. The active participation of these stakeholders—particularly children and youth—as well as teachers, parents and other caregivers is key. Stakeholders need to be involved in identifying needs, planning and support for the delivery of recovery measures, thereby ensuring a sustainable recovery and reconstruction process.

Box 4. The value of student and youth participation in response and recovery activities

Children and youth represent valuable resources to nurture and mobilize for disaster preparedness, response, recovery, and resilience at the individual, family, and community level. Children's participation in DRR is supported by the recognition of their social competence, by the children's rights agenda, and by a literature advancing their participation in a variety of community endeavours. Participation yields potential benefits for children through enhanced personal development and skills, self-efficacy, and interpersonal relationships; and for communities through improved social connections and networks and disaster preparedness. As an example of how this is achieved, UNICEF Nepal has developed a training manual guiding local partners and staff on Child Centered Risk Assessments at the district and community levels. The training equips children with a greater understanding of climate change and DRR, and the skills to develop climate and disaster risk maps for their communities and schools. In some districts this has led to the establishment of risk informed development plans within schools and Village Development Committees.

Sources: Pfefferbaum, Pfefferbaum and Van Horn (2018), UNICEF (2016)

cut	oss- ting rities	Domains of Action	Response Phase Priorities (immediate) Goal: Restore educational access to all affected students	Recovery Phase Priorities (short-term) Goal: Restore the basic functions of the education system	Preparedness Phase Priorities (medium term) Goal: Development and planning to improve and sustain education sector resilience
SAFETY AND PROTECTION	INCLUSION	Assessment, Policy and Planning	Data from initial or rapid needs assessments and Education Management and Information System (EMIS) inform the structures, systems, and conditions that are put in place to provide immediate access to education and address the acute psychosocial and learning needs of children and young people. Priority is given to those most marginalized and/or immediately vulnerable to the impacts of disaster.	Data from comprehensive needs assessments and the updated EMIS inform the structures, systems, and conditions that support a transition from temporary and non-formal education provision to permanent and formal education so that all students are included and protected, and their learning needs are met within the existing system.	Key lessons learned from response and recovery phase activities inform continued and inclusive access to education. Disaster Risk Reduction (DRR) is mainstreamed across school disaster planning, curriculum, and teaching and learning for improved education sector resilience.
		Infrastructure	All education facilities are free from immediate hazard and provide spaces that are safe, accessible, and inclusive for learning and social protection; where educational facilities are used for other purposes (that is, to provide shelter), plans should be made to manage the timely return of facilities to priority educational functions.	Education facilities are comprehensively assessed and identified for full/partial demolition, relocation, retrofitting, or rebuilding in a way that prioritizes community needs, the safety and inclusion of all children and young people, and the future resilience of the education sector.	Relocation, retrofitting and rebuilding of education facilities mainstreams designs that are child-friendly and disaster and climate resilient. Transitions from temporary to permanent facilities cause minimal disruption to learning.
		Engagement, Coordination, and Communication	Coordination committees are promptly assembled with representative membership. Key stakeholders should be positioned to deliver immediate actions. Roles and responsibilities are clearly understood and disseminated through effective and transparent communication channels. Prioritize the inclusion of stakeholder voices, including children, young people, families and teachers.	Development partners are positioned to support and enable the coordination of response phase actions through relevant government departments, managing the transition from response to recovery phase programming. Children, young people, families and teachers are engaged and participate in future policy and planning decisions for the sector.	Improvements in inclusion of minority, marginalized and vulnerable populations are reinforced through continuous communications and engagement efforts, especially during the transition to new and retrofitted school settings, as well as through the mainstreaming of DRR education.
		Capacity and Capability	Internal and external emergency finance is secured to support the response. Resources are allocated, distributed and deployed quickly in response to identified needs. Stakeholders involved in delivering educational services in the response phase have the necessary skills and systems to effectively respond to the immediate protection needs of students and their communities.	Finance is secured for longer term education sector recovery and reconstruction. Resources are allocated toward identified gaps to improve access to learning, safety and protection, and ensure sector resilience.	Contingency financing mechanisms are in place to minimize the impact of future shocks. Funding is secured for ongoing disaster mitigation, adaptation and prevention activities, with a specific focus on education sector capacity building for effective disaster management planning and delivery of DRR activities.
		Teaching and Learning	Adequate personnel, with access to resources, safe facilities, knowledge, and skills are in place to deliver emergency education that is protective, inclusive, and responsive to the immediate needs of all learners.	The safety and wellbeing of education sector personnel are appropriately addressed. Professional learning and development on teaching in crisis contexts is provided. This includes the development of learning programs that build children and young people's knowledge and skills for identifying and managing disaster-related risks, and for overcoming the challenges of a crisis context.	Teachers are positioned and sufficiently skilled to incorporate DRR education into identified carrier subjects. The curricula and pedagogies focus on the development of affective and behavioral dispositions that strengthen children's resilience to future shocks.

Table 1: An overview of phase priorities and domains of action

Response phase

The response phase involves the provision of emergency services and public assistance during or immediately after a disaster. The purpose is to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected. Typically, the response phase is focused on immediate and short-term needs. For the education sector, the extended disruption of key services and the destruction of education facilities means response actions often extend into the recovery phase.

Depending on the scale of the crisis and the preparedness measures in place, the capacity of government to lead immediate action may be undermined by a number of factors during the response phase. As such, development partners should play a supporting role in the coordination of immediate actions. These activities should focus on supporting acute education sector needs until full government services can be restored. Nonetheless, the national government should provide access to data, resources, personnel and facilities that enable development partners to support the coordination of emergency response actions. Development partners should only lead in areas where government capacity to act quickly is assessed and mutually agreed as insufficient. The tables below provide an overview of key considerations and priority actions to be taken during the response phase.

Further, there are many reasons for, and examples of children and youth acting as an important source of response and recovery support during times of disrupted schooling. Box 4 provides greater specification on this.

Assessment, Policy, and Planning

Key Considerations

Priority Actions

- Needs assessments are carried out immediately following a disaster. Data are collected to inform the design and delivery of programs that support access to quality education for all.
- Patterns of disadvantage and marginalization within the education sector should be carefully investigated to ensure actions do not reinforce existing inequalities or compound vulnerabilities.
- To ensure broad representation of stakeholder needs and inclusion in future programming, whenever possible, assessments should utilize participatory, people-centred approaches.
- Response phase assessments should eventually link to recovery and reconstruction planning. As such, they can help frame a locally articulated vision for "building back better".
- Throughout this phase, it is important that stakeholder needs, as well as government and development partner actions are continually assessed and monitored.

