Education Resilience Approaches (ERA) Program
A complement to the Systems Approach for Better Education Results (SABER)

77760

What Matters Most for Students in Contexts of Adversity:
A Framework Paper

Joel Reyes

What Matters Most for Students in Contexts of Adversity:
A Framework Paper

Joel Reyes

About the Series

Building strong education systems that promote learning, life skills and social cohesion is essential in any country. However, contexts of adversity (including natural disasters, political crisis, health epidemics, pervasive violence and armed conflict) can negatively impact the ability of education systems to deliver such services. At the same time, paradoxically, education can help mitigate the risks of such adversity, and enhance the capabilities of children and youth to succeed in spite of the adversities they face. It is precisely this which is captured by the concept of "resilience": the ability of human beings (and their communities and the institutions that serve them) to recover, succeed, and undergo positive transformations in the face of adversity.

Forty years of research on human resilience has shown that children, adolescents, youth and adults can recover from crises and perform in spite of adverse situations and contexts. In the field of education, evidence on resilience and school effectiveness has identified several factors that correlate with learning and school success even when learners are exposed to risks. Emerging empirical evidence points to the opportunities for change that contexts of adversity can facilitate: improving education systems, (re)-building back better, and finding a space to introduce reforms that can improve the relevance of an education system as per the needs of some of the most vulnerable learners.

In 2011, the World Bank Group launched its Education Sector Strategy 2020: Learning for All. The strategy defines the Bank's collaborative agenda with developing countries for the next decade, notably through supporting learning and strengthening education systems. To support the implementation of the strategy,

The World Bank commenced a multi-year program to support countries in systematically examining and strengthening the performance of their education systems. This evidence-based initiative, called SABER (Systems Approach for Better Education Results), is building a tool kit of diagnostics for examining education systems and their component policy domains against global standards and best practices around the world. By leveraging this global knowledge, SABER fills a gap in the availability of data and evidence on what matters most to improve the quality of education and achievement of better results. The SABER tools are being developed across education levels (Early Childhood Development, Workforce Development, Tertiary Education) and with a focus on important quality resources and system support (Teachers, Learning Standards, Student Assessment, Education Technology/ICT and School Health and Nutrition) and governance and finance elements (School Autonomy and Accountability, School Finance, Information Systems/EMIS and Engaging the Private Sector). Also, other quality education system support issues in schools and broader societal contexts are addressed by SABER, mainly Equity and Inclusion and Resilience in the face of fragility, conflict and violence.

For education systems and settings in contexts of extreme adversity, The World Bank has developed a complementary set of tools to SABER, the Education Resilience Approaches (ERA) program. ERA complements SABER's evidence-based diagnostics through strategies and instruments to identify the risks faced by students, teachers, and educational institutions operating in difficult circumstances. Moreover, ERA also helps education systems identify the assets and positive engagement among the education communities (students,

parents, teachers and school administrators) that if supported systematically can harness a more effective response towards the safety, socioemotional well-being and learning of children, adolescents and youth. ERA opens an opportunity to conceive and develop appropriate ways in which education systems can encourage and support their positive performance and transformation beyond the adversity they face.

Through a set of tools that attempt to capture the complexity in fragile, conflict, and/or violence affected situations, the ERA Program seeks, as SABER, to provide a systematic process to collect evidence that can support local efforts to improve academic and non-academic services in contexts of adversity. In this way, the ERA model is founded on the premise that individuals, organizations and societies possess inherent assets and engagement capacities that—if recognized and fostered—can not only support the recovery of education systems after crisis, but can also contribute to positive student performance and learning outcomes.

About the Author

Joel Reyes is Senior Institutional Development Specialist (Education Sector) in the Human Development Network of the World Bank (HDNED). He leads the World Bank's work on Education Resilience, including the provision of technical assistance to developing countries in situations of adversity, conflict and / or violence. With over 20 years of experience in the development of education systems in difficult settings, he has supported and led World Bank teams in Colombia, El Salvador, Guatemala, Honduras, Afghanistan, and South Sudan and advised and evaluated education programs in many other conflict and fragile contexts around the world.

