White Paper
Transforming Systems in Times of Adversity: Education and Resilience

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Acknowledgements

Acronyms

ANSS	affordable non-state schools
DFID	Department for International Development
DME	Deprivation and Marginalization in Education
DRR	disaster risk reduction
ECCD	early childhood care and development
ECE	early childhood education
EMIS	education management information system
EU	European Union
EVD	Ebola virus disease
FY	fiscal year
ICT	information and communication technology
IDP	internally displaced person
IIEP	International Institute for Educational Planning (UNESCO)
M&E	monitoring and evaluation
MOE	Ministry of Education
NWOW	New Way of Working
INEE	International Network for Education in Emergencies
OCHA	Office for the Coordination of Humanitarian Affairs (United Nations)
OECD	Organization for Economic Co-operation and Development
OFDA	Office of U.S. Foreign Disaster Assistance
PBEA	Peacebuilding, Education and Advocacy Program
PEA	political economy analysis
RERA	Rapid Education and Risk Analysis
RSA	Resilience Systems Analysis
SLE	safe learning environments
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations International Children's Emergency Fund
USAID	United States Agency for International Development
USG	U.S. Government
WHS	World Humanitarian Summit

Executive Summary

The Case for Resilience

"Resilience"—defined by USAID as the "*ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth*" (USAID 2012b)—has gained increasing attention for its potential to shape a new paradigm of engagement in crisis and conflict contexts. This is out of recognition that shocks and stressors are increasing in frequency and intensity around the globe and often combine in complex and uncertain ways. They threaten the lives and livelihoods of people whom USAID and its partners seek to support and erode hard-fought development gains and past and present investments in education or other sectors.

For example, when education systems are unable to maintain equitable access to quality education for all in the midst of adversity, it can lead to prolonged education disruption, permanent dropout of learners from schooling, weakened learning outcomes, and long-term psychosocial concerns for learners. Such consequences can have profound impacts for countries and regions of the world seeking to recover and transform after a crisis, particularly when entire generations of children may have never gone to school or had their schooling interrupted prematurely. It can undermine opportunities for future generations to be productive members of society and for the social contract between citizens and the state to be reinforced and strengthened.

Across USAID, resilience has become a priority. The *Policy Framework* (2019), recently released by the Agency, stresses the importance of resilience in ensuring that the journey to self-reliance, and Agency investments in this process, are not unduly compromised in the face of complex crises and natural disasters. Strengthening resilience by building capacity at various levels is seen as vital to enabling partner countries to prevent, mitigate, and recover from crises that might otherwise set them back.

This focus on resilience is also reflected in USAID education programs at present. The *USAID Education Policy* (USAID 2018c) argues that "*education in partner countries must have the capacity to embed effective approaches to improving learning and education outcomes, to innovate, and to withstand shocks and stresses*" if the aim is to support sustained improvements in learning outcomes and equitable access for all learners (p. 17).

To accomplish this, it is vital that education systems are themselves resilient and able to mitigate the impacts of crisis and conflict in a way that does not undermine current and past investments in the sector. This requires having in place and drawing on a range of capacities, assets, resources, and networks at various levels of the education system in times of adversity.

At the same time, education has an important role and function to play in strengthening capacities that can support inclusive development and reduce chronic vulnerability in times of crisis and conflict. It is

unique in that it is a service in demand and in need during times of crisis, as well as in its scale and reach across society. As such, education forms a critical platform for broader efforts across a range of sectors to improve capacities to absorb, adapt, and transform shocks and stressors. Education also plays a key role in strengthening social and human capital, women's empowerment and gender equality, and internal dispositions to adapt and in improving societal knowledge and action about known risk factors in the environment.

Moving Forward with a Resilience Focus in USAID Education Programming

Programming for resilience focuses on identifying, supporting, and enhancing capacities, assets, networks, and resources, otherwise known as "resilience capacities," that support the continuation, adaptation, and/or transformation of services in response to shocks and stressors at all levels of the education system. It is an inherently strengths-based approach. While the longer-term intention is to reduce or transform factors that make particular learners, communities, or institutions more vulnerable to shocks and stressors, the immediate focus should be to capitalize on existing and strengthened resilience capacities to do so. By working in this way, USAID education program efforts can serve an important function in strengthening the overall resilience of the education system as well as supporting and sustaining learning and well-being outcomes in times of adversity.

Doing so requires that USAID missions start with an understanding of contextual risks and their impacts on sectoral priorities and goals, because in *all* contexts where USAID operates, shocks and stressors are constantly impacting the education sector. The actual level of risk posed to learners, communities, and institutions, however, is mediated by their respective levels of (a) exposure to these hazards and (b) sensitivity to shock(s) or stress(ors).

Consequently, programs need to leverage and strengthen assets that are already supporting key learning outcomes for vulnerable populations in contexts of adversity. Specific attention should be given to (a) ways in which schools and communities currently provide support and opportunities to students and teachers through actions or approaches that enable access, permanence, and teaching and learning and (b) how institutions currently plan for and provide strategic direction; integrate learning, social-emotional well-being, and protection- focused support; and provide or direct human, material, and financial resources to support communities at greatest risk.

USAID education programming should ideally identify multiple entry points for action—at the institutional, community, household, and individual levels—as part of any effort to build resilience with intentionality. Additionally, education programming requires integration, beyond its contributions to human capital, into broader portfolio approaches focused on resilience at a country-strategy level. Programming also needs to give explicit attention to strengthening relationships, trust, and supportive networks through education interventions—that is, to build social capital within and through education programming, particularly if the aim is to bolster the overall resilience of the system.

A key component of designing programming with a resilience focus is the opportunity to learn from success and failures, which requires innovation, variation, and learning within education program approaches. These approaches make it possible to understand why certain elements in a system are less affected (negative deviance) or more affected (positive deviance) by the impacts of realized risk. Having this information will help to build the evidence base on education's contributions to resilience and to better understand what works and why in particular contexts of adversity.

Key Recommendations

Based on the findings and conclusions of the white paper, following are recommendations in two major areas for the U.S. Government.

Policy Level

At a policy level, recommendations include the following:

1. Frame resilience within USAID education policies and operational guidance as a mediating set of conditions, abilities, assets, strategies, networks, and relationships—more simply known as "resilience capacities"—that help protect learning and well-being outcomes in the face of shocks and stressors.

2. Give greater focus and attention to acknowledging the full range of capacities that education can support (absorptive, adaptive, and transformative), as well as the multiple levels of the education system at which resilience strengthening can operate (learners, households, schools, communities, and institutions).

3. In USAID operational guidance, recognize that resilience capacities may not always moderate the sensitivity or exposure of shocks and stressors among all citizens equally.

4. Avoid conflating resilience with self-reliance, with a clearer delineation and specification of how resilience-strengthening efforts may support the journey to self-reliance, but likewise, how the resilience of education (or other systems) on their own may not lead to country self-reliance.

Office of Education, Regional Bureaus, and USAID Missions

Within the USAID E3/Office of Education, Regional Bureau Education Teams, and USAID Missions, there is a critical need for education programming to be positioned and leveraged in contexts where resilience is identified as a key focus or priority for the country or region. Recommendations to accomplish this include the following:

1. Ensure that education teams are active participants in cross-sector resilience working and leadership groups.

2. Further strengthen the capacity and knowledge of key members of USAID on how to develop education programming within a resilience frame, drawing on the core messages and ideas of this white paper.

3. Identify and document a series of case studies of education programs or activities from within USAID Missions or its partners in which resilience has been a priority.

4. Give greater attention and emphasis to education's function in supporting and strengthening social capital.

5. Strengthen the utilization of tools such as the Rapid Education and Risk Analysis (RERA) and political economy analysis (PEA) to capture key dimensions of risk and resilience through the program cycle, and potentially supplement this information with more participatory approaches that capture subjective dimensions of resilience.

6. Build the evidence base on education's contributions to broader well-being and self-reliance outcomes in times of adversity.

7. Develop strong monitoring and evaluation (M&E) guidance and systems to better measure the impacts of education interventions and activities from a resilience approach across multiple time horizons, and to support learning and adaptive management within the Agency.

8. Ensure that program designs are coherent in resilience and education-sector outcomes at all levels of the education system (learners, schools, communities, and institutions). Ensure that a clear theory of change connects these outcomes.

1. Introduction

In its 2018 *U.S. Government Strategy on International Basic Education: Fiscal Years 2019–2023*, the United States Government renewed and strengthened its commitment to working with partners to increase equitable access to education for learners living in countries affected by conflict and crisis. At the same time, USAID's new *Policy Framework* (2019) places strong emphasis on self-reliance—namely building a partner country's capacity to plan, finance, and implement solutions to local development challenges, as well as the commitment to see these through effectively, inclusively, and with accountability. Achieving these two mandates concurrently presents a challenge, particularly because countries affected by conflict and crisis face a range of intersecting shocks and stressors that can compromise education outcomes and undermine inclusive, sustainable development. In response, USAID and the broader education-in-emergencies community are recognizing the need to find more sustainable, coherent, and innovative approaches to education programming in times of conflict and crisis.

"Resilience" is defined in USAID's *Policy and Program Guidance on Building Resilience to Recurrent Crisis* (2012b, 5) as the ***"ability of people, households, communities, countries, and systems to mitigate, adapt to, and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth."*** It has gained increasing attention for its potential to shape a new paradigm of engagement in crisis and conflict contexts, including the education sector. This focus on resilience is reflective of a growing recognition among the international development community that it must better understand how to govern with and through risk, uncertainty, and complexity (Joseph 2018).

Programming for resilience focuses on identifying, supporting, and enhancing a range of capacities, assets, networks, and resources, otherwise known as "resilience capacities," that support well-being outcomes, including learning, in times of adversity. It is an inherently strengths-based approach and seeks to capitalize on **opportunities for innovation, adaptation, and existing capacities already present in contexts of adversity**. In doing so, and by further building such capacities, the aim is to support actions that help societies manage through crises without compromising well-being. In the long-run, these strengthened capacities, and the responses that ensue, can contribute to reducing chronic vulnerability and supporting inclusive growth, which are seen as important preconditions for minimizing the need for external assistance in times of crisis. Resilience is also seen as an important bridging concept between the work of humanitarian and development programming as it provides a common frame for action across all stages of a crisis (Nicolai et al. 2019).

USAID, through the Center for Resilience, has issued a range of policy and program guidance on this topic. Yet, to date, the Agency has not produced any guidance or learning opportunities specifically on the topic of education and resilience. Resilience does, however, feature as a strong conceptual anchor in recent USAID tools such as the *Rapid Education and Risk Analysis* (RERA) *Toolkit*, the *White Paper on Education and Humanitarian Development Coherence*, and the *Safer Learning Environments* (SLE) *Toolkit*, and

it frames one of the key questions in the *USAID Education in Crisis and Conflict Learning Agenda*. Outside of USAID, several partners have made concrete strides in developing their own tools and guidance on this topic in recent years (UNESCO-IIEP 2015a; Reyes 2013b; UNICEF Education Section 2019).[1]

This white paper was commissioned to provide USAID, including Missions, Regional Bureaus, Pillar Bureaus, and the Office of U.S. Foreign Disaster Assistance (OFDA), with (1) an overview of global and Agency thinking and practice on education and resilience and (2) a foundation and justification for positioning USAID education efforts more concretely within a resilience frame.[2]

The white paper is organized into three key sections. The first section outlines the business case for resilience, explaining how and why resilience is an important consideration for education programs to consider in contexts of crisis and conflict and how education is well poised as a sector to contribute to strengthening resilience. The second section presents a conceptual framework for understanding how resilience operates through and within the education sector and program interventions. The third section provides a series of key considerations for developing and supporting USAID education programs with a resilience lens or focus.

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[1] The World Bank (2013a), for example, developed a suite of tools as part of its broader SABER approach on Education Resilience Approaches (ERA). These tools are intended to help identify ways in which education systems can encourage and support positive performance and transformation amid and beyond contexts of immediate adversity. UNICEF's Education Section (2019), under UNICEF's broader risk-informed programming approach, has developed guidance to analyze risk and adapt education policies and programs to take such risks into account. UNESCO-IIEP (2011) created a set of guidance booklets for education planners on why and how to address safety, resilience, and social cohesion in education sector policies and plans.

[2] Conducted largely as a desk-based exercise, a wide range of documentation on the topic of resilience, produced within USAID (largely out of the Center for Resilience), by other donors, and from the research community—and with relevance to the education sector—was reviewed. A limited number of interviews were held with key staff within the Center for Resilience and with the Education in Conflict and Crisis team within the Office of Education at USAID. Additional contributors that helped to shape and refine the paper's conceptual focus included an internal task team within the USAID Education in Crisis and Conflict Network (ECCN) and an external advisory group composed of stakeholders from within USAID's Office of Education and the Center for Resilience, Save the Children, Mercy Corps, the World Bank, UNICEF, and Interpeace.

2. Resilience Is Critical for USAID Efforts in Education Today

2.1 Why Resilience?

Shocks and stressors are increasing in frequency and intensity around the globe. Climate change and weather variability, population growth, migration and displacement, local and global price shocks, illness and disease, political instability, violence, and armed conflict are combining in complex and uncertain ways, threatening the lives and livelihoods of people and eroding hard-won development gains. As a result, billions of people around the globe are at risk in terms of loss of life, injury, or livelihoods; national and regional economies are being undermined; and the cost of humanitarian response is unsustainable and rising.[3]

At present, and by conservative estimates, approximately 75 million children each year have their schooling interrupted by a range of shocks and stressors, such as natural hazard impacts, outbreaks of disease or famine, climate change, gender or school-based violence, violent conflict, and economic shocks (UNESCO-IIEP 2011; Global Campaign for Education 2016). When the education system is unable to maintain equitable access to quality education for all in the midst of adversity, this can lead to prolonged education disruption, permanent dropout of learners from schooling, weakened learning outcomes, and long-term psychosocial concerns for learners (Nicolai and Hine 2015; Ireland 2016). Current estimates from the UNESCO Institute of Statistics (2018) are that globally one out of five children are out of school, while within contexts of conflict and crises, estimates are one in two children may be out of school.