- Facilitate rapid needs assessments in the first 48 to 72 hours after the disaster, and identify vulnerable schools and students, other local stakeholders, infrastructure, and resourcing from a multi-hazard point of view. The assessment should also assess the psychosocial needs of students and education personnel.
- Within 1-2 weeks of the disaster, conduct a more in-depth education sector assessment that disaggregates and analyzes EMIS data. Triangulate it with the rapid needs assessment findings and education sector stakeholder voices (especially women and children) to inform a more in-depth analysis of where vulnerability is most acute and needs are greatest.
- An initial EMIS analysis should focus on student attendance, retention, engagement, and achievement (AREA). It should look for patterns and trends of educational risks and vulnerabilities based on demographic indicators.
- Establish or update a fit-for-purpose EMIS to monitor and track the inputs and supports provided to students and communities in the response phase.
- In the absence of a functioning EMIS, the identification of key education resources and risks prevalent in each location should be a priority in information gathering. As such, it should inform future systems-strengthening efforts.
- Identify pre-disaster disparities and allocate resources across all types of education programming to ensure education interventions do not exacerbate underlying inequalities or conflicts.
- Ensure that local resources and assets are identified, prioritized, and activated early in the response phase.
- Monitor response activities to ensure alignment with Inter-Agency Network for Education in Emergencies (INEE) Minimum Standards and the SPHERE Humanitarian Charter and Minimum Standards.

Sources: GFDRR and ARUP (2017); GFDRR, World Bank, European Union, UNDG (2012); INEE (2010a); Shah and others (2016); Sphere (2011); and USAID (2014).

Infrastructure

Key Considerations

- The safety of school infrastructure is identified as a key target within the Sendai Framework for Disaster Risk Reduction. Target 4 of the Sendai Framework aims to reduce disaster damage to critical infrastructure and disruptions to the delivery of basic services.
- Education sector infrastructure includes all school buildings and individual classrooms, water supply, sanitation, and hygiene (WASH) facilities, information and communications technologies (ICT), furniture and signage, and learning resources, such as textbooks and exercise books. Infrastructure also includes transport routes and school design features that ensure safe participation in schools for all students following a disaster.
- In an acute emergency, children and young people's access to some form of education should be focussed on protection. This takes precedence over rules such as maximum student-teacher ratios. Such standards are often difficult to achieve in an emergency setting. However, it is vital that temporary education infrastructure measures do not become permanent.
- The Three Pillars of Comprehensive School Safety present a strong starting point for reviewing infrastructure requirements following a disaster. These pillars guide actions to ensure that school structures and facilities are safe for children and youth, and that schools have disaster management plans in place. Such plans integrate disaster risk reduction into all school activities.
- There is a need for agreed interagency and government standards for the construction of safe and accessible temporary learning structures, processes to manage equitable community access, and a forecasted timeline for transition of learning to permanent learning facilities.

Priority Actions

- Undertake a rapid needs assessment of school buildings for safety and risk purposes using best practice infrastructure assessment guidelines.
- Design and build temporary schooling structures with safety as a priority, and temporality or a transition to permanence in mind.
- Ensure that all learning facilities used are child friendly and promote positive learning experiences, addressing:
 - The differential needs of girls and boys needs, including the need for gender-specific WASH facilities to ensure attendance by girls. This includes one toilet for every 30 girls and one toilet for every 30 boys, as well as three liters of water per day per student for hydration and hygiene needs.
 - Access the needs of children and education personnel with disabilities to classroom and WASH facilities.
- Ensure available learning facilities are sufficient in size and number and physical learning environments meet best practice ratios of space per student, as well as students per teacher:
 - Sixty students per teacher is an acceptable ratio in the response phase of an emergency, with that number decreasing to 30 or 40 students per teacher in a chronic recovery phase.
 - Agree upon indicators representing comfortable student to space ratios.
- Informed by conflict and risk analysis, ensure transport routes provide all students with safe passage to learning facilities.
 - Include special consideration for gender-based vulnerabilities and potential for discrimination/harassment of other marginalized groups.
 - Plan for a reduction of risks near rivers, coastal areas, unstable land, and isolated urban areas through which students might pass along transport routes.
 - Provide clear signage indicating areas of risk or evacuation routes.
 - Provide reflective strips on learner backpacks or clothing.
 - Install adequate lighting along walkways.
 - Reroute paths and walkways that pose physical or emotional risks to learners.
 - Appoint chaperones, walking groups, or route monitors to be positioned at designated safe spaces.
- Devise standards for a maximum distance between students and education facilities with local education sector stakeholders. Standard distances may vary depending on type of transportation and the functioning of available transport routes.
- Establish a timeline for schooling facilities used as temporary shelters to return to core teaching and learning purposes. Ensure that delays and any adverse impacts on learning are minimized.

Sources: GADRRRES, INEE, GFDRR, and World Bank (2009); GFDRR (2017a, 2017b, 2018); GFDRR and ARUP (2017); Sphere (2011); UNESCO-IIEP (2010); UNICEF (2006); UNISDR (2012, 2014).



Students participate in school activities at the Sahabatpur Daspara Ananda school in Sahabatpur village, Bangladesh. Photo: © Dominic Chavez/World Bank

Key Considerations

- The first high-level priority should be the establishment or activation of a national education sector coordination committee with corresponding local committees (if possible). Where they exist, acknowledge and commit to the strengthening of existing coordination mechanisms.
- National authorities should provide leadership, but development partners may be required to step in, depending on the disaster's impact and the capacity status of local authorities. If local authorities are unable to act, the Inter-Agency Standing Committee (IASC) cluster system should be activated. Roles and responsibilities for supporting and enabling government leadership at a time of crisis should be agreed on through a Terms of Reference.
- An evaluation of education sector stakeholder capacity should inform the strategic prioritization of communication and engagement measures, guiding the allocation of urgent response activities.
- Focus on access to and continuity of quality education for all students displaced by the crisis.