Prior to his current role focused on research and the development of analytical tools, he was an education team leader in the Latin America and South Asian departments within the World Bank Education Sector. Joel Reyes is also a doctoral candidate in International Education from the University of Sussex (UK) and has been awarded Masters in International Development from Columbia University (New York) in 1993, and Organizational Development from Johns Hopkins University (Baltimore) in 2000. In addition to his duties at the World Bank, he also co-chairs the Steering Committee of the International Network for Education in Emergencies (INEE).

Ackowledgments

Abstract

This document presents the conceptual background and operational tools of the World Bank's Education Resilience Approaches (ERA) Program. It begins by grounding the program in its theoretical evidence base before discussing the guiding principles and tools that operationalize this.[1] Building strong education systems that promote learning, life skills and social cohesion is essential in any country. However, contexts of adversity (including natural disasters, political crises, health epidemics, pervasive violence and armed conflict) can negatively impact on the ability of education systems to deliver such relevant services. At the same time, paradoxically, education can help mitigate the risks of such adversity and enhance the capabilities of children and youth to succeed in spite of the adversities they face. It is precisely this which is captured by the concept of "resilience": the ability of human beings (and their communities and the institutions that serve them) to recover, succeed and undergo positive transformations.

The theoretical foundations of ERA recognize the human capacity to create meaning from adversity, define a positive future purpose, develop skills and competencies, connect with others and manifest personal and social accountability. In addition, ERA stresses the central role of education systems to understand the risks faced by children and youth, to protect the assets and opportunities inherent in education communities, and to provide the school and educational supports to help students navigate the difficult environments in which they live.

This paper presents the tools developed under the ERA Program and several key principles that guide the application of a resilience process. The tools offer a systematic process to improve education system alignment to a resilience-based approach and ensure relevant quality education services for learners affected by difficult contexts, especially conflict and violence. The annexes provide more detail on how the tools can help align education strategies, plans and services in the areas of access, learning quality, equity, capacity building and participation, amongst other education sector goals.

---

1   For further discussion of the resilience-based evidence, please refer to the "Education Resilience Literature Review" (forthcoming).

Contents

What is education resilience and why does it matter?

Education in contexts of violence, conflict and fragility

With tens of millions of children out of school and substantial gender gaps remaining, efforts to achieve the MDGs must continue. Gains in access have also turned attention to the challenges of improving the quality of education and accelerating learning…. The development benefits of education extend well beyond work productivity and growth to include better health, enhanced ability to adopt new technologies and/or cope with economic shocks, more civic participation and even more environmentally friendly behavior.
World Bank Education Strategy 2020

Education systems have the potential to mitigate conflict and contribute to peace-building in the longer term, but also to exacerbate and perpetuate violent settings, depending on the nuances of policies, designs, and implementation efforts…
The World Bank, World Development Report 2011

Violence, conflict and other contexts of adversity present a significant challenge to the pursuit of the Millennium Development Goals (MDGs). Moreover, as highlighted in the World Development Report 2011, countries affected by violence and conflict often face severe development challenges and many are characterized by weak institutional capacity and political instability. The impacts of pervasive violence and conflict are especially felt by the poor and traditionally excluded communities

not least because such contexts often exacerbate existing inequity in social service delivery, including education services (World Development Report, World Bank 2011).

However, research and practice in situations of adversity have also highlighted how education can protect children and youth at-risk by providing them with an appropriate environment within which to nurture their learning and psychosocial well-being.[2]

The case for education resilience: Theoretical evidence

Reciprocal caring, respectful, and participatory relationships are the critical determining factors in whether a student learns; whether parents become and stay involved in the school; whether a program or strategy is effective; whether an educational change is sustained; and, ultimately, whether a youth feels he or she has a place in this society. When a school redefines its culture by building a vision and commitment on the part of the whole school community that is based on these three critical factors of resilience, it has the power to serve as a "protective shield" for all students and a beacon of light for youth from troubled homes and impoverished communities.[3]

Studies on resilience show that human beings can foster strengths and coping abilities that allow them to transform crisis situations into opportunities. Education resilience research provides evidence that many students succeed academically in spite of adverse economic conditions (Gamerzy, Masten and Tellegen 1984; Gizir and Aydin 2009), homelessness and transitory situations (Masten et al. 2008), conflict-affected settings (Boyden 2003), social exclusion (Borman and Overman 2004) and

---

2   See for example, Nicolai and Triplehorn (2003); INEE Minimum Standards for Education (2010).
3   Bonnie Benard, "Fostering Resilience in Children" (1995).

other overwhelming risks.