THE IMPACTS OF NATURAL DISASTERS AND EPIDEMICS ON LEARNING OUTCOMES

In the period in which schools were shut in Liberia, Guinea, and Sierra Leone because of the Ebola virus disease (EVD) outbreak, it is estimated that students lost approximately 1,848 hours of schooling—the equivalent of nearly a full year of schooling in these countries. Beyond this immediate impact, attendance in schools following their gradual reopening was significantly lower than prior to the EVD outbreak (UNDG 2015). Another study by Save the Children in the Asia-

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[3] In the introduction to the Agency's resilience policy, Dr. Rajiv Shah, the administrator for USAID at that time, noted that, "*in response to [ongoing] emergencies, the international community provides significant levels of lifesaving relief, largely concentrated in just a few countries. Over the last decade, approximately US$90 billion was spent by international donors in just nine countries, accounting for almost 50 percent of all humanitarian assistance during this period. During the same time, three-quarters of USAID humanitarian assistance was spent in just 10 countries*" (USAID 2012b, 3).

Pacific region, where recurrent natural disasters are commonplace, found that children are losing days or months of schooling, sometimes on an annual basis, because the education system is not prepared to withstand these shocks. This has been found to be associated with longer-term reductions in school attendance and increased drop-out rates (Ireland 2016).

Reduced or limited access to schooling can have profound impacts on countries and regions around the world seeking to recover and transform after a crisis, particularly when entire generations of children may have never gone to school or had their schooling interrupted prematurely. The lack of schooling can undermine opportunities for these future generations to be productive members of society and for the social contract between citizens and the state to be reinforced and strengthened (Smith and Ellison 2015). **The longer-term economic and human capital costs of emergencies to the education sector, while thinly researched, include estimates that reach well in excess of hundreds of millions, if not billions, of dollars** (Nicolai and Hine 2015).

THE IMPACTS OF CONFLICT IN THE MIDDLE EAST ON LEARNING OUTCOMES

Recent conflicts in the Middle East (i.e., Syria, Iraq, and Yemen) have had significant impacts on educational access for an entire generation of children. Learners who have been displaced and had their education interrupted have found it particularly difficult to re-enter into education—in many cases because systems in these countries, and neighboring host countries to which these learners flee, have been unable to absorb learners and rapidly adapt to accommodate the situation (UNICEF 2015b). The estimated cost of the loss of human capital formation due to the ongoing crisis in Syria is estimated to be US$10.7 billion, or about 17.7 percent of Syria's gross domestic product (GDP) in 2010 (UNICEF 2015a).

The *U.S. Government Strategy on International Basic Education* (U.S. Government 2018) contains a renewed and strengthened commitment to work with partners to increase equitable access to education for learners living in contexts of crisis and conflict and to improve learning outcomes. According to internal budget data, in fiscal year (FY) 2018, 50 percent of basic education investments and 22 percent of higher education investments were directed to crisis and conflict-affected contexts. In light of some of the aforementioned issues, it is vital that education systems are able to mitigate the consequences of crisis and conflict in a way that does not undermine current and past investments in the sector. This requires having in place and being able to leverage the assets, resources, and networks present at various levels of the education system.

Building and supporting the resilience of the education sector is vital to ensuring that all children have access to safe, equitable, and quality education in times of adversity. The *USAID Education Policy* (USAID 2018c, 17) argues that, "*education in partner countries must have the capacity to embed effective approaches to improving learning and education outcomes, to innovate, and to withstand shocks and stresses,*" if the aim is to support sustained improvements in learning outcomes and equitable access for all learners. Likewise, USAID's recently released *Policy Framework* (2019) stresses

the importance of resilience as part of ensuring that the journey to self-reliance, as well as Agency investments in this process, are not unduly compromised in the face of complex crises and natural disasters. Strengthening resilience by building capacity at various levels is seen as vital to enabling partner countries to prevent, mitigate, and recover from crises that might otherwise set them back.

Strengthening the resilience of the education system as a whole ensures that gains made in improving learning and broader well-being outcomes are sustained rather than squandered in the midst of a crisis. Early investments in resilience reduce the costs associated with recurrent crises, including lost lives and livelihoods, the cost to national and regional economies, and the unsustainable costs of responding to repeat, large-scale humanitarian emergencies in the same places every few years (USAID 2016b, 2018b).[4] Outside the education sector, there is now clear evidence that early action focused on early recovery and resilience leads to more efficient and cost-effective responses in the long term by helping people, households, communities, and systems to better manage risks; enabling international and national actors to respond faster; and, in some instances, reducing the likelihood of risks occurring at all (DFID 2013; UNDP 2014; USAID 2018b).[5]

There is a strong economic imperative for "*investing in resilience in places USAID routinely spends tens, if not hundreds, of millions in responding to humanitarian crises every few years***"** (USAID 2013, 1).

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[4] As evidence of this: In the midst of recurrent droughts in the Horn of Africa in 2011, 250,000 people lost their lives in Somalia, with half of this population being children under the age of 5. In Kenya the drought crises resulted in over $12 billion in losses to the Kenyan economy between 2008 and 2011. In 2011–2012 alone, the U.S. Government (USG) provided $1.5 billion in humanitarian aid. The World Bank (2016) estimates that, on an annual basis, natural disasters cost the global economy $520 billion and push 26 million people into poverty. Additionally, conflicts that have become more protracted and caused greater displacement of populations and loss of lives in recent decades also have significant costs in the short- and long-term. The cost of violent conflict was estimated at $14.3 trillion in 2014 or 13.4 percent of global gross wealth (IEP 2015). Countries affected by major violence in the period between 1981 and 2005 had a poverty rate 21 percent higher than countries that did not. Often social development is arrested for countries affected by violence, with children born in these countries twice as likely to be undernourished, three times as likely to not be enrolled in primary school, nearly twice as likely to die before the age of five, and more than twice as likely to lack access to safe drinking water (World Bank 2011). Additionally, in situations of violent conflict, women and children are disproportionally affected by issues such as domestic and sexual violence and forced displacement (IEP 2015). Of concern is that by 2030, two-thirds of the world's poor will be concentrated in fragile and conflict-affected states, and children and youth will represent a significant part of that population (OECD 2018).

[5] For example, early action in Kenya in 2016–17 aimed to protect livestock assets, incomes, and food security of pastoralists facing drought by providing livestock feed and supplements, water, animal health treatments, and borehole rehabilitation. The value of the animals saved, extra milk produced, and increased value due to improved body condition shows that for every $1 spent on livestock interventions, households had a return of $3 to $4. Similarly, early action in Ethiopia in 2017 resulted in even higher benefits to cost. For every $1 spent on livestock interventions, the household had a return of $4 to $6 dollars. Timely humanitarian assistance (food aid, food or cash–for-work, and hazard insurance) combined with social capital development (informal safety nets and community groups, household asset building, access to savings and credit, and access to communal natural resources) strengthened resilience to drought for households in a USAID-funded project in Ethiopia, particularly in communities that had high-intensity engagement with the project. As a result, they had longer-standing food security and recovery following a drought compared to households in communities with low-intensity engagement (USAID 2018b).

Within the education sector, evidence suggests that investing in disaster risk reduction (DRR) strategies, for example, improves the capacity of populations to cope with recurring disasters and keep children in school, while also reducing the long-term vulnerability of the poor to disasters (UNICEF 2012). As identified by UNESCO-IIEP (2011), resilient education systems maintain education delivery during crises by including planning that anticipates and analyses risks. This planning is typically supported through the following measures:

- Conducting education sector risk assessments.

- Protecting, rehabilitating, and/or relocating vulnerable educational infrastructure.

- Strengthening the capacities of educational personnel and communities to lead response efforts and the development of contingency plans and finance mechanisms for the sector in anticipation of future shocks (see for instance Shah, Henderson, and Couch 2019).

Likewise, attending to education policy reform, institutional strengthening, and capacity development, while simultaneously improving equitable and relevant educational opportunities in contexts of conflict, can make inroads to building or sustaining peace (Shah et al. 2016).

> **SUPPORTING RESILIENCE IN THE FACE OF CONFLICT**
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> As USAID's conflict-assessment framework (2012a) notes, "building the resilience of individuals, families, communities, the natural environment, economies and markets, civil society, and the state are all important dimensions of development and conflict management" (p. 22), and "whether and how armed conflict breaks out depends in part, therefore, on the resilience of those institutions, mechanisms, or other factors in society that provide the means to suppress or resolve conflict through non-violent means" (p. 16). This necessitates bringing together different aid instruments, such as humanitarian and development funding, to contribute to common outcomes such as providing children and their families with emotional and physical protection from the negative impacts of shocks.

2.2 The Evidence on Education's Contribution to Resilience

Education serves a foundational role in strengthening the resilience of learners, communities, and institutions in contexts of adversity. Specifically, **when education is provisioned in a way that is risk-informed, conflict-sensitive, and equitable, it strengthens resilience at multiple levels in a number of ways. At the same time, the resilience of individuals, households, communities, and educational institutions in the face of adversity is critical in ensuring that accessible and equitable learning opportunities are maintained for all learners.** This relationship is depicted in Figure 1. In the long run, the symbiotic relationship between resilience and education serves to reduce chronic vulnerability and promote inclusive growth and development.

Figure 1. Conceptualizing the relationship between education and resilience

ENDOGENOUS QUALITIES

Education a vehicle to reach populations in masse | Retains high public value and demand in times of conflict | Education as a critical hub in times of adversity

EDUCATION

Quality, inclusive, accessible and equitable, safe education provision

CONTRIBUTIONS TO RESILIENCE

Strengthening social capital

Improving community knowledge of risks and hazards

Women's empowerment and gender equality

Strengthening human capital

Building internal dispositions to adapt

Reduction of chronic vulnerability and facilitation of inclusive growth

RESILIENCE

A resilient education system(s)

CONTRIBUTIONS TO SERVICE DELIVERY

Actions (i.e. contingency planning)

Structures (i.e. school management committees)

Relationships/ networks (i.e. peer-to-peer or adult-child)

Processes (i.e. teacher professional development)

In terms of education's contributions to strengthening resilience, evidence suggests the following:

Education can support and strengthen social capital,[6] which acts as an important safety net for individuals and households in contexts of adversity. Individuals who have higher levels of education have been found to have higher trust in others and be more likely to join social organizations and groups outside of their immediate family and community (Putnam 1995, 2000). Education has been identified as a critical platform for strengthening trust, tolerance, and empathy between and among various communities, improving levels of civic engagement, and increasing civic skills for citizens to support inclusive institutions (Reyes 2013b; Rose and Greeley 2006; Smith et al. 2011; INEE 2012; Shah and Lopes Cardozo 2015; World Bank, 2018b).

Evidence from UNICEF's Peacebuilding, Education, and Advocacy Program (PBEA) suggests that when education is provided in an equitable fashion to all segments of society and when local stakeholders have opportunities to be involved in shaping education policies and monitoring and reporting on the quality of education service delivery, education can strengthen links between individual citizens, wider communities, and the state. At the same time, opportunities within and outside the classroom for intra- and inter-group dialogue and cooperation—explicitly in teaching and learning approaches and implicitly through participation in school-based governance and decision-making processes—are important mechanisms for strengthening relationships and trust between various segments of an individual community (Shah et al. 2016).

Completing a primary or secondary education raises the human capital of individuals, a critical foundation for resilient people, households, and communities. Educated populations, particularly those with a secondary level education and beyond, are better able to adapt or transform their behaviors and livelihoods in anticipation of or in response to adversity because they have higher capital assets, better earnings, improved productivity, and greater opportunities for paid employment (UNICEF 2015a; World Bank 2018b, 2018a).

Additionally, having an education opens up opportunities for individuals to diversify or alter livelihood choices in the face of particular types of shocks or stressors.[7] Evidence also suggests the presence of intergenerational benefits of education due to the ability that educated households have to make better-informed decisions for their family. For instance, higher levels of education of mothers has a strong

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6 Social capital can be understood as comprising productive relationships of trust, reciprocity, and obligation: (1) between individuals within communities, known as bonding social capital; (2) across communities, known as bridging social capital; and (3) across communities and the state and its institutions, known as linking social capital (Woolcock 2001).

7 This has long been recognized as a risk management strategy and a source of resilience at the household and community level. Recent research from Kenya, Ethiopia, and Bangladesh identifies that this is typically done by either (a) "stepping up" within agriculture/livestock and buffering risk through agricultural diversification, increasing agricultural trade and income, and increasing the ability to build savings and/or buy insurance; (b) "stepping partially out" of agriculture/livestock to engage in livelihoods that have a different risk profile as a complement to agriculture-based livelihoods; or (c) "moving out" of agriculture/livestock entirely and into livelihoods that have a different risk profile. However, the research also makes clear that diversification on its own may not increase livelihood security. In this respect, education can help by offering more choices that can contribute to livelihood security, but the correlation is not a direct one (USAID 2018b).

influence on the likelihood of children being fully vaccinated and on reductions in child mortality and growth stunting in the early years (Forshaw et al. 2017; Fernald et al. 2012). Additionally, households with more educated parents, have been found to be more likely to keep their children in school in the midst of adversity (Sabates, Hossain, and Lewin 2010; USAID 2018b).