Engagement, Coordination, and Communications

Priority Actions

- Reduce barriers that prevent international organizations and donors from partnering with local and national responders. This should include civil society organizations (CSOs) and other non-state actors (for example, religious entities/leadership, and civic associations) to promote legitimacy and sustainability.
- Engage with or establish an education cluster (or working group or steering committee) to identify and coordinate action responses and financing.
- Coordinate services within and outside the education sector to ensure that all students and education personnel have access to appropriate psychosocial and/or mental health support to deal with acute trauma.
- Where ongoing hazards in accessing learning spaces are identified, ensure protective measures are established to facilitate ongoing and safe access for students and educational personnel.
- Engage appropriate agencies or authorities in coordinating security and protection provisions for transport routes and school facilities.
- Establish a regular process of contingency planning to anticipate and solve problems during the response phase.
- Provide children, young people and women with opportunities to contribute their unique skills and perspectives to planning and decision making at the community, regional and national levels.
- Ensure that all communications and dissemination of risk-based information targets women and girls in gender sensitive spaces using gender responsive communication channels.

Sources: Global Campaign for Education (2016); ICVA (2017); INEE (2010a); UNICEF (2006); Shah and others (2016); and UNDP and GCCA (2013).

Capacity and Capability^a

Key Considerations

- Key capacity and capability concerns should focus on the efficiency and effectiveness with which national systems can rapidly secure finance, access educational resources, repair or relocate education facilities, and deploy required personnel.
- Humanitarian aid is a key challenge for education sector responses; when available, it is often erratic.
- Finance options are commonly weighted toward preparedness, mitigation and adaptation activities
 with limited coverage for early recovery needs.
- Historical funding gaps are being addressed by improvements in the Global Partnership for Education's (GPE) accelerated support and early recovery funding and Education Cannot Wait's education in emergencies fund. However, this funding is primarily targeted toward GPE partner countries, fragile states, as well as situations of protracted conflict.
- Disaster response and recovery financing faces four major challenges requiring careful management at a disaster's outset, including the need to: (1) quickly quantify the scale and cost of a disaster; (2) develop response, recovery and reconstruction budgets; (3) identify and access sources of funding; and (4) establish mechanisms to manage and track funds.
- To build donor confidence in education sector efficacy and efficiency, all education sector stakeholders, including development partners and CSOs, should use timely, transparent, equitable and coordinated financing mechanisms to address the needs of students and their communities.

Priority Actions

- Recruit and train emergency teachers and/or "first responders" regarding matters of child protection so they can work effectively with children, young people and their families in the crisis context.
- Train in-service teachers as well as newly recruited response phase educators in using training programs specific to teachers in crisis contexts. Focus on the following basic education competencies in a crisis context:
 - Teacher roles and wellbeing
- Child protection, wellbeing, and inclusion
- Curriculum and planning
- Effective pedagogy
 Subject knowledge
- Ensure personnel decisions at every level of education are gender-informed, and responsive to the immediate needs of those made most vulnerable by the disaster.
- Deploy trained and experienced emergency education and psychosocial support specialists to affected areas. Where local expertise is lacking, access development partner education in emergency rosters (for example, Plan International, the International Rescue Committee, the United Nations Children's Fund (UNICEF), Norwegian Capacity (NORCAP), and Save the Children).
- Provide victims of abuse, violence, exploitation or other human rights violations with access to appropriate services. Ensure that those providing services are appropriately trained in human rights law and psychosocial support.
- Support the Ministry of Education in developing and disseminating emergency education curricula. For urgent needs, access temporary curriculum options from development partners and support local education personnel in establishing and delivering education programs in formal and nonformal learning settings.
- Work with government and development partners to identify and access domestic finance options. Domestic options are highly variable across contexts and include a mix of public sector and private sector possibilities, such as:
 - Government risk financing
- Disaster risk management budgets

Sovereign funds

- Development planning funds
- (contingency or local insurance policies)
- s) Parametric risk insurance programs
- Work with government and development partners to identify international financing options. Evaluate the disaster context's alignment with the parameters of different financing options. Construct funding applications that connect with national priorities.^b Options for consideration include, but are not limited to, the following:
 - World Bank's International Development Association (IDA) Crisis Response Window (CRW) and Immediate Response Mechanism (IRM);^c
 - United Nations flash appeals and consolidated finance appeals processes;
 - The United Nations Central Emergency Response Fund.
 - The Global Partnership for Education's (GPE) accelerated support for emergency and early recovery situations, which fast tracks 20 percent of allocated education sector development funds;
 - The European Civil Protection and Humanitarian Aid Operations (ECHO) dedicates 6 percent of its €1 billion annual humanitarian aid budget to education in emergencies. In 2018, this amount will increase to 8 percent;
 - Education Cannot Wait funding requires a specific focus on reaching girls, improving protection
 of the most vulnerable, and improving both teacher capacity and community engagement;
 - The Asian Development Bank's Asia Pacific Disaster Response Fund (APDRF) fast-tracks emergency assistance loans of up to US\$3 million for 67 member countries.

Sources: Asian Development Bank (2016); Education Cannot Wait (2017); GIZ (2017); Global Partnership for Education (2015, 2016); INEE (2010b, 2016); INEE and Teachers in Crisis Contexts Working Group (2017); ODI (2015); Willis Towers Watson and others (2017); and World Bank (2018). *Notes:*

- a. Capacity is the extent to which the education system is positioned, prepared, and resourced to respond to acute infrastructure, student and education personnel needs arising from a disaster. Capability relates to the skills and competencies of education personnel, and the extent to which they can operationalize system requirements for students and their communities.
- b. See the INEE Reference Guide on External Education Funding for comprehensive support, emergency finance options. INEE (2010b).
- $c.\ http://ida.worldbank.org/financing/crisis-financing.$

Key Considerations

- Teachers in crisis contexts face formidable barriers to accessing appropriate professional development support. Strategies should be in place to support and manage teacher wellbeing as a pre-condition for emergency and temporary learning solutions.
- Teachers often triage and monitor the psychosocial wellbeing of students, leading risk prevention and mitigation activities for students and their communities.
- Resources are needed for the provision of professional learning for social workers, counselors and teachers to support the identification of trauma and stress symptoms, including delegation of appropriate courses of action.
- There are often insufficient educational personnel for learning sites after a crisis. As such, there will be a need to recruit emergency/volunteer teachers from communities to fill the void. Incentives, training and ongoing support for these individuals is required, and the parameters for this need should be devised by the Ministry of Education, development partners, local education stakeholders, and local communities.
- Students in a state of trauma or distress will struggle to engage in and benefit from educational opportunities. Emergency education curricula should focus on protection and providing psychosocial support (PSS) to children. As the response phase transitions into recovery, formal and non-formal curricula can include social and emotional learning (SEL). This is a process of acquiring values, attitudes, competencies, knowledge, and skills that are essential for being an effective learner, for self-managing wellbeing, and for coping and overcoming ongoing challenges.
- Ensure that the curriculum and pedagogy is inclusive and conflict sensitive, paying attention to the language of instruction, religious content, and ethnic representation of/by teachers.

