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POLICY BRIEF

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Unmaking Disasters: Education as a Tool for Disaster Response and Disaster Risk Reduction

Philip Vaughter

Highlights

Education on disasters has tended to focus on disaster response and recovery, as opposed to proactive actions to reduce disaster risk and increase preparedness. Furthermore, disaster risk is framed as an external event or threat rather than being integrated into development patterns. In order to build disaster resilience in societies around the world, education will need to reframe how disaster risk can be understood and reduced — not only reducing existing risks, but also preventing the creation of new risks.

Recommendations:

- Educational materials on disaster risk should be tailored to fit the region in which they are being taught.
- Traditional knowledge from indigenous communities should be included in educational materials on disaster.
- Educational outreach on disasters should engage with migrants and visitors.
- Women and girls must be fully included in educational outreach focusing on disasters.

Education and Disaster Risk Reduction

It is widely acknowledged that managing disaster risk will be integral in the pursuit of sustainable development, as highlighted in the Sendai Framework for Disaster Risk Reduction (DRR). Furthermore, it is generally accepted that approaches to disasters need to shift from reactive to preventative, building resilience into societies before a disaster happens. The threat disasters carry to the global sustainable development agenda is clear. Disasters incur a rising number of lost human life-years, or the time required to produce economic development and social progress. Disasters also carry increasingly high price tags, with average annual loss (AAL) continuing to rise around the globe. Taken together, this means that development gains that have been made could stall or even be set back. Simply put, the Sustainable Development Goals (SDGs) cannot be achieved unless disaster risk is reduced. Therefore, DRR will play a critical role in advancing the 2030 Agenda for Sustainable Development.

While several UN agencies, including OCHA, UNICEF, and WFP are focusing on education in responding to disasters as well as disaster preparedness, UNISDR has championed the idea of using education as a tool to reduce disaster risk and build resilience against disasters. Education can play an instrumental role in building the knowledge, skills,

and attitudes necessary to reduce disaster risks. More critically, and as UNISDR has been advocating for the last decade through the Hyogo Framework and now through the Sendai Framework, education can also play a role in preventing disasters by addressing disaster risks that are integral to development rather than focusing on disaster risks as external threats to development. As much disaster risk is associated with inequality and low accountability for poor development planning as with seismic shifts and the pathway of a given tropical storm. By attempting to address the former issues in education upstream, during the development process, there will be greater resilience to the latter. The goal of education in relation to disasters should be a shift from managing disasters as they happen, to managing risk before disasters unfold. While school systems typically take the initiative on educational material development and engagement, these policy recommendations are equally relevant for government, business, and civil society actors who enact education and training policies in relation to disaster response and DRR.

This policy brief provides a set of recommendations for using education as a tool for not only responding to disasters, but also reducing disaster risk within the development process.

Recommendations for the Content of Educational Materials

Local Implementation

Most nations' educational materials focusing on disasters address those that have occurred within their borders. However, within any one country, there is variability both in terms of the type of disaster that may unfold, and the levels of risk to which a population may be exposed. Thus, educational materials relating to DRR should be tailored to fit the needs of regional and local populations. The Russian Federation provides a good example for using regional adaptation strategies based on a national policy. While the federal Ministry of Education has created a general curriculum around safety and security during disasters, the ministry encourages different regions to contextualise the curriculum to fit their context. This policy not only takes geographic variation into consideration, but recognises culture as another important variable in teaching about disaster response (UNICEF and UNESCO 2014).

This approach to localising a national curriculum should also be taken into account when teaching about managing risk before disaster strikes within localities. Educational materials can be designed to not only create targeted responses for local citizens during a disaster in the region, but also be structured to educate about disaster risks that have been built into the development of local regions, and ways to mitigate them. For example, if a region borders a flood plain, lessons can be designed with a focus on safe and high risk locations for construction. A discussion of inequality and risk can also be brought into the classroom in recognition that many people may have little choice in where they live because of unequal access to low-risk locations.

Traditional Knowledge

Indigenous peoples are the residents who are most familiar with methods of reducing the risk of disasters within their ancestral territory. Despite the knowledge that indigenous peoples possess concerning disasters, there has been little systematic uptake of this knowledge into school curriculums, public information campaigns or planning policy in general. Many societies ignore early warning signs that can signal how to address a disaster — whether it is how to reduce risk before a disaster strikes, how to respond as a disaster unfolds, or how to recover in the aftermath — of which indigenous groups are cognizant. For example, the population of the Andaman Islands evacuated to higher ground quickly during the Indian Ocean tsunami of 2004, while other coastal communities and foreign tourists were caught unprepared in Myanmar and Thailand (UNISDR 2015). Knowledge from indigenous groups can also be used in DRR education by learning from land-use patterns, building designs and harvest schedules used by indigenous communities — not as part of local history, but as a crucial aspect of future development.