STRENGTHENING THE RESILIENCE OF HOUSEHOLDS THROUGH EDUCATION

Educational attainment has been found to contribute to strengthened resilience capacities of households in multiple resilience-focus countries, such as Ethiopia, Bangladesh, Burkina Faso, and Niger (USAID 2018b). Separate analyses in Bangladesh suggest that differences in adaptive capacities are explained by disparities in educational attainment (i.e., at least one adult in the household with a primary education or higher) and that such capacities significantly predict poverty, dietary diversity, and food consumption scores (the key well-being outcome indicators for that program; TANGO 2015). In Nepal, another study following the April 2015 earthquake suggests that the higher levels of educational attainment helped to mitigate stressors exacerbated by the shock event, such as hunger and food insecurity, and that this was true irrespective of the caste status of the populations researched (TANGO 2017). Research produced out of the Resilient Africa Network on the State of African Resilience suggest that "education, including access, quality and relevance, was the aspect most cited…as a critical underlying driver, cause and outcome of vulnerability across the target community" (Cooke 2015).

In other words, the lack of access to quality, relevant education is seen to increase people's vulnerabilities to shocks and stressors, often as an immediate cause/effect. In part, this is because the research surmises, "human capital and wealth are closely linked." The report goes on to identify that targeting sectors like education are, "likely to have the greatest influence on resilience outcomes [at the individual level]" (Cooke 2015, 33).

Disaster risk education plays a critical role in strengthening community knowledge about **responding to natural disasters and climate change, health emergencies, and future armed conflict**. Such knowledge can serve as an important precursor for changing behaviors that act to adapt or transform contexts of adversity through changed natural resource management practices, higher levels of tolerance for diversity and difference, greater environmental concern and activism, or willingness and capacity to make adaptations to climate change (UNESCO 2014). Disaster risk education can also provide concrete skills, particularly in terms of supporting communities to employ specific adaptive technologies or approaches, which can protect household and community assets and support the maintenance of well-being outcomes in the midst of adversity.

Education can strengthen the self-efficacy,[8] aspirations, and confidence of individuals, thereby reducing the likelihood of negative coping strategies and enhancing the abilities of individuals to recover from shocks (USAID 2018b). Specifically, program responses that strengthen psychosocial support responses inside the school and wider community, establish or strengthen protective, safe classrooms and school environments for all, and give explicit attention to the well-being of education personnel and caregivers contribute to such aims (Reyes 2013b; Varela et al. 2013; INEE 2016).

Education can improve women's empowerment and gender equality, which are strong predictors of whether households can escape and remain out of poverty in the face of shocks and stressor. Specifically, education increases the ability of women to make more informed choices about their lives, particularly regarding matters such as marriage and reproduction. From a livelihood perspective, education (particularly secondary education and higher) helps women to use information and services and diversify their livelihoods beyond subsistence agriculture, increasing their financial independence and reducing their vulnerability as well as the vulnerability of their households to weather-related shocks and stressors (USAID 2018b).

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[8] Belief in one's ability to succeed in a specific situation or to complete a task

increase societal inequality and the vulnerability of already marginalized segments of society (Shah et al. 2016).

At the same time, USAID (2012b) guidance cautions that the actions undertaken by individuals, households, communities, and institutions in times of the adversity may not always support the well-being of all citizens equally, and that caution must be taken in labeling such actions as "resilience." Certain responses promote learning and well-being outcomes for some but not all members of society, and they are not examples of resilience as understood and defined within the Agency. For example, communities establishing schools in the aftermath of a shock that are divided along sectarian or ethnic lines, or that are unaligned with broader institutional policies and approaches, may undermine the bridging and linking social capital necessary to promote the well-being of all citizens. Likewise, community or school resourcefulness in the midst of adversity can lead to systems of patronage and corruption, which is particularly risky when they become embedded in new state structures and institutions and thereby in relationships to—and within—the state. This has often been witnessed in relation to school-based management structures in the aftermath of natural disasters or conflict, in which localized patronage politics are often leveraged to support the restoration of service delivery, but in ways that exclude broader community participation and engagement in decision-making (Edwards and Higa 2018; Shah and Lopes Cardozo 2014). These manifestations of local or institutional "resilience" are in fact actions that are likely to heighten the vulnerability of the education system in the long-run by exacerbating or creating cleavages within society (Simpson et al. 2016). It is for these reasons that all program responses in times of adversity should adhere to INEE's Minimum Standards for Education: Preparedness, Response, Recovery (INEE 2012) and utilize the USAID's Checklist for Conflict Sensitivity in Education Programs (Haugen and JBS International 2013).

Within the education sector, the role and importance of each subsector of the system—from early childhood through to tertiary education—is distinctive in strengthening the capacities of individual learners, their households, and their communities to maintain learning and well-being outcomes in contexts of adversity. The specific contribution of each subsector to broader resilience outcomes is specified in **Annex 1**.

As identified in Figure 1, **there are important attributes of education as an institution of the state.** These qualities render it a critical platform through which to leverage broader resilience-strengthening efforts.

Education remains a service in demand in the midst of adversity. Numerous examples exist of communities setting up nonformal learning opportunities for their children in the midst of a crisis, as well as demanding the quick resumption of educational services from the state (Rohwerder 2015). Often, this is driven by strong community-level ownership for education, both for its immediate protective and its longer-term transformative potential (Nicolai and Hine 2015). This is because **being part of education programs and institutions in the midst and immediate aftermath of a crisis can help to protect children from further harm, provide a sense of routine and normalcy in otherwise chaotic circumstances, and facilitate important networks of peer**

and adult support outside children's home environments. From an affective dimension, this enables children and their families to quickly regain meaning and purpose and supports individual and household resilience (Masten et al. 2008; Gizir and Aydin 2009; Borman and Overman 2004).

By meeting and leveraging these expectations, **significant opportunities exist for education (through its institutions and actors) to act as a hub within the community to reach learners and their families at scale prior to, during, and following times of adversity.** In many instances, they act as a source of protection and a conduit for individuals and households to access resources and information from the state and/or other actors. Additionally, schools are an important venue for community mobilization, participation, and collective action in anticipating, responding to, and mitigating the impacts of shocks and stressors on individual, household and community welfare (Shah, Henderson, and Couch 2019). In recognition of this, global DRR compacts (such as the Hyogo and Sendai Frameworks for Action) place education at the core of DRR efforts—and support the use of *knowledge, innovation, and education* to build a culture of safety and resilience at all levels.

Importantly, **education remains one of the few public institutions that retains value and demand in the midst of ongoing stressors.** RERAs done by USAID in El Salvador (USAID 2016a) and Bangladesh (USAID 2018a) found that despite risk factors such as endemic violence, corruption, poverty, and inequality eroding general confidence in the state, citizens continued to retain faith and hope in education as a way to overcome such issues. When the education system gives explicit consideration to issues of redistribution, recognition, representation, and reconciliation, **it plays a key role in strengthening the social contract and restoring public confidence in the state** (Novelli, Lopes Cardozo, and Smith 2017). Trust and confidence between citizens and between citizens and the state is a necessary pre-condition for broader resilience-strengthening efforts focused on transforming conditions of adversity (Simpson et al. 2016).

2.3 Leveraging Resilience Capacities to Support Learning

A growing body of research suggests that **education systems can promote learning in times of adversity by identifying and capitalizing on existing resources, capacities, networks, and assets**. At the individual and household levels, it has been found that having capacities for change and renewal in responding to risk is a critical determinant of learning in high-stress environments. Specifically, learners, caregivers, and education personnel are better able to support effective learning outcomes when they have a greater sense of control over their lives; empathy and engagement with peers; the capacity to manage and regulate emotion in productive, rather than destructive ways; a strong sense of self-efficacy; and hope for the future (Neenan 2009; Masten and Obradovic 2007; Ungar 2011).

Within schools and school communities, effective and inclusive classroom practices of teachers, strong school leadership, meaningful assessment approaches, and shared accountability for learning are important features for supporting education provision in adversity (Abdul-Hamid et al. 2015; Reyes 2013a). In addition, strong peer-to-peer and teacher-to-student relationships predicated on support,

care, and mutual understanding can help to establish a culture of safety within school environs (Reyes and Kelcey 2014).

Additionally, at a community level, strong involvement and engagement from a range of stakeholders in supporting emergency preparedness, contingency planning, and recovery efforts within the education system can also support access and learning (Harmer, Stoddard, and DiDomenico 2011; Hannah et al. 2014). School management committees, when they have meaningful autonomy and authority over educational decisions, can help to engender community buy-in and support and sustain education services through times of crisis (Reyes and Kelcey 2014).

Finally, institutions that afford flexibility and adaptation to the needs of learners in times of crisis; ensure adequate resourcing and support for the psychosocial well-being of learners and education personnel; plan and protect school facilities and personnel from known risks; and provide ongoing opportunities for teacher professional development and support in times of adversity are critically important in supporting more localized responses to shocks and stressors (Reyes and Kelcey 2014).

3. What Is Resilience and How Should It Function?

A range of actors and agencies supporting education programming in contexts of conflict and crisis currently define "resilience" in a similar way. What is clear is that, like USAID, most actors see resilience-strengthening efforts as fundamental to ensuring that learning or well-being outcomes are not unduly compromised in contexts of risk, uncertainty, and adversity. They differ, however in specifying how and at what levels resilience should operate. The majority of agencies perceive resilience as a trait at the individual or community level, rather than one that exists across a system (such as education), and which includes institutional resilience. Less frequent definitions are those that acknowledge coherence or alignment of action across all of these levels. Lastly, there are critical differences as to whether resilience program efforts should focus solely on adaptive and absorptive responses or move toward more transformative action (see **Annex 2** for more details).

For USAID, the aim is to ensure that when a system faces adversity (i.e., shocks or stressors), it is able to respond in a way that maintains and supports learning and ultimately positive well-being outcomes for all. The intent is to protect existing efforts and investments to date and ensure all partners are in a position to advance and not backtrack in the face of conflict or crisis on their journey to self-reliance. The *USAID Education Policy* (USAID 2018c), for instance, places emphasis on the absorptive and adaptive capacities of individuals and communities (namely schools) within conflict and crisis contexts.[9] The focus on the individual and community levels is typical of the USAID's work in other sectors, in which resilience-focused programming has focused largely on the individual and community levels, with less attention to the systems and institutional levels (Pícon 2018; USAID 2012b).

3.1 Shocks and Stressors

According to Sagara (2018), **shocks** are typically short-term, acute deviations from long-term trends that have substantial negative effects on people's current state of well-being, level of assets, livelihoods, and safety or their ability to withstand future shocks. **Stressors**, on the other hand, tend to be chronic, long-term trends, pressures, or protracted crises that undermine the stability of a system and increase vulnerability within it. As detailed further in **Annex 3,** shocks and stressors with known impacts on the education sector include natural disasters, disease epidemics, armed conflict, violence, and economic crises and instability. The impacts, as the annex details, vary depending on the severity of the event, as well as its scale or reach, but all have the potential to adversely impact learners, communities, and education institutions in a range of ways.

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[9] Despite being a key principle of the new policy, which is "*strengthen systems and develop capacity in local institutions,*" "resilience" as a concept or term is notably missing from this entire section.

It also is important to recognize the **interdependent nature** of **these various shocks and stressors**. For example, there is strong evidence to suggest that, in times of violent conflict, inequality in terms of access to education is exacerbated as a result of an acute shock being superimposed on longer-standing chronic stressors, such as insecurity, crime, localized violence, poverty, and lack of access to basic services (Wael Moussa et al. 2016; UNESCO 2011).

Similarly, a shock such as a drought can be the catalyst for the creation or exacerbation of other stressors, such as food insecurity and conflict over resources, internal migration, or malnutrition. When left unaddressed, compounding stressors can degrade the overall capacity of the education system and reduce its potential to maintain function in the face of a future shock or stress.

THE OVERLAPPING IMPACTS OF CONFLICT AND NATURAL DISASTER ON EDUCATION

Among the Nepal communities most acutely impacted by the country's long-standing civil war and chronic underinvestment in infrastructure were communities where reductions in educational access and learning outcomes were most pronounced in the months and sometimes years after the 2015 earthquakes (Mu et al. 2016).

Likewise, acute shocks, when not mitigated rapidly, can create new, longer-term stressors on the education system, as has been the case for countries hosting large numbers of refugee children (see box below).

THE GROWING STRAIN OF THE SYRIAN REFUGEE CRISIS ON HOST COUNTRY EDUCATION SYSTEMS

The inability of host country systems—and particularly those of Jordan and Lebanon—to respond quickly and effectively (in part because of chronic underinvestment in education) and absorb the millions of learners who were displaced has exacerbated tensions between host and refugee community children, put increased strain on infrastructure and school personnel, and led to an overall reduction in learning outcomes in these systems (Human Rights Watch 2016; Government of Jordan 2018; Ministry of Education and Higher Education Lebanon 2016).

3.2 Exposure, Sensitivity, and Vulnerability

Shocks and stressors are not experienced uniformly within a population or across a country. The concepts of exposure and sensitivity help to differentiate the impacts that they have on learners, communities, and institutions within the education system.

Exposure refers to people, property, systems, or other elements present in hazard zones that are subject to potential losses in the midst of a shock or stress. Exposure is often based on geography or location in relation to a shock or stress event. As an example, those in close proximity

to the ocean would be more exposed to the impacts of sea level rise than those living in the mountains. When individuals, households, communities, or institutions are all equally exposed to the same shock or stressor, it does not mean that all are impacted the same.

Sensitivity, or the degree to which they are affected by a given shock, is based on factors such as the severity, scale, frequency, duration, and co-variant effects with other shocks or stressors (Chouralton et. al. 2015). For instance, in an earthquake, all schooling infrastructure in a given geographic area may be exposed to the impacts of seismic activity. The degree to which such infrastructure is sensitive to the earthquake may depend on factors such as the quality of the construction of the building, the frequency of seismic activity, or the degree to which that infrastructure has been maintained or retrofitted over time.