Teaching and Learning

Priority Actions

- Use module 1 of the Teachers in Crisis Contexts. (TiCC) training to ensure that teacher knowledge and skills are in place to recognize signs of trauma and support peer wellbeing.^{a,b} Such efforts should focus on:
 - The importance of teacher wellbeing in crisis contexts;
 - Techniques of trauma and stress management; and
 - Methods to support wellbeing of self and others.
- Utilize teachers, social workers, and counselors who have the skills to recognize the psychological needs of students. Build connections between the home and school environments to monitor and address psychosocial issues.
- Source and deploy curriculum that include effective psychosocial support practices and social and emotional learning as an emergency measure. Incorporate a range of childfriendly learning experiences, such as:
- Sports Art
- Drama Music
- Games Storytelling
- Provide complete teaching and learning materials in literacy, numeracy, life skills, and other emergency areas to allow learning to continue and enable children to gain new skills related to their new settings. Include lifesaving skills to avoid threats, such as unsafe buildings, environmental hazards, disease, unexploded ordinance, and exploitation.
- Provide training for teachers to develop skills-based health and hygiene education, inclusive of:
 - Core WASH knowledge and skills for male and female students and education personnel;
 - Specific WASH knowledge and skills for female students and education personnel; and
 - Precautionary actions to reduce water contamination and the spread of infectious disease.
- Review and address gender-related concerns in the learning setting, including textbook gender bias and differential teacher treatment of boys and girls.
- Support the needs, safety, and comfort of girls in temporary formal and informal learning settings. Increase the number of adult women in the classroom. If insufficient numbers of female teachers are available, appoint community members as teaching assistants. Provide basic guidance on child protection and gender discrimination

Sources: INEE (2010a, 2010b, 2013, 2016); INEE and Teachers in Crisis Contexts Working Group (2017); UNICEF (2006). Notes:

a. The conditions of teacher wellbeing are presented in Module 1: Teachers' Role and Wellbeing. INEE and Teachers in Crisis Contexts Working Group (2017)

b. See participant handbook, pp 2-15. INEE and Teachers in Crisis Contexts Working Group (2017).

Recovery phase

The recovery phase involves the restoration and improvement of facilities, livelihoods, and living conditions. It also involves the psychosocial wellbeing of affected communities, including efforts to reduce disaster risk factors.

In the recovery stage, the initial shock of disaster has subsided. At this point, basic government services should have been restored. Government activities should transition, mainstream and reinforce development partner provisions to ensure that access to learning for all children and young people remains uninterrupted. Development partners should also support a nascent focus on "building back better" by facilitating nationally-led planning and decisionmaking in line with key learning from the response phase outcomes. The tables below specify key consideration and actions across the various domains of the education sector.

Assessment, Policy, and Planning

Key Considerations

- A post-disaster needs assessment should be undertaken. It should be much more comprehensive than the earlier rapid needs assessment. Specifically, it should address the extent to which education facilities are functional and safe for learning, and the impact the disaster had on vulnerable stakeholders' access to education, including its impact on learning continuity.
- Data collection should inform measures to prevent or mitigate the significance of a disaster's impact on education in the future.
- Support should be provided for the government's analysis of existing disaster management plans, and/or an assessment of the extent to which the plans address the structural conditions that create ongoing vulnerability within a population to known risks and hazards.
- All evaluations should highlight lessons learned and best practices from the recovery phase. Specifically, evaluations should delineate those responses that promoted and reinforced social cohesion, resilience, and security.
- In the planning and design of comprehensive needs assessments, reference should be made to best practice recommendations in Rapid Needs Assessment (RNA), Post-Disaster Needs Assessment (PDNA), RES-360° Assessments, and the Recovery and Reconstruction Roadmap (RRR) to inform areas of focus, assessment parameters, and methodologies.
- During the recovery phase, pathways should be created to integrate and/or transfer students and education staff back into the formal system from informal education mechanisms established during the immediate response phase. This might be informed by a recovery phase needs assessment.

Priority Actions

- Undertake an evaluation of education sector response programming, including curriculum implementation and temporary teacher arrangements, to understand their effectiveness, impact, and future priorities.
- Evaluate school exposure to natural and man-made hazards against the need to return educational facilities to their original function, minimizing their use as temporary shelters. Use this evaluation to develop a time-bound, evidence-informed strategy to guide this action.
- Undertake an in-depth needs analysis of the education sector to guide policy development, and the strategic direction of future DRR activities. Adopt a multi-hazard approach to identifying pre-existing vulnerabilities, including measures to prevent future risks focused on DRR planning.
- Establish or maintain an updated Education Management Information System (EMIS). This system will collate and manage national baseline education data. Provisions should be made to ensure that all data is securely stored and accessible at all times.^a
- Use participatory and inclusive consultations to determine from children and young people what conditions they require to feel supported in safe learning environments.
- Regarding disaster recovery monitoring and evaluation, establish objectives and indicators representing safety and protection and inclusion. Ensure tools include gender-specific indicators and targets, and that the design and delivery of interventions are aligned.
- Ensure that women's perspectives inform the analysis, evaluation and interpretation of data, and that women play a key role in policy planning and decisionmaking.
- Monitor response activities to ensure alignment with INEE Minimum Standards and Sphere Humanitarian Charter and Minimum Standards.
- To enable collaboration and coherence across sectors, align education policies with the broader regional and/or national recovery strategy.
- Harmonize emergency and early recovery activities with longer term education development priorities. Develop and/or revise a sector plan with a focus on high-level goals of strengthening social cohesion, resilience and human security.
- Disaggregate education data by region, ethnicity, religion, gender, and economic status to identify where educational inequality exists and how this might influence conflict dynamics. Use the data to avoid any form of exclusion or marginalization.
- Develop a written contingency plan informed by key developments in the response phase. If the situation is one of chronic crises, or there are regular emergency threats, agree on the frequency of review and revision based on the risk analysis.
- In disaster recovery, monitoring and evaluation efforts should utilize tools that include gender-specific indicators and targets.