Education policies that seek to systematically promote DRR within local contexts should include the knowledge and practices of the region's indigenous people. Incorporating this knowledge in local implementation of education policies is appropriate, as top-down implementation would likely miss important nuances between different regions, as well as marginalise the voices of indigenous community groups (UNESCO 2007).

Recommendations for Stakeholder Engagement with Educational Materials

Migrants, Foreign Residents, and Tourists

Due to increased mobility, people now live in and travel to areas of the world with disaster risks with which they are completely unfamiliar. Education initiatives are needed to inform recent arrivals and tourists as to the disaster risks they could potentially face, how to minimise their exposure to these risks, and how to respond should they be confronted with a disaster. Many countries provide people who have come to live and work within their borders

with information packages detailing local laws through immigration bureaux. These packages are often produced in different languages, so that the material is accessible even if one cannot speak the language(s) of the host country. Some municipal governments, such as Tokyo in Japan, include information on disasters and disaster response in orientation packages for foreign residents. A next step could be for similar information to be distributed by tourist bureaux as well as travel and hospitality companies. This can be done in a non-alarming manner, the same way a fire evacuation route is included in many hotel rooms. Finding ways to engage with non-formal migrants and those who cannot read will also be crucial.

While detailing what to do during a disaster for new arrivals and visitors (in addition to the general public) is a good first step, public information campaigns will be more effective with a broader focus. In addition to specifying how to respond to a disaster, informing about how to reduce risk, the rights of those at risk, and the responsibilities of local and national actors during an emergency adds value to public education initiatives. These initiatives can involve distribution through traditional print media, radio, and television, and also through social media and SMS messaging.

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Gender Equality

Effective DRR education requires policymakers to promote gender equality and the full inclusion of women and girls within any education policy or initiative. Research examining mortality during disasters has shown that nations with higher levels of education, especially among women and girls, experience lower levels of mortality during and following disasters (Striessnig et al. 2013). The implications are quite clear: societies in which female education is prioritised before a disaster occurs not only survive disasters with lower mortality rates, but also show greater social and economic resilience during the aftermath of a disaster. Education efforts to reduce disaster risk are more effective when women and girls are fully included. Formal education offers not only the literacy and numeracy that is required to understand early warnings and evacuation plans, but also the problem-solving skills that are required to understand and minimise risk (UNISDR 2015).

Beyond an agenda of including women and girls in formal education, educational materials related to health, safety, and conflict within families and communities in post-disaster environments need to ensure that issues facing women and girls are explicitly addressed and not marginalised or omitted (Enarson 2012).

Beyond Schools

School systems around the world have a rich history of engaging with disaster, often championing experience-based learning around the topic. Teacher education plays a crucial role in this type of learning. Recommendations relating to disaster response and DRR in education call for schools to integrate interdisciplinary approaches across all curriculum topics. This is especially salient within higher education, where there is little opportunity to study disaster management comprehensively, hampering the growth of experts in the field.

However, governments, businesses and civil society also need to tackle learning about disasters within their own ranks. Government employees need to be educated about DRR and disaster response so that conflicting information and orders can be avoided across different branches of government. This is especially important during compound disaster scenarios, like the nuclear disaster in Fukushima, Japan following the earthquake and tsunami in March 2011. Many in the business world need a better understanding of risk, so that the temptation to maximise profits in the short term does not reduce the solvency of an investment over the long term. Civil society groups can increasingly distribute knowledge on how best to reduce disaster risk and what to do in disaster situations if they are unavoidable.

Policymakers must also be cognizant of the fact that while education policies are crucial, there are limits to what they can achieve. Even if populations are perfectly aware of their vulnerability and exposure to risk, unless there are policy tools that allow for people to address the inequality they face by either reducing these risks or building resilience in the face of risk, knowledge alone will not be enough to reduce disaster risk. Furthermore, under current development paradigms, those who

generate risks within development rarely bear the costs. There needs to be increased transparency in auditing the benefits and costs within disaster risk management in relation to any development objective. Unless mechanisms of accountability can be enacted, decision-makers may continue to pursue development objectives that capitalise risk, knowing full well that the risk generated will not affect them (OECD 2014). Given that many of the world's political, business and civil leaders are among the world's most educated people, this may call for a sea change in education itself.

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Author
Philip Vaughter, UNU-IAS

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