Oftentimes, sensitivity is found to be shaped by key community and household characteristics, such as the highest levels of education in a household, access to land and financial capital, social networks, location, and existing levels of poverty. Often these factors work in intersectional ways to impact the level of risk that learners, households, and communities will face in times of adversity (UNESCO 2011, 2010; UNESCO Institute of Statistics 2018). For instance, UNESCO (2011) identified that while armed conflict is a hazard with exposure to large numbers of learners, its impacts are experienced differentially among them. Specifically, analysis from the Deprivation and Marginalization in Education (DME) data set suggests that poor girls living in rural locations are typically most sensitive to the impacts of armed conflict in terms of a lack of access to education.

Vulnerability is the combination of exposure <u>and</u> sensitivity to a range of risk factors. Within the *USAID Education Policy*, it is those who are most vulnerable to risk who warrant specific attention under a resilience approach. Specifically, the policy argues that "*understanding sub-national and local issues can lead to more focused activities and identify disparities and inequalities, particularly for marginalized and vulnerable populations, including rural and remote populations or indigenous peoples. Similarly, violence, crisis, and conflict may span borders or administrative divisions, and require regionally coordinated or cross-border programs*" (USAID 2018c, 17).

Addressing the causes of vulnerability necessitates explicit attention to a range of transformative capacities (defined below)—such as governance mechanisms, politics and regulatory frameworks, cultural and gendered norms, social protection, and inclusion mechanisms in society—which prove critical in enabling or constraining the capacities that education can strengthen at the individual, household, and community level.

THE ROLE OF GENDER IN INFLUENCING VULNERABILITY

A strong body of evidence suggests the gendered dimension of vulnerability in situations of crisis (USAID 2018a; Masson 2016; Diwakar and Shepherd 2018). For women and girls, discriminatory barriers that limit access to education and information, capital, property, land and productive resources, civil and political rights, legal and justice systems, health care, adequate housing, employment, and social protection increase their sensitivity to the negative effects of a range of shocks and stressors—despite the fact that women and men might be exposed equally to the same risk factors. These same obstacles also prevent women from being able to actively contribute to decision-making and the development of activities related to climate change mitigation, disaster prevention, and reconstruction efforts. This situation is particularly grave for the most marginalized girls, such as those with disabilities or from ethnic minority communities. During times of crisis, the already disproportionate burden of unpaid care work invariably falls to women and girls, as do additional household and income-generating activities. Men and boys are also uniquely affected by conflict and crisis. Boys can be more sensitive and exposed to forced recruitment into armed groups or mobilization into armed forces rather than attending school. These dynamics can perpetuate a cycle of violence and poverty—with negative repercussions for both boys' and girls' education (UNESCO 2011; INEE 2012; Shah et al. 2016). These issues highlight the importance of exploring and understanding resilience capacities at levels below the household level and how they are enabled or constrained within gendered norms, structures, and institutions (Diwakar and Shepherd 2018).

3.3 Resilience Capacities

Resilience capacities are seen as the types of assets, skills, knowledge, resources, and networks that are used to anticipate and deal with the consequences of shocks or stressors in a way that reduces their overall impacts (Béné et al. 2012; Béné, Headey, et al. 2016; Béné, Frankenberger, et al. 2016; Diwakar and Shepherd 2018). In other words, **capacities are pathways through which resilience manifests by acting to counterbalance exposure and sensitivity (and ensuing vulnerability) to a range of risk factors.**

These capacities take three forms:

- **Absorptive resilience capacities** – The ability of individuals, households, communities, or institutions to minimize exposure and sensitivity to shocks and stressors through preventative measures and appropriate coping strategies to avoid permanent, negative impacts

- **Adaptive resilience capacities** – The ability of individuals, households, communities, or institutions to make informed choices and changes in livelihood and other strategies in response to longer-term social, economic, and environmental change

- **Transformative resilience capacities** – The ability of communities and institutions to establish an enabling environment for systemic change through their governance mechanisms,

policies and regulations, cultural and gender norms, community networks, and formal and informal social protection mechanisms

Absorptive and adaptive capacities using internal and external assets, networks, skills, and relationships—such as psychosocial (*i.e.,* dispositions and attitudes including hope, perseverance, confidence, and motivation), knowledge, and financial and social capital—are typically deployed at the individual, household, and community levels in the midst of adversity. Transformative capacities, however, require more collective efforts from the community level upwards (Vaughan 2018, 5). On a spectrum, absorptive capacities are deployed to address the consequences of shocks and stressors; adaptive capacities are used in anticipation of future shocks; and transformative capacities are developed to address underlying vulnerabilities to these shocks and stressors (Béné, Headey, et al. 2016). This spectrum is depicted in Figure 2.

Figure 2. **A mapping of resilience capacities in the education sector** (adapted from Béné, Heady, et al. 2016, with permission)
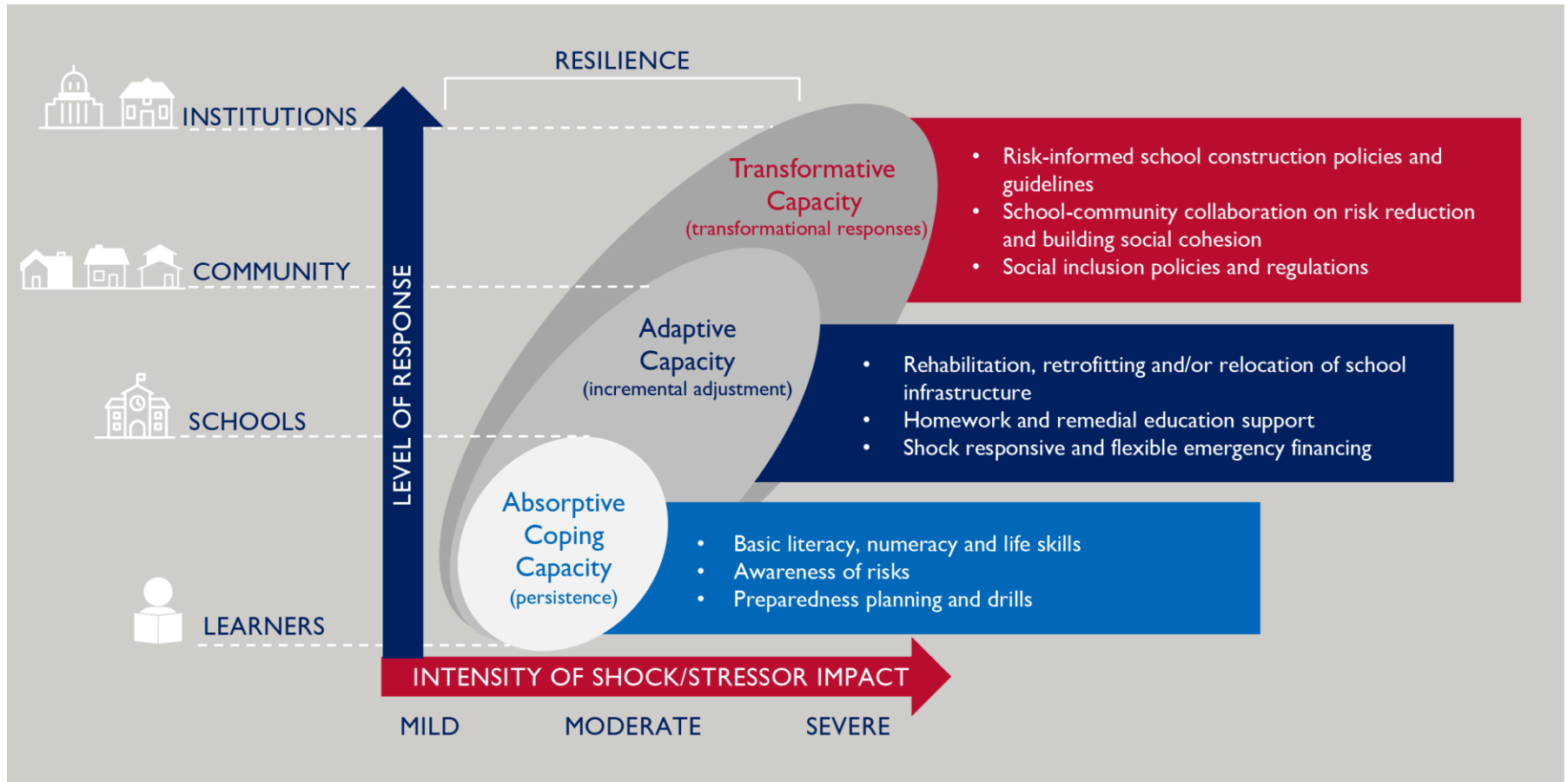
Annex 4 provides a fuller mapping of a range of absorptive, adaptive, and transformative capacities highlighted in guidance and literature from within and outside the Agency as critical to maintaining and supporting quality learning and broader well-being outcomes in times of adversity (UNESCO-IIEP 2011; INEE 2012; Reyes 2013a; Burde et al. 2015; Heaner et al. 2015; Shah, Henderson, and Couch 2019; Shah et al. 2016; UNICEF Education Section 2019).

Oftentimes, as suggested in Figure 2, there is a chronological layering and sequencing of capacities, with absorptive capacities being those immediately triggered or supported in the face of adversity while transformative capacities are seen as longer term and systems-focused. For example, in the event of a natural disaster, a school community may seek to use alternative facilities or personnel to maintain some level of education service provision if existing infrastructures are destroyed or damaged. Over time, however, when the immediate shock has passed but the underlying stressors remain, capacities may be directed toward adapting to the context—either for the sake of maintaining survival or to prepare for a future similar shock. This adaptation may lead to rehabilitation and infrastructure strengthening efforts at a community level. In the long term, there may be an acknowledgement of a need to develop more robust school mapping systems that identify schools and learners at highest risk and to redirect resources accordingly in the aftermath—leading toward more transformative action.

At the same time, **absorptive, adaptive, and transformative capacities should be strengthened concurrently, rather than in a sequenced and chronological progression**. Many of the transformative capacities identified in **Annex 4** are critical in supporting, enhancing, and sustaining the absorptive and adaptive capacities specified at the institutional and community levels. For this reason, transformative capacities need to be identified and programmed early in a crisis event, even when gains are not expected in the immediate term.

3.4 Resilience within a Socio-Ecological Frame

Resilience manifests itself through social processes and within a broader system of relationships, networks, and assets that connects individuals, communities, and institutions to one another. These processes are dynamic rather than static. As a result, capacities across these levels may or may not be realized in ways that support the well-being of all, based on the overall dynamics within a system. In this respect, the resilience of the education system as a whole is more than the sum of the capacities of individuals, communities, and institutions that constitute this system; resilience extends to the ways in which the system is structured to connect these levels together through particular mechanisms of governance, coordination, communication, and partnership.

Specifically, having internal or external "assets" to address adversity may not be sufficient on its own for an effective resilience response (Vaughan 2018). For example, for situations in which these assets are not functionally accessible or available due to other structural or institutional barriers, responses that sustainably support the absorption of, adaptation to, or transformation of key stressors may not be

possible.[10]   Hence, resilience of the system is shaped not only by the varying capacities at each of the levels but also by the existing assets, structures, and processes that mediate relationships and networks at and between these various levels—otherwise known as "conversion factors." Some of the critical conversion factors for escaping poverty, for instance, include the following:

- Access to free, high-quality schooling and health care

- Protection of women's property and reproductive health rights

- Bridging, bonding, and linking social capital

- Gender inclusive and equitable social norms and practices

- Health insurance

- Infrastructure, such as roads, telecommunications, and electricity

- Functioning labor markets and labor laws

- Disaster risk management policies

- Fair and functional policing and judicial systems (Diwakar and Shepherd 2018)

For education programming, this evidence highlights the importance of linkages to efforts in health, social protection, justice sector reform, infrastructure, and livelihoods, particularly if the aim is for education to support the maintenance and improvement of broader well-being outcomes. For example, poverty, gender-based discrimination, a lack of access to quality or affordable health care, and/or insufficient legal protections against violence can all undermine the capacities that education strengthens at the individual, household, or community level. For this reason, the *U.S. Government Strategy on International Basic Education* calls for increased cross-sectoral coordination, arguing that "*education programs should work with other sectors…by considering the impact of transportation, infrastructure, lack of early stimulation and nurture, health, nutrition, social norms, vulnerability to labor exploitation, household income, and extreme weather*" (U.S. Government 2018, 20).

In other words, resilience is not about self-reliance, self-sufficiency, or sustainability—despite the fact that these terms are often conflated. Self-reliance may only be possible when the responses of individuals, households, communities, and institutions work in tandem to support strengthened social cohesion and social accountability and improved and equitable access to basic services (Vaughan and Henly-Shepard 2018). Additionally, Mitchell (2013, 3) specifies that the burden and responsibility of exhibiting resilience must be shared among individuals, communities, institutions, and the state, given that various capacities and responses are required at all levels for well-being to be

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[10]As an example, having stronger coping skills through effective SEL programming may be a capacity in itself at the individual level, but it requires having access to networks of support and care beyond the individual for these skills to be functionally accessible and adaptable.

maintained and advanced in the midst of adversity. This recognition resonates strongly with USAID's efforts in conflict-mitigation and peacebuilding, which recognizes that **change at the individual/personal level must be linked to change at the institutional and system-wide levels, and that, ultimately, addressing underlying factors of vulnerability is critical to the broader resilience agenda** (USAID 2012a, 38). Similarly, USAID (2012b) guidance on resilience identifies the importance of an "enabling environment" as demonstrated by political will and institutional performance; effective leadership at local, national and regional levels; and comparative advantage demonstrated by existing USAID humanitarian/development and USG presence for resilience efforts to take hold. As Béné et. al state, a resilience focus would strive for "*interventions where synergy and complementarity between the three dimensions of resilience are fostered, not interventions where only one of these dimensions is favored to the detriment of the others*" (2012, 25).

4. Programming from a Resilience Approach: Implications for Moving Forward

For partner countries identified as resilience-focus countries within USAID, there is significant demand to better understand what it means to develop and design education programming with such a focus in mind. Drawing on the key concepts presented in section 3, and the wider evidence base discussed in section 2, this section presents a series of principles for thinking more concretely about programming with and for resilience in mind. Where possible, references and links to existing guidance and tools within and outside the Agency are presented.