Sources: Accelerated Education Working Group (2017); GFDRR and ARUP (2017); GFDRR (2018); GFDRR, World Bank, The European Commission, and UNDG (2012); Global Partnership for Education (2016); INEE (2010a, 2013); Institute of Development Studies (2009); Sebellos and others (2011); UNDP and GCCA (2013); Sphere (2011); UNICEF (2006, 2016); UNISDR (2012, 2014); USAID (2014, 2018); World Bank (2013).

Infrastructure

Key Considerations

- Whereas some stakeholders already coping with significant disruptions may demand a prompt rebuilding and/or relocation that replicates preexisting facilities (that is, a return to normal), others may view disaster as an opportunity to improve upon traditional school design (that is, building back better). Indeed they may advocate for a rebuilding effort that is disaster resilient and compatible with aspirations for improved and safer teaching and learning conditions. Such an effort could take more time, patience, and resources.
- To reduce further harm to an already fragile population, it is important that tensions arising from this 'false dichotomy' be reduced through building social demand for safer and more resilient schools. A long-term view of building back better with minimal disruption to community norms should be adopted.
- Community-driven awareness and appreciation for disaster resilient school construction is needed.
- It is important that development partners and the government seek a range of stakeholder viewpoints through accessible public forums and community workshops.
- The centrality of safe schools in community life should be highlighted. Stakeholder voices should be included in future infrastructure planning and decisionmaking.
- Stakeholder consensus should be taken into account in all planning and construction decisions so that communities feel a sense of agency, ownership, and leadership in the ongoing and future function of schools.

Priority Actions

- Use comprehensive needs assessment data to inform school risk and vulnerability mapping, determine where populations have shifted, and decide if there is a need to build new schools. If needed, decide where they should be built.
- Assessments to determine whether and how a school needs to be rebuilt or retrofitted need to:
 - Determine the vulnerability categories to be assessed
 - Identify structural deficiencies, propose retrofit strategies to meet hazard safety objectives, and identify necessary repairs and renovations;
 - Investigate capacity and constraints to implementing a retrofitting plan.
- In rebuilding or retrofitting schools, disability-inclusive, child-friendly principles and gender-informed designs need to be prioritized alongside the selection of reconstruction locations that prevent future risks.
- Identify and manage land tenure obstacles in securing sites for the relocation of schools. Ensure that conflict analysis informs negotiations and decisionmaking to avoid future risk or disruptions to learning for children and young people.
- When retrofitting or reconstructing schools, adhere to safety considerations that prevent or reduce vulnerability to future shocks. Ensure that construction is aligned with design principles pertaining to different natural disaster risks.
- Engage school communities in identifying needs for safe school construction and relocation (if required).
- Review and ensure that physical learning environments address protection issues, as well as the mental and emotional wellbeing of boys and girls – including those with a disability.
- Ensure professionals involved in retrofitting, rebuilding and relocating learning sites are trained on: safe site selection; disaster resilient building codes; performance standards; quality control; design of inclusive and pedagogically sound learning spaces; and WASH requirements.
- School furnishings and learning equipment should be designed and installed to minimize the potential harm caused to school occupants in the event of a disaster.
- ICT should be provided and made accessible, including software and hardware. Ensure that energy supplies and repair are affordable and sustainable.
- The needs of students with disabilities should be included in the design of temporary and permanent schools, inclusive of classroom spaces, furniture, and WASH facilities.
- School retro-fitting or reconstruction should provide all students with adequate lighting, ventilation, and heating.
- Plan for continuous monitoring, financing and oversight of facility maintenance and safety.

Sources: GFDRR (2018); GFDRR and ARUP (2017); GFDRR and others (2012); INEE (2010a); INEE, GFDRR and World Bank (2009); Reyes (2013); UNESCO-IIEP, Global Education Cluster, and UNICEF (2011); UNICEF (2013); World Bank, INEE and UNISDR (2009).



A classroom in rural Madagascar. Extreme poor households are supported by a cash transfer program that also promotes school attendance of children. As a result, the school principal reports having more than 100 additional students and a much better attendance rate. Photo: Mohammad Al-Arief/The World Bank.

Priority Actions

Engagement, Coordination, and Communication

Key Considerations

- Development partners and other key stakeholders should ensure that leadership of key recovery activities is maintained by governments as, where, and when capacity allows. Where capacity and capability needs have been identified in the response phase, efforts should focus on enabling, supporting and strengthening government-led leadership and coordination mechanisms.
- Consider the degree to which the relevant Ministry has convened coordination meetings with other stakeholders during this time, including the extent to which collaborative and trusting relationships have been formed. These factors should inform the parameters for development partner input and influence during the recovery phase.

- Devise a strategy for the reduction of external support. This should be time bound, while also taking into account contextual needs, Ministry capacity and capability, and situational variations.
- Support broad consultation with a full range of education stakeholders to ensure that long-term education sector recovery aims are legitimate and sustainable.
- Assess the engagement and influence of under-represented stakeholders on education sector coordination committees. Address reasons for disengagement using conflict=informed and culturally responsive approaches.
- Promote pathways through all levels of formal and informal education. Seek stakeholder input regarding the management of student transitions between levels, as well as between informal and formal education in a disaster recovery context.
- Work across a range of ministries in government, and alongside the media to develop evidence- and consensus-based key messaging regarding home and school-based hazards and risk-reduction measures.
- In all communications, ensure that women and girls are visible as leaders and agents of change in the post-disaster context.

Capacity and Capability

Key Considerations

- Disaster recovery and reconstruction are rarely funded by domestic sources alone.
- Depending on the state of the economy and the urgency of need, a number of international and private sector finance options should be considered.
- Within the World Bank, the International Bank for Reconstruction and Development (IBRD) focuses on immediate reconstruction periods. It extends loans and credits to partner governments.
- The International Development Association (IDA) extends development assistance to the world's poorest countries. In some instances, a World Bank Country Partnership Strategy might include options for accelerated allocation of funds in emergencies.
- Bilateral donors can also (re-)allocate or release funds in response to catastrophic disaster events.
- Education sector needs are often absorbed by broader infrastructure investments.
- In many contexts, the private sector is well positioned to provide financial and in-kind support for education sector recovery and preparedness phase activities.
- Trends show that corporate donors prefer financing for the most vulnerable and/or marginalized.
- Corporate donors are looking for evidence of sustainability, replicability, and scalability of their investments.
- Private sector donors use different language than DRR experts. They are outside of the traditional humanitarian network. Adjust proposals to reflect corporate language and frames of reference accordingly.
- Private sector financing is an opportunity to innovate and improve upon traditional approaches to education sector change in the post-disaster context.
- Consider the capacity of the education system, particularly that of existing personnel and resources, to meet the needs of students in the medium to long-term.