Although the social and economic environment of a learner is an important predictor of academic results, resilience evidence—especially from longitudinal studies—has identified additional success factors that strongly correlate with positive school and life outcomes of children and youth living in adverse contexts.[4] These include individual factors (e.g., hope, purpose, social competence, problem solving, and autonomy) and environmental ones (e.g., care, support, high expectations and opportunities for meaningful participation in school, family and the community). Table 1 below presents some synthesized resilience processes that can be extracted from the available literature.

Table 1.

What matters for individuals and groups in contexts of crisis and adversity?
Making sense and finding purpose (cognitive engagement).[5] Individuals facing adversity seek to make sense of the situation they are experiencing and find a purpose that in turn will allow them to make meaningful and positive decisions.
Seeking identity and well-being (emotional engagement).[6] Adversity engages ones' emotions and feelings (e.g., anger, pain, sadness, hope, empathy, humor, etc.), providing an opportunity to manage and regulate them, as well as to develop a concept of 'self' through self-awareness, self-esteem and self-confidence.
Developing control and competence (proactive engagement).[7] When faced with adversity, individuals seek to take some control over their situation through the development of new competencies and skills. In this way individuals aim to satisfy basic material needs, such as clothing, food and shelter, but also long-term life purposes.
Connecting with others (connected engagement).[8] Individuals seek support from others during times of adversity. Within a group, individuals find protection, identity and comfort—and often a connection to something larger than oneself such as social justice or spirituality.
Committing and being accountable (committed engagement).[9] Individuals during times of adversity move toward adaptive outcomes through perseverance, a sense of accountability, and responsibility to themselves and others.

---

4   See for example, Emmy Werner and Ruth Smith, *Overcoming the Odds: high risk children from birth to adulthood* (1992).

5   This engagement process—between one and one's environment—is grounded in cognitive psychology; see for example Neenan (2009) on cognitive-behavioral principles applied to resilience.

6   Masten and Obradović (2006) call this adaptive process "internal integration".

7   Masten and Obradovic (see preceding note) refer to this adaptive process as "external adaptation".

8   Spirituality, religion, social justice or other larger forums for connection that transcend the individual and the group have been documented as protective factors in studies of individuals in contexts of overwhelming adversity. See for example Ungar (2011; 2012).

In addition to the above individual level resilience processes, more recent research emphasizes the role of community, culture and available and accessible social services in fostering resilience in children and youth.[10] Indeed, research shows that when confronted with overwhelming adversity, students inherently engage in a dynamic process with their environment that, if supported by educational institutions, can help them find meaning and purpose in education, develop new skills and knowledge, build positive and supportive relationships and embrace accountability and justice.[11]

Education systems can support resilience

After families, schools are most influential in a child's development, values formation, learning and skills acquisition. Thus, education systems can play an important role supporting both the well-being and education outcomes of students in contexts of adversity. To do so, education policies programs and schools are called upon to consider the strengths and assets of education actors and to support students to make sense of the adversity they experience, find purpose in education and develop needed competencies and skills. Providing resilience-relevant services may not require designing new education programs. Existing formal and non-formal education programs can be framed, adapted and integrated to foster the cognitive, social and emotional strengths of students.

Existing strategies—for access, learning and school management—can be made relevant to adverse contexts and can contribute to improving education quality and provide resilience-building opportunities. For example, teaching and learning strategies such as peer-to-peer learning, community-based projects, teacher learning circles, student led clubs and other cultural and extracurricular activities can foster both learning and socioemotional well-being. Moreover, the way educational success is assessed and measured can also take into account academics, behaviors and values of students and contribute to mitigating the impact of risk exposure. In particular, school management approaches can promote the meaningful participation of parents, students and teachers to support the school success and well-being of students at-risk. For example, education programs are increasingly making use of community-based approaches to school management during emergency response, recovery and development in situations of acute and chronic crisis. During these times, schools and communities can provide the structures for connection, mutual support and commitment to learning, protection and well-being among students, school staff and families.