4.1 Education programming needs to start with an understanding of current risk and resilience factors and their impacts on sectoral priorities and goals.

USAID's *Policy Framework* (2019) identifies the following ways that USAID can build self-reliance: (1) understand every country's context, (2) meet partners where they are in the development journey, and (3) ensure partnerships evolve as countries build self-reliance. Additionally, the *USAID Education Policy* acknowledges that all education programming must be developed with a particular awareness of obstacles that prevent any group of learners from accessing and being effectively included in the education system (USAID, 2018c). This requires understanding and acting within the existing risk and resilience parameters of a particular context. Doing so necessitates a clear understanding of (1) the ways in which the education system (and components of it) are exposed to individual shocks and stressors, as well as the shocks and stressors in combination with one another; (2) the existing capacities (i.e., the networks, resources, and assets) that are drawn upon at each of the levels of an education system, as well as across the education system, in response to these risk factors; and (3) how, in combination, the system either increases or reduces the sensitivity of the adverse impact and either supports the maintenance and strengthening or the reduction of key USAID priorities for the sector. This process is depicted in Figure 3.

Figure 3. **A resilience framework for the education sector** (adapted from Frankenberger et. al. 2012, a USAID publication, with permission)
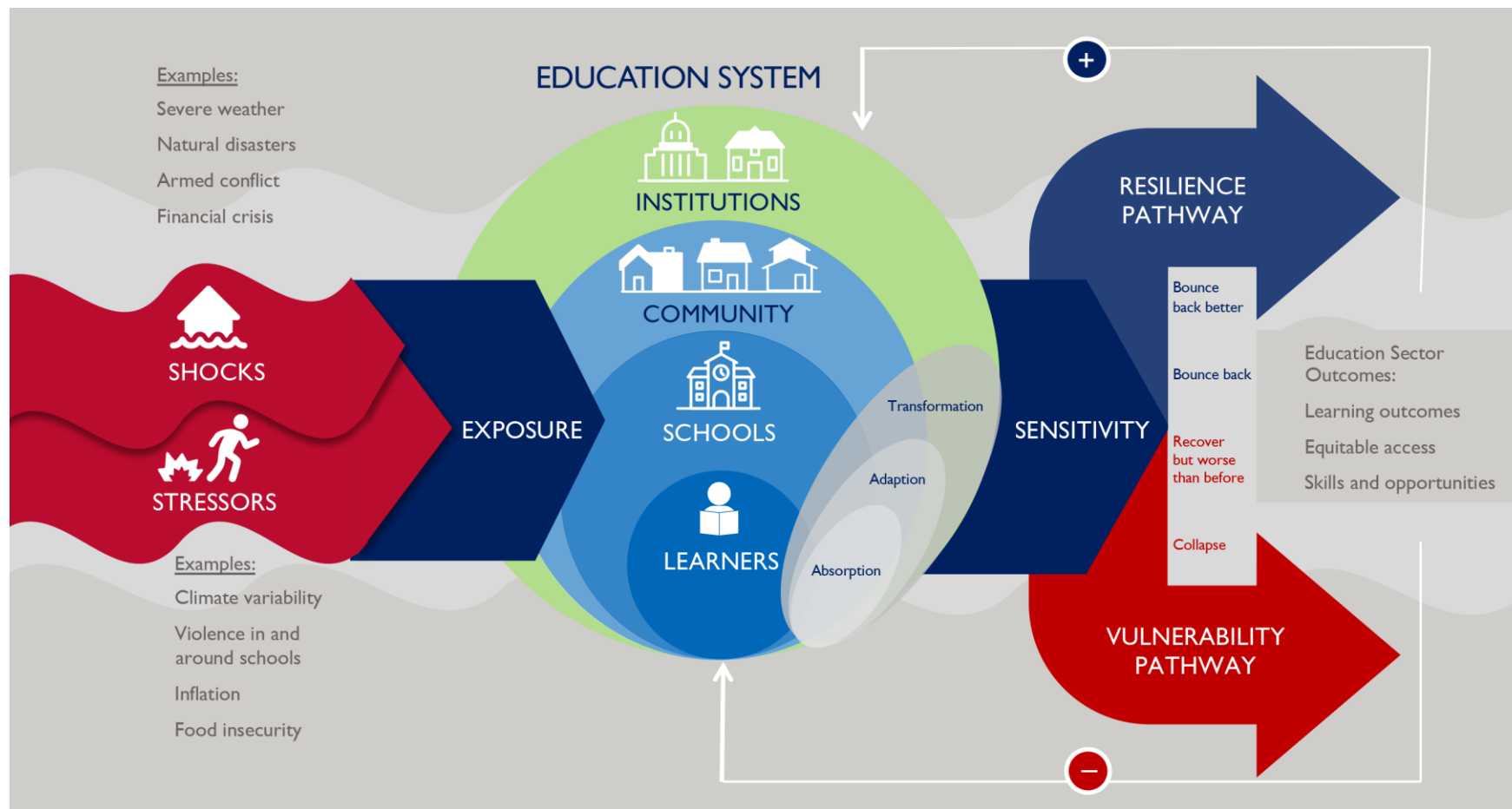
To understand how shocks and stressors are a product of and mediated by the political, social, and economic context, an applied political economy analysis (PEA) may be necessary (Menocal et al. 2018). The PEA is a useful tool in understanding system-level factors that may impact on sector-specific goals, such as (1) the rules and norms that shape governance and decision-making processes; (2) deeply entrenched power structures (at the global, regional, national and sub-national level) influencing the system; and (3) the ways in which behaviors and actions of key stakeholders and decision-makers might be shaped in a context of adversity.

As part of analyzing the context, it is also important to understand "*how people think, engage with one another and their environment and react to and affect changes from the local level to the national (or even global) level*" (Vaughan and Henly-Shepard 2018, 1). The ways in which people understand the interrelationship between risks and their capacities to manage them, otherwise known as "subjective resilience," is now recognized as equally important to more objective and quantifiable dimensions of resilience.

UNDERSTANDING SUBJECTIVE RESILIENCE

Béné, Frankenberger, et. al. (2016) suggest that resilience is determined by more than tangible factors such as income or assets; it is also subjectively constructed. Subjective elements of resilience include risk perception, self-efficacy, and aspirations. People's perceptions about their ability to handle future shocks and stressors affect decisions on short-term and longer-term livelihood coping strategies and their capacities to engage in particular types of responses. They also affect the ways in which networks and relationships between and among various levels of the system (i.e., bridging, bonding, and linking social capital) are construed and connected. This subjective measure of resilience is now generally seen as equally important to more objective and quantifiable measures of resilience, such as household level assets, levels of education, etc.

USAID's *Rapid Education Risk Analysis Toolkit* (Rogan 2019) is a useful complement to the PEA in affording the collection and analysis of data from education stakeholders themselves. RERA helps in the following: (a) identifying some of the key threats, risks, vulnerabilities, and sources of resilience (i.e., assets, capacities, and relationships) from the perspective of education stakeholders themselves, and (b) establishing a set of recommendations based on a resilience framework that is typically multi-sectoral and multi-dimensional in nature. It provides an important starting point for shaping programs focused on strengthening the capacities of individuals, communities, and institutions to respond to risk more effectively and sustainably.

RERA, for example, can be used to understand, analyze, and provide recommendations for programming on the dynamics, interactions, and consequences of a broad range of shocks and stressors, as well as the way they might be addressed within the broader school community by leveraging existing capacities. The RERA is also a tool for identifying cross-sectoral dependencies and opportunities to support the resilience of schooling communities from a system level—a necessary component of any approach that seeks to build capacities at multiple levels.

> **RERA FINDINGS FROM EL SALVADOR**
>
> To date, RERAs have been conducted in conflict-affected areas of Bangladesh, El Salvador, Afghanistan, DRC, Liberia, and Mali. The 2016 RERA conducted in El Salvador found, for example, that high levels of gang violence and the insecurity it creates was a key risk factor influencing the education system in deleterious ways, but that this risk factor does not exist in isolation from others, such as the natural hazards the country faces periodically. Sources of resilience were often found within the school and community environments (e.g., supportive peers and teachers, engaged parents). Importantly, the RERA identified that in addition to better supporting the Ministry of Education to contextualize national planning and programs to high-risk settings in the country, there is a need to work with the Ministry of Justice and Public Security to improve community policing and the patrols that are assigned to school. This is because in many circumstances the community police are seen as a risk rather than protective factor in schools (USAID 2016a).

USAID's *Safe Learning Environments (SLE) Toolkit* (Heaner, 2019) also provides a narrower analytic snapshot of hazards and threats present at the school level, with a specific focus on risk factors in terms of safety and security of learners. It does not, however, examine in any depth the wider community, institutional, or systems-level factors that impact risk, and, importantly, it does not share the same resilience conceptual framework as the RERA.

Beyond identifying risk factors, education programming also needs to capitalize on and strengthen capacities that are already supporting key learning outcomes for vulnerable populations in contexts of adversity. As specified in USAID's *Local Systems Framework for Supporting Sustained Development* (2014), it is important to recognize that in any education system there are already actors and institutions that are committed to maintaining and improving learning outcomes in the face of adversity. The *Local Systems Framework* emphasizes that it is the role of USAID to "*identify and find ways to support these nodes…as they are the poles around which strong and sustainable systems can emerge*" (p. 8). Assessments such as the RERA can be used to identify the following:

- The ways in which schools and communities currently provide support and opportunities to students and teachers through actions or approaches that enable access, permanence, and teaching and learning

- How wider institutions currently plan for and provide strategic direction; integrate learning, social-emotional well-being, and protection-focused support; and provide or direct human, material, and financial resources to support communities at greatest risk (Reyes, Kelcey, and Diaz Varela 2013)

Beyond this, more comprehensive assessments of risk and resilience within the Agency can help with the task of identifying multiple, interacting, and cross-scalar factors (Vaughan and Henly-Shepard 2018).

FINDING OPPORTUNITIES FOR SUSTAINING FLEXIBILITY IN THE LONG-TERM: THE CASE OF MALI

In the aftermath of the 2012 crisis in Mali, the World Bank carried out an education resilience assessment in the country. The assessment identified a number of intangible (e.g., hope and a feeling of being protected in schools) and tangible (e.g., community solidarity when families opened their homes to internally displaced persons [IDPs] and schools welcomed both students and teachers from the north) assets and resources that were deployed to keep children in schools. In many instances, schools provided the structure to bring families and communities together, often through community-school management committees. At a systems level, the flexible policies of the Ministry of Education allowed displaced teachers from the north to find temporary positions in schools in the south and also provided a system-wide structure that fostered school-community interactions during the crisis. Such flexibility promoted volunteerism and the caring support of displaced children by teachers during and after school.

At the same time, the case study identified that there were limitations to these endogenous resources, particularly in how the emergency flexibility of the system, in some regards, was not sufficiently adaptable to the long-term learning needs of displaced learners. Additionally, while host communities were willing to support IDPs on a temporary basis, without sufficient social services from the state, strains on this type of support grew. Through this, the World Bank's assessment was able to pinpoint existing education policies, programs, and resources that could sustain and promote the types of assets that schools and communities developed from working together. It was also able to identify how endogenous and community-response measures could provide a foundation for addressing key issues of quality, community participation, complementary programs, and even planning processes in education (Reyes and Kelcey 2014).

As part of such analyses, **specific attention should be given to identifying how existing adaptive, absorptive, and transformative capacities for resilience can be better supported and complemented by strengthening connections, networks, relationships, and access to resources through USAID support**. It is also critical to identify, acknowledge, and build on the efforts of other partners and programs whose work might already be supporting the resilience of the education system or its components. According to the USAID's *Policy Framework*, the aim of USAID efforts should be to "*amplify bright spots, those beacons of institutional effectiveness, visionary leadership, or grassroots reform*" (USAID 2019, 26).

4.2 Education sector support should identify multiple entry points for strengthening learning and well-being outcomes.

USAID education programs are already well accustomed to placing learners within a broader socio-ecological frame, given that many operate through multiple levers to strengthen learning outcomes (i.e., parents/caregivers, teachers, school leadership, community, and policy reform). When developing sector approaches with resilience in mind, it is essential to think about learners, communities, and institutions from this same systems perspective (see Béné 2018; Béné et al. 2012; Ungar 2018). For example, without strong political will and commitment for educational policies that acknowledge, accommodate, and address the impacts of adversity, community- or individual-level efforts to support and sustain education are unlikely to be sustained in the long-term (Fazey et al. 2007). Likewise, without strong social protection networks and livelihood and labor market opportunities for all, it is unlikely that the acquisition of cognitive and life skills alone can support the long-term resilience of individuals, households, and communities to shocks and stressors they might face.

While USAID's *Policy Framework* (2019) indicates that self-reliance grows from the bottom up—and particularly by working with and through communities and institutions—it is also recognized that it is the systems they constitute and contribute to that determine self-reliance. In the *USAID Education Policy,* this point is reaffirmed with its explicit focus on strengthening systems and local institutional capacity and its acknowledgement that the *"interactions of the numerous and varied components of the education system are essential to its ability to successfully develop human capital"* (USAID 2018c, 20).

Given this policy, strategic and long-term approaches within **USAID education efforts should ideally identify multiple entry points for action—at the institutional, community, household, and individual levels.** Additionally, a resilience-focused approach will require education to be better integrated beyond its contributions to human capital into broader portfolio approaches focused on resilience at a country-strategy level. As discussed earlier, the broader intention of resilience-focused programming is to move beyond sectoral goals to create holistic responses that help partner countries maintain and enhance well-being outcomes in times of adversity. This is accomplished by building capacities from national institutions to individual communities to cope with and adapt to adversity and to be able to mobilize action to counter systemic threats.