Priority Actions

- Ensure that capacity strengthening is incorporated in all partnership agreements in accordance with the 2015 'Grand Bargain'.^a
- Develop pathways to integrate and upskill temporary teachers into the national education system as it recovers.
- Ensure that an up-to-date register of all teachers working through the response and recovery phases is maintained. This register should include evidence of teacher training and in-service professional development and, if carried out, appraisal against national teaching criteria or standards. This may be part of the EMIS.
- Professional development opportunities for teachers should be identified, funded, and incorporated into medium-term strategic planning at the national, regional, and local levels.
- Work with government, development partners and private sector stakeholders to identify and access private sector finance options. Investigate a full range of options aligned with the scale and target of the funds required. In this context, consider multinational and domestic corporations, small and medium size enterprises, corporate foundations, industry associations and business networks.
- Harness the private sector's comparative advantage. Target funding and in-kind services that can compensate for government and humanitarian sector shortfalls.
- Explore public-private partnership models, leveraging the technical expertise of private-sector partners where possible. Investigate collective impact and corporate shared value models of engagement, whereby corporate funding complements or strengthens existing public-sector efforts.
- Leverage gender equality and women's empowerment as key priorities in the design of education sector recovery financing proposals.

Sources: CSR Asia (2015); FSG (2016); GFDRR (2018); Global Business Coalition for Education (2015); ICVA (2017); INEE (2010b, 2015); UNICEF (2006) Note:

a. The Grand Bargain is an agreement between more than 30 of the largest donors and aid providers. It aims to place more resources into the hands of people in need (ICVA 2017).

Teaching and Learning

Priority Actions

Key Considerations

- Curriculum and the pedagogies used to bring learning to life are key avenues through which students reengage in schooling. They also build resilience and shape their future pathways.
- Emergencies often provide opportunities to improve teaching and learning under a "building back better" approach. This work commences in earnest during the recovery phase.
- The training needs of teachers already working in the formal education system, as well as those who will join this system, need to be assessed. Teachers should be provided with appropriate levels of support and mentoring.
- The experience of teachers mobilized during an emergency should be properly recognized. Efforts should be made to ensure proper certification of those individuals who then become part of the formal education system.
- Professional support for teachers and other education professionals should be differentiated and positioned at the intersection of their personal and professional development needs. Specifically, professional development is redundant if their well-being and welfare have not first been addressed.
- It is worth exploring possibilities for teachers to co-design professional development relating to long-term DRR education.

- Train in-service and pre-service teachers in methodologies to help children deal with loss and trauma. Such training should help children to rebuild inner resources to overcome challenges associated with living in a context affected by crisis.
- Respond to assessments of student needs. Promote new possibilities for post-response educational programming through improved pedagogy focused on integrating knowledge of risks and hazards across the curriculum.
- Align temporary and first-responder teacher training modules and professional experience with national teaching standards and accreditation pathways.
- Support education personnel in aligning and developing skills for teaching disaster risk reduction through child-friendly methods.
- Introduce new subjects such as life skills, or mainstream response phase topics such as hygiene promotion, disease prevention, and risk/hazard awareness into the existing formal curriculum.
- All teaching and learning materials should be reviewed from a gender and conflict sensitive perspective to ensure it is not perpetuating or reproducing harmful norms and messages.
- Assure the quality of proposed or Seprovisional educational materials, and equipment or facilities for compatibility with the education system's long-term ability to support and sustain their use.

Sources: INEE (2010a, 2015, 2016); INEE and Teachers in Crisis Contexts Working Group (2016); Selby and Kagawa (2012); UNICEF (2006).



This library has 60 computers which are utilized on daily basis by the students. National Institute of Management and Administration. 21 April 2015. Sanatoriam Street, Darulaman Road, Kabul, Afghanistan. Photo: Abbas Farzami / Rumi Consultancy / World Bank

Preparedness phase

The preparedness phase is focused on the prevention and mitigation of hazards. At the time of disaster, these hazards may pose significant risk to people and property. This phase consists of activities and measures taken before and between hazardous events to raise awareness and promote actions to ensure an effective response. It is vital that all stakeholders use this phase to focus on building resilience knowledge and capacities.

During the preparedness phase, basic government services should have been

restored and the focus should shift toward fully activating the vision of "building back better". The government should take the full lead regarding strategies to secure access to education for all children and young people. Based on response and recovery phase assessments, development partners should continue support for cross-sectoral coordination and development of disaster management planning. Support should also include the facilitation of disaster risk reduction capacity-building activities at the school and community levels. The tables below provide an overview of key considerations and priority actions to be taken during the response phase.

Assessment, Policy, and Planning

Key Considerations

- Acknowledge that risks are interrelated and can compound the vulnerability of individuals, communities and systems to known hazards.
- Assessments should focus on the protection of educational assets whose loss/destruction would cause the largest impact on the population's wellbeing rather than on the highest dollar-value.
- Policy and planning should address the extent to which local schools and learning institutions are capable of continuing education in a crisis.
- Building on response and recovery phase experiences, education continuity planning will include: measures to ensure the payment of teachers in the event of a future disaster; alternative facilities or locations for the continuation of schooling; accommodating an influx of internally-displaced persons (IDPs) or refugee students; and the development of local leadership capacity to coordinate activities and promote safety and resilience.
- Consider how policy, planning and programming respond to and are inclusive of local knowledge and expertise. Inclusivity contributes to longterm stakeholder engagement and ownership of preparedness processes and outcomes.