Over forty years of research on human resilience has shown that children, adolescents, youth and adults can recover from crises and perform in spite of adverse situations and contexts. However, fostering such resilience also requires institutional support and social services. In the field of education, emerging

---

9   Researchers and practitioners who work in programs for youth in adverse contexts both identify the needs for structure and boundaries, opportunities for responsibility and accountability, and restorative discipline and justice. These are all processes grouped into what the ERA Program calls the "commitment dimension." See for example, Krovetz (2008); Cefai (2008); Wachtel and Mirsky (2003).

10   Ungar (2008; 2011; 2012).

11   Ungar (2008; 2011; 2012). See for example, Benard, *Resiliency: What we have learned* (2004); Borma and Overman, *Academic Resilience in Mathematics among Poor and Minority Students* (2004); Cefai (2008); Comer et.al., *Rallying the Whole Village: the Comer process for reforming education* (1996); Gizir and Aydin, *Protective Factors Contributing to academic of students living in poverty in Turkey* (2009); Krovets, *Fostering Resilience: Expecting all students to use their minds and hearts well* (2008); and Masten et.al. *School success in motion: protective factors for academic achievement in homeless and highly mobile children* (2008).

empirical evidence points to the opportunities that contexts of adversity also bring to transform education systems, build back better, and find a space to introduce reforms that can improve the relevance of education as per the needs of some of the most vulnerable learners.

Education systems' "own" resilience

From an institutional perspective, empirical evidence from research on organizations in contexts of crises and chronic adversities also points to the opportunity of fostering institutional resilience within education systems. Education systems require: (i) understanding of the critical and latent risks affecting education actors and institutions; (ii) strengths-based goals within their strategic plans, objectives and indicators; (iii) programs that aim to mitigate risks and build resilience assets in education institutions and communities; (iv) opportunities for innovation, flexibility and constant learning; and (v) participatory management to motivate staff and hold management accountable for results (Valikangas 2010; Masten 2008; Weick and Sutcliffe 2007). Institutional resilience in education systems also requires forging external links among agencies, across sectors and with clients and beneficiaries (Gu-

lati 2009). Studies on service delivery in conflict and fragile contexts also stress the following determinants of institutional resilience: the State's capacity and willingness (Baird 2010; OECD 2008); public, private and civil society partnerships (EFA 2008; Brinkerhoff 2007); and crisis preparedness (including conflict and disaster risk reduction; INEE 2012).

Based on the existing and growing evidence on resilience, the ERA model is founded on the premise that individuals, organizations and societies possess inherent capacities that—if recognized and fostered—can not only support the recovery of education systems after crisis, but can also contribute to positive student performance and learning outcomes. Although resilience processes can be applied across all types of difficult situations and risky environments, the ERA Program has made it a priority to understand resilience in contexts of pervasive violence and conflict. This may manifest in a variety of forms including armed conflict, genocide, displacement, crime, delinquency, social tension, school and family violence, and psychological oppression (e.g., bullying, discrimination and social or group-based hate). In these contexts, quality and relevant education—guided by a resilience lens—can also enhance the opportunities for broader social transformation.

Where can the ERA Program be applied?
While the ERA Program has been designed in the first instance to support the delivery of education services in fragile and conflict-affected states, this certainly does not preclude its application to other contexts of focalized adversity (e.g., conflict and violence) within other low and middle income countries or even in regions across countries. Indicative of this, much resilience research has been carried out in specific disadvantaged communities, neighborhoods or even in specific school settings in developed countries. Thus, in keeping with resilience theory and in order to support any type of setting where learners are exposed to risks, the ERA Program and its tools can be applied across a variety of contexts. Subsequently, within a country, more than one ERA Case Report can be prepared to better understand the complexity of adversity and resilience-based situations.