Importantly, USAID's guidance on shock responsive programming signals the need for adaptive and agile approaches that create a "*seamless and integrated response from humanitarian and development partners*" (2017a, 2) in recurrent crises contexts.[11] The *USAID Education Policy* and the broader *U.S. Government Strategy on International Basic Education: Fiscal Years 2019–2023* offer several venues for achieving such a response, for example by emphasizing a need to focus efforts on quality and equity, as well as access-related considerations in response to crisis and conflict; and conversely within existing development programming a

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[11] Examples of this include the use of crisis modifiers and social insurance schemes within programs to quickly adapt responses and modalities of support in the midst of a shock.

greater emphasis on mainstreaming risk reduction, inclusion, and protection elements to contextually related risks within and outside the education sector.[12]

4.3 Education sector support can better theorize the relationship between education and resilience.

There is a need to develop new theories of change in program designs, as well as appropriate measurement approaches, that link the resilience capacities supported by education programming to learning outcomes in the short- to medium-term, and to broader portfolio well-being outcomes in the long run.

Figure 4.   **Supporting the journey to self-reliance** (adapted from Simpson et. al. 2016, with permission)

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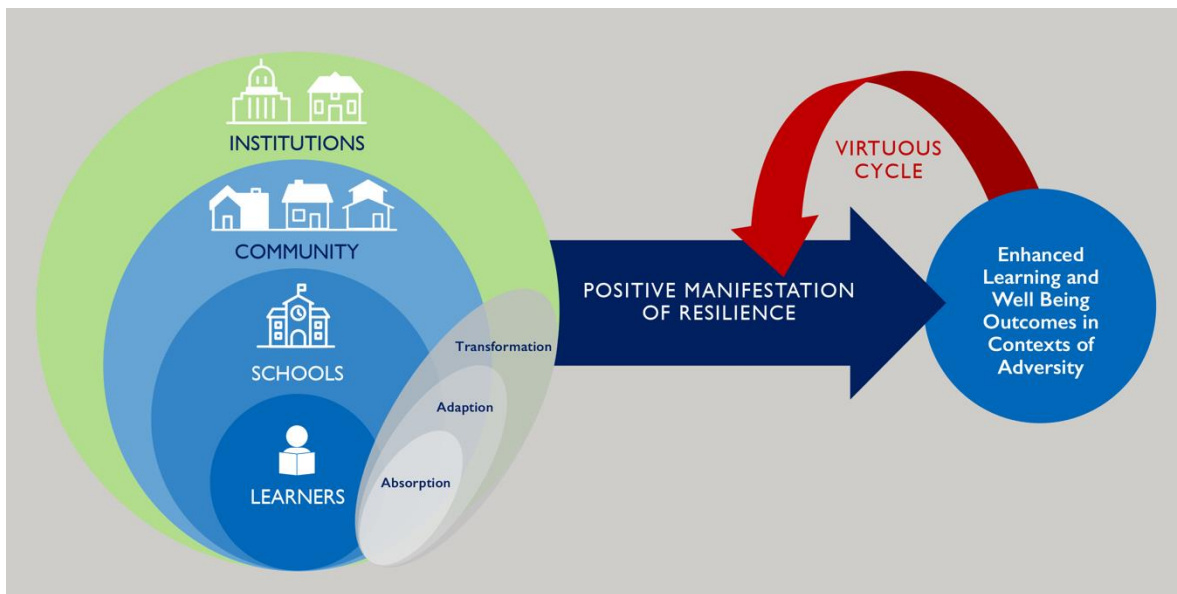
[12] For example, the *U.S. Government Strategy on International Basic Education: Fiscal Years 2019–2023* stresses the fact that "*U.S. Government education programs will collaborate to respond to short-term educational needs while also working with stakeholders from partner countries to address long-term, systemic reforms needed to mitigate future crises and build individual, community, and institutional resilience. The U.S. Government will work with local institutions and across programs to appropriately respond to each circumstance*" (U.S. Government 2018, 38). Much of this reflects an evolution in broader global frameworks such as the Incheon Declaration and Framework for Action (UN 2015), which expresses a commitment to "*work[s] within the overall international development framework, with strong links to humanitarian response, rather than alongside it.*" Likewise, The New York Declaration for Refugees and Migrants (UNGA 2016) pledges to provide quality primary and secondary education in safe learning environments because "*[a]ccess to quality education, including for host communities, gives fundamental protection to children and youth in displacement contexts, particularly in situations of conflict and crisis.*" Efforts such as the New Way of Working (NWOW), a central commitment on coherence made at the World Humanitarian Summit (WHS), have similarly made commitments for humanitarian activity to work within and alongside development efforts in education and other sectors, rather than alongside of it. This has subsequently informed the education strategy of agencies such as the United Nations High Commissioner for Refugees (UNHCR), which now identify mainstreaming of refugees into national education systems as a key priority in times of displacement.

As Figure 4 suggests, **when capacities are enacted/activated in ways that lead to improved learning opportunities for all, it can strengthen the capacities identified as necessary for improved societal well-being—such as reductions in poverty, improved civil society engagement, and a diversified economic base**.[13] In the long run, these wider capacities should promote systems-level self-reliance and better shield the education system from future shocks and stressors, establishing a virtuous cycle.

Conversely, **when a shock or stress affects the education system adversely and leads to diminished capacities to support accessible, quality and protective education <u>for all</u>, there is a real risk that the education system may in fact weaken overall societal resilience by eroding social and human capital in the medium to long term**.

In thinking about broader well-being outcomes that education contributes to, the Self-Reliance Metrics (USAID n.d.), and particularly those metrics related to commitment and capacity, should be reviewed. Examples of metrics that education programing can contribute to, based on the evidence covered in section 1, are presented in Table 1.

Table 1. **A mapping of education's contributions to USAID's self-reliance metrics**

Areas Where Education Contributes to Resilience Outcomes	Associated Self-Reliance Commitment Metrics	Associated Self-Reliance Capacity Metrics
Social capital	Open government Social group equality	Government effectiveness Safety and security Civil society and media effectiveness
Human capital		Poverty rate Education quality Child health GDP per capacity Export diversification
Women's empowerment and gender equality	Economic gender gap	
Internal dispositions to adapt		Safety and security

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[13] See https://selfreliance.usaid.gov/ for further details about the range of commitment and capacity metrics that have been identified by USAID as necessary to support the journey to self-reliance.

The following key questions may help Mission staff to develop a program theory of change that strengthens both education and broader well-being outcomes within a resilience lens. These questions are adapted from ones originally developed by Mercy Corps for USAID in planning for resilience-focused programming:

- **Resilience for Whom?** – This question refers to the key "levels" at which education sector programming is currently supporting and enhancing resilience capacities and responses and/or where it could or should strengthened resilience capacities and responses. These levels might include, but not be limited to, the learner, the school, the wider school community (inclusive of parents and other community leaders), and institutions (e.g., relevant ministries and non-state actors, such as civil society, private enterprise, and religious organizations) that have relationships to education.

- **Resilience of What?** – This question refers to the key absorptive, adaptive, and transformative responses desired or needed at each level to support the maintenance and enhancement of country-level and USAID priorities for education.

- **Resilience to What?** – This question refers to the range of identified and potentially complex and compounding shocks and stressors impacting on the provision of accessible, quality learning for all. For the education sector, this would be founded on a robust risk assessment using tools such as the RERA and SLE, which in combination should provide a clear picture of the specific shocks and stressors of interests and attention in a given program intervention.

- **Resilience through What?** – This question refers to the specific assets that can be further leveraged and strengthened to achieve the responses specified. These might be forms of knowledge, skills, dispositions to strengthen in education programming at the level of individuals and communities, and/or specific institutional capacity development and sector reform initiatives at the institutional or systems level.

- **Resilience to What End?** – This question refers to the key outcomes that an education program can contribute to, in terms of both sector-specific and broader well-being outcomes.

Annex 5 outlines these questions in the form of a planning tool which could be used by Missions in developing a new program design.

In developing or assessing any theory of change which has strengthening resilience capacities as an immediate outcome, recent USAID guidance suggests three key steps:

1. Understand the context, specifically, the population of interest and their political, social, and economic contexts, as well as the relevant shocks and stressors that are of interest and their potential impact on education sector outcomes.

2. Plan for data collection with a clear plan for collecting data related to the responses to specific shock events and across various segments of the population. Data collected should include both objective (i.e., key education indicator data such as achievement, attendance, enrollment, drop-out rates) and subjective measures. For education sector programming, it may also be important to identify ways in which shocks and stressors compound each other and have longer-term impacts.

Hence, longer-term and composite measures of shock exposure, vulnerability, and resilience may also need to be established.

3. Use this data to assess and justify programmatic intervention, identify if there is a need for more targeted humanitarian support within broader developmental programming using crisis modifiers, and monitor how and whether interventions aimed at supporting capacities at various levels are changing how shocks and stressors are responded to or mediated (Pícon 2018; Sagara 2018; Vaughan and Henly-Shepard 2018).

Policy recommendations coming out of the sustainable poverty escapes research (Scott, Shepherd, and Garloch, 2016), as well as the recently produced concept note titled *Measuring Resilience across and between Scales and How to Do It* (Béné 2018), provide both stronger rationale and tools to embrace this M&E approach.

Throughout the USAID program cycle, assessments of risks and resilience should be an ongoing feature in conflict and crisis affected settings. This ongoing analysis is critical for understanding whether and how theories of change informing and shaping the relationships between shocks and stressors, capacities, and resilience responses do indeed hold true, and then refining program design and assumptions accordingly (as depicted in Figure 5). As the USAID *Policy Framework* stresses: "*in these settings, we should review our programming more systematically and ensure that we focus on the core problem set, respond and adapt to local contexts, leverage critical local partners, assess risks, be experimental, and learn from activities that have worked in comparable settings*" (USAID 2019, 41).

Figure 5.   **Developing a theory of change for education programming with a resilience focus**
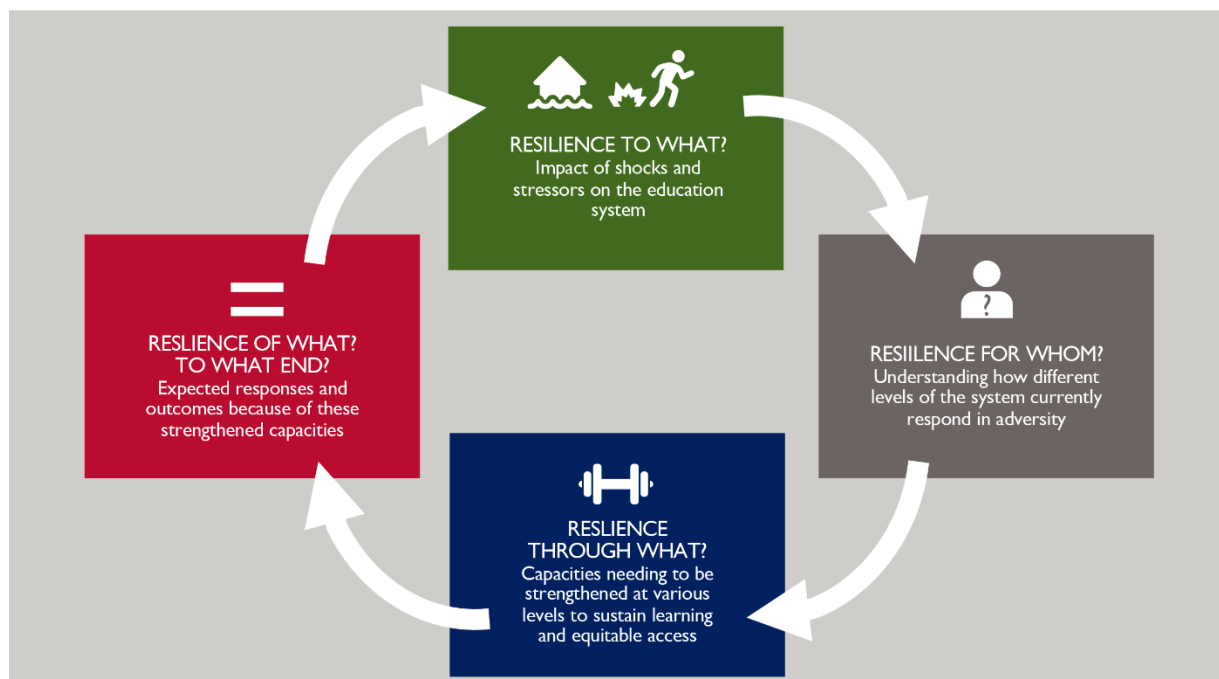
4.4 Education program outcomes also need to strengthen relationships, trust, and networks between and among communities and institutions.

USAID's *Policy Framework* (USAID 2019, 9) acknowledges that societies that have supportive bonds between citizens are more likely to be able to support inclusive development that benefits all citizens—largely because of the fact that they enjoy greater social cohesion, interpersonal safety, and intergroup trust. Key to this inclusiveness is the need for connectivity between various components of the education system—learners, their caregivers/parents, schools, wider communities, and the institutions that support education provision (Ungar 2018). As discussed earlier in the white paper, the ability of individuals, communities, institutions, and systems as a whole to absorb shocks and stressors and to adapt to and/or transform the context of adversity is enabled and constrained by bridging, bonding, and linking social capital (Varela et al. 2013; Béné et al. 2012; Ungar 2018; Fazey et al. 2007).

As part of the Agency's approach to conflict-sensitive programming, **efforts should be designed and managed with an awareness of power, relationships, and networks between and among communities** (USAID 2018c). From a resilience standpoint, programming needs to **give explicit attention to intentionally strengthening relationships, trust, and supportive networks**—in other words, to building social capital within and through education programming. As specified earlier in this section, both the PEA and RERA explore the ways that power dynamics, networks, and relationships function to either strengthen or limit resilience capacities. Using this information as a starting point for considering where program efforts should focus attention is critical.