Priority Actions

- Compile and triangulate data from response and recovery phase assessments, impact evaluations (if available) and the EMIS to identify:
- Foster continuous dialogue of mutual learning and understanding between government and development partners, project engineers, and school communities.
- Ensure that the final new school or retrofitting design is context appropriate. It should build on local building capacity and materials, and should be capable of being maintained inexpensively by the school community over the long term.
- Where possible, install climate smart technologies and materials in school retrofitting and reconstruction. This will reduce long-term energy costs and lower the education sectors' contribution to carbon emissions.
 - Impacts on student attendance, retention, engagement and achievement
 - Effective practices
 - The benefits and impacts of prior activities
 - Persistent gaps or shortfalls
- Undertake a national analysis of education sector vulnerabilities, including structural factors impacting on it, as well as enabling factors that ensure system-level resilience. This analysis should inform long-term planning for education sector DRR and preparedness provisions by identifying existing assets/strengths. It should also specify areas within and outside the education sector that warrant policy attention.
- Document key lessons learned from planning, decision-making, and delivery experiences across the response and recovery phases.
- Develop policy-level strategies to scale-up teacher and student involvement in the development of individual, community and systems-level resilience.
- Establish national and sub-national contingency plans to support educational continuity, including support for and payment of teachers.
- Write DRR into institutional, regional, and national education policies to ensure longterm mainstreaming and prioritization.
- Ensure that participatory consultation with stakeholders at all levels takes place as part of the development of policies and programming related to DRR.
- Promote a policy framework that supports DRR curriculum development and ensures the presence of mechanisms to implement it at scale.

Sources: CERA (2016); GFDRR and others (2012); Global Partnership for Education (2016); Hallegatte and others (2017); INEE (2010a); Selby and Kagawa (2012, 2014); Tetebe and Mutch (2015); UNESCO-IIEP (2010, 2011); UNICEF (2006); and UNISDR and GADRRRES (2017).



Key Considerations

Infrastructure Priority Actions

- key considerations
- It is vital that international expertise and funding be fully appropriated during this period to build hazard resilient schools that ensure the long-term safety and protection of students and teachers.
- Based on key learnings from response and recovery phase activities, it is also worth investigating the status of less-effected school infrastructure in terms of its ability to withstand future shocks.
- Enhancing the hazard resilience of existing schools can be a time-consuming effort.
 Prioritizing those schools at greatest risk is key.
 By assuring quality in design and implementation, and engaging the community throughout the process, retrofitting efforts can achieve excellent and cost-efficient results and save lives in the long run.
- Recovery phase infrastructure activities include assessing education infrastructure for deficiencies and determining the need for demolition and relocation, retrofitting, or reconstruction.

Sources: INEE (2010a); INEE, GFDRR and World Bank (2009).

Formalize key safety, protection and inclusion learnings from response and recovery phase assessments. Incorporate this knowledge into permanent school construction, integration of school resources, and establishment of risk reduction measures along transport routes.

- Foster continuous dialogue of mutual learning and understanding between government and development partners, project engineers, and school communities.
- Ensure that the final new school or retrofitting design is context appropriate. It should build on local building capacity and materials, and should be capable of being maintained inexpensively by the school community over the long term.
- Where possible, install climate smart technologies and materials in school retrofitting and reconstruction. This will reduce long-term energy costs and lower the education sectors' contribution to carbon emissions.



Volunteers from the community cook traditional Lao recipes with more nutritious ingredients to ensure that the children eat healthier meals. Lao PDR. Photo: Bart Verweij / World Bank

Engagement, Coordination, and Communication

Key Considerations

Priority Actions

- Effective engagement and coordination are built upon open and clear channels of communication and working partnerships based on a shared vision.
- At this stage, strong levels of ownership and engagement in preparedness planning and mitigation approaches need to be directed at the local level, particularly the roles/responsibilities of school management councils, parent-teacher associations (PTAs), local leaders, and teachers in supporting school-based disaster reduction activities.
- Stakeholders should be actively engaged in working alongside local, regional and national officials from the Ministry of Education and other relevant ministries to support DRR actions, mitigate hazards, and address inequalities and vulnerabilities within specific communities.
- Ensure consistent and authentic engagement of school communities in disaster preparedness decisionmaking.
- Formalize or mainstream preparedness processes into long-term, school-based disaster risk reduction activities and planning.

- Establish school-based emergency and disaster preparedness committees. Ensure that channels of communication between local committees and regional and national education officials are functional.
- Ensure that school committees are legitimate advocates for student and community needs, and that the committee's composition is representative of the community's diversity.
- Develop standard operating procedures for individual schools and community-based school clusters, covering:
 - Evacuation routes
 - Safe assembly zones
 - Family reunification processes
 - Safe havens
 - School lockdown procedures
 - Early warning and early action processes
- Use community- and school-generated disaster management plans to schedule and regularly simulate disaster response policies and procedures.
- Develop and facilitate community- and school-level conflict prevention activities that are holistic and inclusive of all key actors.
- Engage the private sector and define the roles of local, national, and international businesses in preparedness planning.
- Facilitate and manage formal links between government disaster management agencies and education sector policy planners and decision makers.
- Ensure the long-term integration of education sector needs in national level disaster management planning. Incorporate disaster planning and preparedness and riskinformed programming into education sector plans and strategies.



Nurses listen during a training program to learn more about child and adolescent mental health in Monrovia, Liberia. Photo © Dominic Chavez/World Bank

Key Considerations

- As part of strengthening national and local capacity to lead and participate in DRR activities - including, but not limited to the conducting of a rapid needs assessment, the provision of psychosocial support, and the leading of an emergency education first response -strengths within the education sector at each level should be assessed and mapped to provide requisite training where needs are identified.
- With respect to sustainability, predictability, and long-term ownership of disaster risk management, governments are encouraged to plan financing mechanisms and prepare contingency funds to reduce the impact of disasters. This will require collaboration between the relevant planning, finance, and education ministries.
- The experiences of children and young people, and the knowledge they have developed through earlier stages, can help to inform community-level disaster management planning, emergency drills, risk mitigation, and hazard mapping.