SUPPORTING TRANFORMATIVE RESILIENCE: THE UNICEF PBEA PROGRAM

In the education sector, the most explicit efforts that have worked from this premise has been UNICEF's Peacebuilding, Education and Advocacy Program (PBEA), which was implemented in 14 conflict-affected contexts between 2012 and 2016 (Shah et al. 2016). The program set out with an explicit focus on strengthening vertical (linking) cohesion, horizontal (bridging) cohesion, and individual (bonding) social cohesion, with three key theories of change:

1. *If education services, both formal and informal, are managed and delivered in conflict-sensitive, equitable, and accountable ways, then they will create incentives for sustainable peace and build resilience to violent conflict.*

2. *If education services, both formal and informal, are planned and delivered in communities in ways that create mechanisms for dialogue and cooperation, build capacities, and strengthen positive relationships among groups, then community resilience to violent conflict will be enhanced.*

3. *If education services, both formal and informal, help alleviate the negative impact of violent conflict on individuals and build their capacity to address the underlying causes and dynamics of violent conflict, then individuals will be able to contribute to social cohesion and more resilient, peaceful societies. This is because education service delivery aimed at strengthening peacebuilding can build individuals' transformative, adaptive, and absorptive capacities to*

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address the psychosocial root causes and impacts of violent conflict and create inclusive social relationships in the home and the community.

Underpinning the program design was the belief that state fragility is not just a product of weak institutions, governance, and security; it is also a lack of social cohesion and resilience of communities and individuals to risks and vulnerabilities and a lack of trust between citizens and the state. The more intersections that occur between a state that is responsive to its citizenry and diverse communal groups and individuals who are networked together and equipped with the capacities to respond, adapt, and transform risks that might undermine social cohesion, the more likely a society will be to possess the inclusive mechanisms necessary for mediating and managing conflict (see Colletta and Cullen 2000).

By the end of the four-year program, the following were examples of the types of activities that had occurred:

- **Vertical social cohesion (across the levels of the system):**
  - Integration of inclusive development, conflict sensitivity, and peacebuilding principles into education sector plans and curriculum, while incorporating education into peacebuilding policies
  - Strengthening of education agencies with knowledge and tools to deliver gender and socially inclusive conflict-sensitive education, while bolstering formal justice mechanisms that interlink with education agencies to protect children
  - Engagement and development of citizens' skills to participate in education policymaking processes; and the broadening of access to education services to traditionally marginalized and excluded groups

- **Horizontal social cohesion (within particular levels):**
  - Revisions in curriculum to recognize diverse constituencies of learners
  - Capacitation of community-based justice and child protection systems to enhance resilience to violence and natural disasters
  - Facilitation of equitable community-level, inter- and intra-group dialogues and interaction through formal and non-formal education opportunities for not only girls and boys and young people, but also parents and community

- **Individual transformation (strengthening of individual resilience capacities):**
  - Detailed revisions in curriculum to foster diversity, gender equality, and appreciation of "the other"
  - Training of community members to take charge of dispute resolutions and reconciliation
  - Extension of extra-curricular activities, alternative education or skills training, and psychosocial support to reintegrate children and youth affected by conflict into society

4.5 Ensure education program approaches enable innovation and variation.

Resilience research suggests the importance of experimentation with new solutions, opportunities to reflect on the impact of experience, and the ability to integrate learning into future efforts to adapt and transform systems (Cutter et al. 2008; Arctic Council 2016). The capacity of systems to adapt to shocks and stressors is greater, for example, if there is a high diversity of functional groups and a higher diversity of different ways in which those within the system can respond to change (Fazey et al. 2007). **The development of resilience capacities requires time, continuity, and repetition, as well as the opportunity to move from simple to more complex challenges** (Bronfenbrenner and Morris 1998).

Within the education sector, resilience is enhanced by forging links among various educational institutions and forms of service provision, across sectors, and between various levels of the system itself. Additionally, partnerships between public, private, and civil society can foster and support innovation and also ensure strengthened crisis preparedness (Shah, Henderson, and Couch 2019). The *USAID Education Policy* stresses the need for "*innovative and entrepreneurial solutions to education delivery and finance*" (USAID 2018c, 18), particularly in contexts in which systems are currently not robust enough to withstand adversity and in which children lack access to quality learning as result. **Supporting greater diversity and variation in pathways for learning, through accredited nonformal or alternative education options, can help to ensure that in times of crisis access learning, and well-being outcomes are maintained rather than hindered** (see Reyes 2013b; Shah 2015).

THE ROLE OF NON-STATE ACTORS AND INSTITUTIONS IN STRENGTHENING RESILIENCE

As recent research conducted by Results for Development (2018) on affordable non-state schools (ANSS) indicates, non-state schools may be better able to mitigate the impacts of conflict and violence because they are often strongly rooted in their communities (sometimes more so than state schools). At the same time, risk exists in working with non-state educational institutions, because they often are established on religious lines and may have restrictive entry criterion or fees that preclude particular groups of learners from enrolling. Such restrictions may present significant challenges for building social cohesion and bridging social capital. As the ANSS research concludes, "engagement with non-state schools may enhance the likelihood of meeting strategic goals around access, learning, building resilience and peace, or supporting marginalized communities. However, donors must also analyze the risks of associating with non-state actors. Donor engagement should intentionally take into account political and political-economy considerations." (Results for Development 2018, 10)

Additionally, **through variation, redundancy in systems, and opportunities for innovation, it is possible to understand why certain elements in a system are less (or negative deviance) and more (positive deviance) affected by the impacts of risk, and why they are better able or less able to maintain or improve their living standards in the face of change** (Pahl-Wostl 2009). The

USAID Education Policy stresses the need for the promotion and testing of innovation, which can range from testing new technologies and seeking new partners to experimenting with collaborative forms of activity design and embracing adaptive and flexible implementation mechanisms (USAID 2018c). Linked to USAID's *Education in Crisis and Conflict Learning Agenda* (2017b), several important questions can be explored through program approaches to supporting learning and resilience outcomes, such as the following:

- How can the education sector support improved education outcomes and contribute to Agency cross-sectoral goals, such as improved resilience?

- What education delivery modalities most effectively improve equitable access to education in crisis and conflict contexts?

- Which education interventions most effectively improve student well-being in crisis and conflict contexts?

- How can USAID education programs contribute to building more resilient education institutions in crisis and conflict contexts?

5. Conclusion and Recommendations

Education serves a critical role in supporting USAID efforts regarding resilience because it has unique qualities as a service in demand; it is scalable; and it serves a core function as a bridge and a link between individual citizens and between citizens and the state. In doing so, education is a critical platform for preparedness, response, and recovery efforts for a wide range of shocks and stressors facing partner countries at present. There is strong evidence about how education contributes to social and human capital, internal dispositions to adapt, improved knowledge of risks and hazards, and gender equality and women's empowerment—all of which are critical components of resilience-strengthening efforts across USAID.

At the same time, there is both an imperative and a need for USAID education programming in all contexts to be better attenuated and focused on understanding the impacts that shocks and stressors are likely to have on past and current investments. Beyond this, however, programming aiming to strengthen resilience needs to identify and support "bright spots," that is, where individuals, households, communities, and institutions are working together to ensure that access and quality learning are not being unduly compromised in the face of adversity. It means better understanding and strengthening of the networks, relationships, assets, and structures that enable these responses to occur. Concurrently, care must be taken to ensure that the overall resilience of the entire education system is strengthened, rather than just constituent parts of it. When efforts support the maintenance or improvement of learning outcomes for some but not all segments of society, grievances are likely to result. In the long run, this may make society more, rather than less, vulnerable.

These overall findings lead to a set of recommendations that will better enable the U.S. Government to meet the commitments on resilience and learning and well-being outcomes outlined in the READ Act, the *U.S. Government Strategy on International Basic Education: Fiscal Years 2019–2013*, and USAID's *Education and Resilience Policies*, along with the associated USAID *Policy Framework*.

1. At a **policy level**, presently, there are several areas where there are inconsistencies between education sector-specific policies and the ways they frame resilience and wider policies and guidance on resilience within the Agency. In particular:

   - Resilience needs to be better framed within USAID education policies and operational guidance as a mediating set of conditions, abilities, assets, strategies, networks and relationships—more simply known as "resilience capacities"—that help protect learning and well-being outcomes in the face of shocks and stressors. While within any given Mission there may be resilience and education outcomes, these outcomes contribute to broader well-being outcomes, rather than being an end in themselves.

   - Greater focus and attention should be given to acknowledging the full range of capacities that education can support (absorptive, adaptive, and transformative), as well as the

multiple levels of the education system at which resilience strengthening can operate (learners, schools, communities and institutions). In particular, more specific guidance is needed on how efforts to strengthen systems and support local institutions (one of the key priorities of the *USAID Education Policy*) can mutually support the resilience of learners and schools.

- USAID education policies and operational guidance need to better recognize that resilience capacities may not always moderate the sensitivity or exposure of shocks and stressors among all citizens equally. Policies and guidance should strongly emphasize the importance of promoting equitable access to quality, safe learning for all under all resilience strengthening efforts.

- Care needs to be taken to ensure that resilience is not conflated with self-reliance. Specifically, it should be made clear that resilience may support the journey to self-reliance—and in particular ensure that countries' progress in this journey is not retarded in the midst of adversity—but such efforts may not lead to self-reliance in and of itself. At the same time, and given that self-reliance outcomes and objectives are positioned at a systems-level, it also must be made clear that self-reliance is not a discrete outcome for individuals, communities, or institutions within the *USAID Education Policy*. Finally, further work and research in specifying the relationship between education, resilience, institutional capacity development, and self-reliance are necessary to fully understand the complex interrelationships between these Agency priorities.

2. Within the Office of Education in Washington, D.C., and USAID Missions there is a critical need for education programming to be better positioned and leveraged when resilience is identified as a key focus or priority for the country or region. This can be achieved by doing the following:

- Ensure that education teams in Missions and Bureaus and at headquarters are active participants in cross-sector resilience working and leadership groups.

- Strengthen the capacity of key members of USAID Bureaus and Missions on how to develop education programming within a resilience frame, drawing on the core messages and ideas of this white paper. This might be done through in-person and virtual-facilitated trainings and seminars, as well as through the production of shorter briefs and guidance notes or how-to guides on programming for resilience within the education sector.

- Identify and document a series of case studies of education programs or activities from within USAID Missions or its partners in which resilience has been a priority; assess the degree to which such efforts fit with the conceptual framework presented within this white paper.

- Better articulate education's contributions to resilience beyond that of the individual and human capital formation and give greater attention and emphasis to education's function in

supporting and strengthening social capital. This is likely to lead to a different mix of program interventions that give more explicit focus and intentionality to building relationships of trust, cooperation, and dialogue among citizens and between citizens and the state through education.

- Strengthen the utilization of analytic tools such as the RERA and PEA to capture key dimensions of risk and resilience through the program cycle; potentially supplement this information with more participatory approaches that capture subjective dimensions of resilience.

- Build the evidence base on education's contributions to broader well-being and self-reliance outcomes in times of adversity with a focus on gathering robust evidence on several of the key questions within the EiCC and self-reliance learning agendas that focus on relevant topics of interest.

- Develop strong monitoring and evaluation guidance and systems to better measure the impacts of education interventions and activities from a resilience approach across multiple time horizons, and which support learning and adaptive management within the Agency. This will necessitate developing new theories of change for education programs that extend beyond immediate learning outcomes to broader well-being outcomes, and which better link inputs and immediate outputs to particular shocks or stressors within the education system.

- Ensure that programs clearly theorize and support relationships between resilience capacities of focus at various levels and the necessary resources, structures, and networks within and outside the education sector that are required to achieve key learning and well-being outcomes.

Annex 1. Justifications for Investment in Particular Subsectors of Education from a Resilience Approach

SUBSECTOR	JUSTIFICATION
Early childhood education	The early years of a child's life set important foundations for their later growth, development, and well-being. Investments in early childhood education have been shown to be a cost-effective and critical strategy for increasing human capital and social and emotional competencies for vulnerable populations (Heckman 2011). Early childhood education: • Has significant potential to disrupt cycles of adversity and violence, as early experiences can alter neural pathways both in relation to physiological responses to reacting to stress and in forming relationships in adulthood (Keverne 2014; Shonkoff et al. 2012) • Can increase psychosocial dimensions of resilience in young people (Bhana and Bachoo 2011; Masten 2014) • Is an important platform for strengthening capacities and changing mindsets and practices of vulnerable caregivers (EPDC 2018) Evidence also suggests that quality early childhood education for disadvantaged children can simultaneously reduce inequality and boost future productivity and income (Elango et al. 2015).
Primary and secondary education	Quality, accessible, and equitable primary and secondary education has enormous and widely recognized benefits: • Children gain critical cognitive capacities, particularly in literacy and numeracy, which are fundamental precursors for success later in life in terms of economic productivity, health, and well-being outcomes, and broader and effective participation in society (World Bank 2018b).