Capacity and Capability

Priority Actions

- Develop the capacity of education sector staff and students to be better prepared for disasters, specifically in withstanding and responding to such events. Target institutional, organizational, and individual needs within the education sector capacity development framework. Devise an appropriate scope and sequence to operationalizing required training and upskilling. This might relate to systems improvement, organizational change, and/or stakeholder engagement policies and processes.
- Ensure that teachers' professional learning experiences are culturally responsive and based on effective coaching, mentoring, and adult learning principles.
- Develop national and sub-national capacity to lead key actions outlined in educationsector planning, including facilitation of rapid needs assessments and the delivery of psychosocial support.
- Work with key personnel from disaster management and first response agencies to analyze needs. Devise learning and development processes that support school and community standard operating procedures for DRR, including (but not limited to):
 - Simulating disaster scenarios
- Understanding the disaster cycle
- Personal resilience and wellbeing
- Leading in crisis contexts
- Teaching in crisis contexts
- Identifying psychosocial needs
- Working in transdisciplinary ways
- Work with the government to plan domestic DRR contingency funds. Support analysis and evaluation of risk-sharing and parametric insurance programs.
- Work with the government to identify and apply for external funding options for disaster risk reduction, preparedness and prevention activities. For example, where climate change presents an immediate and ongoing risk, the United Nations Framework Convention on Climate Change (UNFCC) funds climate resilience and adaptation activities through Paris Agreement financing mechanisms.

Sources: Anderson (2016); UNICEF (2016); and UNESCO-IIEP (2010, 2011).



Key Considerations

- Disaster risk reduction education builds knowledge and develops skills to communicate. prevent and respond to risks before, during, and after crises.
- A policy framework should drive the development of an active, action-orientated curriculum. As such, it should build knowledge and instils affective and behavioural dispositions to position children and youth as agents of change.
- As curriculum development can be highly political, and in some cases cause conflict, a consultative process is required during the preparedness phase. For example, it might be important to seek common consensus on the local factors pertaining to disaster vulnerability and risk, or the promotion of peace.
- To enable a sense of local ownership, it is also important to strike a balance between local knowledge and global expertise across each dimension of a successful DRR curriculum^b.

Teaching and Learning

Priority Actions

- Train in-service and pre-service teachers in Social and Emotional Learning (SEL) and non-specialized psychosocial support strategies for the development of values, attitudes, competencies, knowledge, and skills in students that can support their ongoing wellbeing.
- Promote a comprehensive vision for DRR education, and advocate for timely and coherent implementation across the education sector.
- Work with school leaders, teachers, and disaster management personnel to create a time-bound and objective-driven scope and sequencing plan for integrating DRR into the curriculum and school management processes.
- Complete a curriculum review, inclusive of assessment practices and texts/associated resources. Make appropriate modifications to ensure that it addresses local DRR priorities and promotes preparedness and resilience, as well as the prevention of the potential for conflict.
- Create guidelines for the integration of DRR into across the curriculum.
- Use DRR and preparedness opportunities to strengthen links between homes and schools. Engage parents and communities to ensure engagement and involvement in DRR and preparedness learning and activities occurring at the schools.

Sources: Anderson (2005); Burde and others (2015); GFDRR and others (2012); INEE (2010a); Selby and Kagawa (2014); Selby and Kagawa (2014); Tetebe and Mutch (2015); INEE (2016); UNICEF (2006); and UNISDR (2012).

- Notes: a. Relating to coherence in DRR education, see Selby and Kagawa (2014), and Tetebe and Mutch (2015).
 - b. The dimensions are: understanding the science and mechanisms of natural disasters; learning and practicing safety measures and procedures; understanding risk drivers and how hazards can become disasters; building community risk reduction capacity; and building an institutional and community-wide culture of safety and resilience (Selby and Kagawa 2014).

Key Education Sector Stakeholders

A range of actors are involved in disaster risk management activities—including recovery and reconstruction initiatives in the education sector. Their roles and responsibilities are detailed below.

Government Ministries

Government ministries are integral to the success of any disaster risk management, recovery and reconstruction effort in general, and in the education sector in particular. A few core ministries hold the largest responsibilities within these efforts. However, peripheral ministries are also pivotal at different stages of preparedness, response, and recovery in education. Core ministries include those collectively responsible for the whole-of-sector education system, for example, the Ministry of Education, the Ministry of Higher Education, and the Ministry of Finance. Peripheral ministries with pivotal roles within disaster risk management across the education sector include those with responsibility for health and nutrition, women's rights, statistics and planning, transport, social development and welfare.

Professionals and Learning Communities

Engagement and cooperation with professionals and learning communities² is critical to the success of disaster risk management in education. Individuals from this group deliver core functions related to disaster preparedness, response, and recovery. Additionally, they work directly with implementing development partners, and provide valuable information for decision-making at ministerial levels.

Development partners

In the case of diminished or suspended education provision resulting from a disaster, quality emergency education may be partially or wholly provided by development partners.³

Civil Society

Civil society⁴ presents a unique mixture of capacity and strengths. It represents a valuable resource for governments and development partners in the pursuit of providing quality education in emergencies (World Bank 2007).

The Private Sector

The private sector has proven to be important in supporting government provision of education in a wide range of contexts, and through multiple mechanisms, for example, by providing funding, encouraging innovation in education, delivering advisory services, and providing administrative and strategic leadership. Working through their Corporate Social Responsibility (CSR Asia 2015) and Corporate Shared Value (Bocksette and Stemp 2015) initiatives, local, national, and global businesses have various opportunities and responsibilities when responding to a disaster (Global Education Monitoring Report 2017; Global Business Coalition for Education 2015).

² Professionals and learning communities are comprised of principals and school/learning center leaders, teachers, school administrators, local education officials, students and families, and community leaders.

³ Development partners refers to an agency or organization which provides aid in the form of financial, technical, or implementation support. Such partners work to promote social, cultural, political, and/or economic stability. This includes international non-governmental organizations (INGOs), bilateral and multilateral agencies, and philanthropic organizations. Development partners operate in partnership with aid-recipient government representatives.

⁴ Civil society organizations refer to the wide array of nongovernmental and not-for-profit organizations that have a presence in public life. Such organizations express the interests and values of their members or others based on ethical, cultural, political, scientific, religious and/or philanthropic considerations.

Sirikarn opted for a bachelor's degree taught in English which offers more job opportunities and makes further education abroad possible. Thailand. Photo: Gerhard Jörén/World Bank

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The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership that helps developing countries better understand and reduce their vulnerabilities to natural hazards and adapt to climate change. Working with over 400 local, national, regional, and international partners, GFDRR provides grant financing, technical assistance, training, and knowledge sharing activities to mainstream disaster and climate risk management in policies and strategies. Managed by the World Bank, GFDRR is supported by 33 countries and 11 international organizations.