SUBSECTOR	JUSTIFICATION
	• In contexts of adversity, participation in education at these levels is also protective, providing safety for children and youth from sexual or economic exploitation and harm, early marriage, and conscription into armed conflict. • It allows children and youth who are living in or fleeing from dangerous environments to develop coping mechanisms, and it promotes a sense of routine and hope for the future (INEE 2012; World Bank 2018b; Milton and Barakat 2016). • When delivered in an equitable and relevant fashion, schooling enables students to build trusting relationships with peers, those in authority, and state institutions, as well as to find opportunities to exercise their agency and become active citizens in their community and wider society (Novelli and Smith 2011; Shah et al. 2016). • Primary and secondary education is a critical place for building and strengthening children's social-emotional competencies, such as self-awareness, self-management, social awareness, relationships, and responsible decision-making, all of which are critical for effective workforce participation, and in forging effective social networks in times of adversity (Cunningham and Villasenor 2016; INEE 2016). • Completion of secondary education is particularly critical for girls in contexts of adversity as it has wide-ranging benefits to them, their households, their communities, and society.
Higher education	Higher education institutions, its students, and its personnel serve a critical and fundamental role in supporting and strengthening resilience trajectories that aim to adapt and transform the status quo (Milton and Barakat, 2016; World Bank, 2000, 2002). • Individuals who complete higher education see significant increases in their earning potential. • Societies in which higher proportions of the population complete higher education are also more likely to see sustainable poverty reduction, productivity, economic growth, and a more active and engaged citizenry (McMahon, 2009; Oketch, McCowan, and Schendel 2014). • The institutions themselves are also hubs for research and innovation that can develop new adaptive technologies and approaches and transform policies and practices across a range of sectors. Additionally, it is in and from these institutions that thought leaders and technical expertise within a country are harnessed—critical for the longer-term endeavor of

SUBSECTOR	JUSTIFICATION
	strengthening local institutional capacity in responding more effectively to known risks and adversities (Milton and Barakat, 2016; Schweisfurth et al. 2016).
Nonformal education	Nonformal education offers significant potential to extend the benefits of primary and secondary education to populations that have been excluded from education due to crisis and conflict. Nonformal education: • Can ensure that all citizens have access to foundational literacy and numeracy skills, life and vocational skills, and/or critical information about risks in their environment, so that all individuals within a community—not just those who have completed formal education—have the necessary capacities to adequately prepare for and respond to adversities they might face (Myers and Pinnock 2017; INEE 2012; Milton and Barakat 2016; World Bank 2018b) • Can be a critical platform in contexts of adversity for bringing together those most vulnerable to the impacts of risk factors to redress and transform the adversities they face (Shah et al. 2016)

Annex 2. Definitions of "Resilience" across a Range of Agencies

AGENCY	YEAR	TITLE OF PUBLICATION	DEFINITION OF RESILIENCE
INEE	2010	*Minimum Standards for Education: Preparedness, Response, Recovery.*	"The capacity of a system, community or individual potentially exposed to hazards to adapt. This adaptation means resisting or changing in order to reach and maintain an acceptable level of functioning and structure. Resilience depends on coping mechanisms and life skills such as problem-solving, the ability to seek support, motivation, optimism, faith, perseverance and resourcefulness. Resilience occurs when protective factors that support well-being are stronger than risk factors that cause harm." (INEE, 2012, 122).
UNESCO IIEP, GEC, UNICEF	2011	*Guidance Notes for Educational Planners: Integrating Conflict and Disaster Risk Reduction into Education Sector Planning*	"Resilience is the ability of an education system (at different levels) to minimize disaster and conflict risks, to maintain its functions during an emergency, and to recover from shocks. Resilience at the individual level is the ability to apply knowledge to minimize risks, to adapt to emergency situations, to withstand shocks, and to rapidly resume learning and other life-sustaining activities. Resilience can be strengthened when factors underlying vulnerability are addressed. Resilience is the opposite of vulnerability. Resilience is reinforced when the 'inherent' strengths' – of individuals and systems – are identified and supported." (UNESCO-IIEP, 2011, 12).
World Bank	2013	*Education Resilience Approaches: Field Notes*	"Resilience is the ability to recover, perform and even grow or transform in contexts of adversity. This leads to three foundational premises of resilience: i) it necessarily starts from a point of adversity, ii) it seeks to explain an outcome of interest in spite of adversity ; and iii) it is especially interested in the process that fosters strengths, opportunities and the relations between individuals, communities and institutions…In education systems, resilience relates not only to the assets and strengths of education communities but also to the relevant policies and programs that can support at-risk individuals to overcome adversity and have positive learning outcomes." (World Bank, 2013b, 1).

AGENCY	YEAR	TITLE OF PUBLICATION	DEFINITION OF RESILIENCE
OECD	n.d.	*What Does "Resilience" Mean for Donors? An OECD Factsheet*	"Resilience is most often defined as the ability of individuals, communities and states and their institutions to absorb and recover from shocks, whilst positively adapting and transforming their structures and means for living in the face of long-term changes and uncertainty." (OECD, n.d., 1).
European Commission	2013	*Disaster Risk Reduction: Increasing Resilience by Reducing Disaster Risk in Humanitarian Action*	"Resilience is the ability of an individual, a household, a community, a country or a region to withstand, to adapt to, and to quickly recover from stresses and shocks." (European Commission, 2013, 7).
UNICEF	2014	*PBEA: Key Peacebuilding Concepts and Terminology*	"The ability of children, communities and systems to anticipate, prevent, withstand, adapt to and recover from stresses and shocks advancing the rights of every child, especially the most disadvantaged" (UNICEF, 2014, 1).
UNESCO-IIEP	2015	*Safety, Resilience, Social Cohesion: Glossary of Terms*	"...the ability of children, families, communities, and systems to withstand, adapt to, and recover from shocks and stresses (*e.g.,* natural disasters, political crises, epidemics, pervasive violence, armed conflict) in ways that support economic and social development, preserve integrity, and do not deepen vulnerability" (UNESCO-IIEP, 2015, 11).
DFID	2016	*What is Resilience? Evidence on Demand*	"The ability of countries, communities and households to manage change by maintaining or transforming living standards in the face of shocks or stresses without compromising their long-term prospects" (DFID, 2016, 7).
UN OCHA	2011	*Position Paper on Resilience*	"Resilience refers to the ability of communities and households to endure stresses and shocks. Communities and households are resilient when they are able to meet their basic needs in a sustainable way and without reliance on external assistance. Resilience is therefore an end state that implies that vulnerable communities and households have: 1) the capacity to maintain basic functions and structures during stresses and shocks; 2) access to a range of skills and resources that allow them to adapt to changing circumstances; 3) the ability

AGENCY	YEAR	TITLE OF PUBLICATION	DEFINITION OF RESILIENCE
			to anticipate, prevent, prepare for and respond to stresses and shocks without compromising their long-term prospects." (UN OCHA, 2011, 1).

Annex 3. A Mapping of Shocks and Stressors on the Education Sector

TYPE OF SHOCKS OR STRESSORS	INDIVIDUAL IMPACT	COMMUNITY IMPACT	INSTITUTIONAL IMPACT
Environmental – Includes natural hazards such as severe weather events (e.g., storms, cyclones, windstorms), earthquakes, fires, floods, volcanic eruptions, climate variability, and biological hazards	• Death or injury of children, youth, and teachers stops or pauses education. • Psychological stress or trauma of children, youth, and teachers hinders their ability to learn or teach well. • Students miss exams and do not receive credits or certificates. • Displacement or movement of children and youth due to reduced livelihood opportunities may take children and youth out of school. • Decline in food security and higher rates of malnutrition impact learners' cognitive growth and development. • Increased prevalence of disease reduces attendance and possibly enrollment.	• (Temporary) displacement of households may reduce availability of school personnel and teachers • Loss of family and social support network • Damage or destruction of school or route to school • Increased vulnerability to other hazards, shocks, and stressors • Higher long-term risks to school infrastructure due to increased vulnerability to natural hazards • Reluctance of communities to send children to school • Closure of school facilities to prevent further spread of disease and break of continuity in education provision	• Disruption of payroll, teacher training, or inspections • Loss of administrative data and records • Increased costs for reconstruction, retrofitting, or provision of alternative learning environments • Increased costs for retrofitting or moving schools from affected areas • Loss of teachers due to illness or death • Strains on school infrastructure and facilities as they are repurposed to respond to environmental shocks • Depending on the scale of shocks, widespread disruption to

TYPE OF SHOCKS OR STRESSORS	INDIVIDUAL IMPACT	COMMUNITY IMPACT	INSTITUTIONAL IMPACT
	• Stigmatization of learners (or family members) with a disease increases risk of dropping out or irregular attendance.	• Use of school facilities for other purposes, such as housing for displaced families or triage for sick people	continuity of learning across a region or nationally • Disruption of education as schools or learning facilities are used as temporary housing for displaced people
Conflict or violence in or around the school – Includes armed conflict, corporal punishment, harassment or bullying, and gang-related or gender-based violence	• Higher risks to injury and death within school and on the way to and from school • Increased absenteeism, irregular attendance, and dropout, particularly for learners who are victims of violence • Increased prevalence of sexually transmitted disease and pregnancy, and associated stigma, with reductions in access to education for girls and young women • Recruitment of learners into gangs or armed groups in and outside of school • Loss of family members • Psychosocial trauma disrupting learning	• Overcrowding of schools in communities of sanctuary for displaced learners • Disruption of long-term access to educational services • Unwillingness of households and community to send children to school • Permanent loss of teachers and other educational personnel	• Diversion of financial resources away from education provision to address conflict • Destruction or loss of school data, infrastructure, and resources • Lack of access and information on most affected communities • Loss of faith and/or trust in education as an institution by citizens

TYPE OF SHOCKS OR STRESSORS	INDIVIDUAL IMPACT	COMMUNITY IMPACT	INSTITUTIONAL IMPACT
	• Prohibition and/or restricted access to schools • Displacement from homes and community		
Economic – Includes price shock and volatility and financial crisis	• Students drop out or attend school irregularly to support family with livelihood • Increased prevalence of malnutrition or chronic hunger in schools, affecting learning	• Reduced parental and community involvement and engagement in schooling • Greater stress, tension, and violence in learners' homes and the community-at-large • Increase in teacher absenteeism • Closure, merging, or reorganization of schools	• Reduced financial resources to meet recurrent and capital needs of the system • Reduced quality of education provision

Annex 4. A Mapping of Resilience Capacities for the Education Sector

LEVEL	ABSORPTIVE	ADAPTIVE	TRANSFORMATIVE
Learner	• Emotional engagement • Self-awareness • Self-esteem • Self-confidence • Awareness of risks, knowledge of preparedness • Positive peer relations (connected engagement, bonding social capital) • Sense of safety/security in schools and other educational facilities • Hope for future • Enjoyment of schooling • Basic literacy, numeracy, and life skills • Financial savings and productive assets	• Self-efficacy • Cognitive engagement (academic purpose, motivation, achievement) • Attitudes toward conflict and peace • Committed engagement (perseverance, hope, sense of responsibility toward self and others, bridging social capital) • Completion of secondary education • Financial savings, assets, informal lending institutions	• Social mobility • Strengthened Agency • Gender values • Leadership, negotiation, and communication skills

LEVEL	ABSORPTIVE	ADAPTIVE	TRANSFORMATIVE
Schools	- Preparedness planning and drills - Disaster-resilient building/facility construction - Functioning disaster management committees - Protection of existing infrastructure, resources, and personnel against known risks - Child protection policies - Referral mechanisms to specialized services - Non-specialized psychosocial support - School feeding - Advocacy and awareness among school personnel of known risk factors - School policies and codes of conduct toward violence - School safety drills and evacuation routes	- Rehabilitation, retrofitting, and/or relocation of school infrastructure - School contingency planning and emergency preparedness plans - Reporting and grievance mechanisms for matters related to student and staff safety and violence - Positive discipline approaches - Prevention of gender-based violence - Child-centered schools - Democratic and inclusive school committees - Crisis management skills for educational personnel	- Equity-based decision-making regarding resourcing, with targeted support and interventions toward the most vulnerable to risk factors - Gender responsive and transformative teaching and learning approaches
School communities (inclusive of parents and caregivers)	- Transport to/from school - Awareness of known risks and mitigation strategies	- Prenatal services - Early childhood education (ECE) and early childhood care and	- Localized risk prevention and resolution mechanisms - Community norms and attitudes

LEVEL	ABSORPTIVE	ADAPTIVE	TRANSFORMATIVE
	• Community-level contingency planning • Community schooling and/or temporary learning spaces • Informal education • ICTs for learning • Negotiation with gangs/armed groups • Back-to-school advocacy campaigns • Mutual understanding and trust between members of community (bonding social capital)	development (ECCD) interventions • Parenting support and education • Homework and remedial support • School protection committees • Community-driven development and funding tools • Community policing • Coordination across religious and civic institutions	• Access to resources and outside expertise (linking social capital) • School-community collaboration on risk reduction and social cohesion • Mutual understanding and trust between different school communities and institutions (bridging social capital)
Institutions	• Coordination and monitoring mechanisms • Education Management Information Systems (EMIS) with risk indicators • Nonformal education provision • Teacher professional development and support (in-service) • Standard operating procedures for operating in times of shock	• Evidence-based decision-making • DRR mainstreaming into teaching and learning • Shock responsive and flexible emergency financing • Flexible policies and regulations for continuance of learning in times of crisis • Teacher workforce planning (pre-service) • Social and child protection policies	• Judicial systems • Law enforcement (community-based, child-sensitive policing) • Risk-informed school construction policies and guidelines • Teacher support and training on DRR, violence prevention, etc. • Contextual risk analyses to inform sector assessments and planning

LEVEL	ABSORPTIVE	ADAPTIVE	TRANSFORMATIVE
		• Building codes and planning regulations	• Gender: Women in MOE leadership positions, etc. • Guidance on school business continuity/backup learning plans • MOE language of instruction policy (minority languages) • Gender equity and social inclusion policies and regulations • Equity-focused policies and regulations • Sustainable and long-term financing mechanisms for education • Civil society and private sector engagement • Public health facilities

Annex 5. A Framework for Programing for Resilience in the Education Sector

RESILIENCE FOR WHOM?	RESILIENCE FOR WHAT?	RESILIENCE THROUGH WHAT?	RESILIENCE TO WHAT?		RESILIENCE OF WHAT?		
	Key outcome(s) desired	Networks, assets, relationships, and processes that can be built on to better achieve desired responses	Indicative key stressors and shocks		Indicative key responses that will enable the specified outcomes		
			Internal	External	Absorptive	Adaptive	Transformative
Learners							
Schools							
School communities							
Institutions							
System							

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