The Education Resilience Approaches (ERA) framework

The empirical evidence base

The previously discussed theories of individual, group and institutional resilience provided the foundations of a framework to guide the collection of contextualized evidence, in-country policy dialogue, and the design of programs that are relevant to students and education institutions striving to recover, perform and even transform in contexts of adversities. The empirical evidence base comes from correlational and randomized studies, as well as case studies, and permitted the identification of four integrated and overlapping components as discussed below: (i) understanding and managing adversities; (ii) identifying and fostering the assets and positive engagement of individuals and groups in education communities; (iii) providing relevant school services with community partnerships; and (iv) in general aligning the education system policies, programs and resources to support a resilience approach in contexts of adversity. A summary of the evidence follows.

Understanding adversities

Adversities—and especially conflict and violence— affect children and youth cognitively, emotionally and behaviorally across all stages of their development (Clemens 2006). For example, a study of 791 children and youth aged 6-16 in Sarajevo in 1994, found that 41 percent experienced significant Post Traumatic Stress Syndrome (PTSD) symptoms (Allwood, Bell-Dolan and Husain 2002). In Afghanistan, after the ousting of the Taliban, a study on mental health found that 75 percent of women and children in the sample also suffered

from PTSD (Azimi 2004). Children and youth can experience trauma differently. Although the emotion of fear in small children is a normal manifestation (fear of darkness or of being alone), in contexts of conflict and violence, various studies have identified that even small children verbalize fear of social violence, murders, nuclear attacks and terrorism (Pearson 2003).

Regarding adolescents and youth, adversities affect their sense of identity; of capacity, performance and future purpose; and of group belonging (Burham and Hooper 2008). Although girls tend to express their feelings of vulnerability more than boys, boys can also be deeply affected (Burham and Hooper 2008) and externalize trauma through dangerous, self-destructive and risky behaviors (Pat-Horenczyk et al. 2007). Adolescents and youth seek answers to ethical, social and existential questions regarding the adversities they experience which, if they remain unanswered and misunderstood, could contribute to detrimental cognitive, emotional and social capacities and skills (Carlson 2003). Understanding and making meaning of the adversities that affect them—through expressing emotions, finding a purpose for the future, and having an opportunity to critically understand the risks they are exposed to—is often times the first empowering step in vulnerable and uncertain situations (Clemens 2006; Jackson 2006).

Contexts of adversity—acute, chronic or cumulative—also deter learning. Cognitive and emotional functions are deeply affected by traumatic experience, including the mental executive functions which are crucial for higher-level learning and attention (Greenberg, Kusche and Riggs 2004). Stress studies have linked adversity to a shrinkage of the hippocampus in the limbic system which consolidates short- to long-term memory (a critical part of learning), and to hyperactivity in the amygdala (also in the limbic system),

which processes information tied to negative and positive emotional reactions. Pathways between the limbic system and the prefrontal cortex, where cognitive executive functions, attention and working memory are processed, are also affected by chronic stress (McEwen 2012).

Fostering Social, Emotional and Academic Assets

Evaluated programs, such the Promoting Alternative Thinking Strategies (PATHS) program in the United States, seek to address and reverse the relation between detrimental socioemotional trauma and learning. For example, PATHS aims to help elementary students verbalize, process and understand their feelings; to foster positive relations with others, and; to plan and improve their problem solving, learning and accountability skills. A randomized study of the program included control and treatment groups of students from regular classrooms, from at-risk groups, and deaf children (Greenberg, Kusche and Riggs 2004). For both regular and at-risk students, the study found improvement in social problem solving, emotional regulation, as well as in academic foundational areas (non-verbal reasoning, planning skills, and the ability to analyze, synthesize and reproduce abstract figures). For the at-risk students' treatment group, it also found a strong trend for mathematics achievement. For the deaf children treatment group, in addition to enhanced socio-emotional skills, the study found significant improvements in the Reading section of the Stanford Achievement Test (Greenberg, Kusche and Riggs 2004).

The importance of positive cognitive, emotional and behavioral skills in spite of contexts of adversity has also been supported by resilience research. The seminal longitudinal study by Emmy Werner and Ruth Smith (1982,

1991, and 2001) followed for more than 30 years a group of more than 500 children born in extreme poverty and exposed to other risks, such as parental alcoholism and other pathologies. Although 1 out of every 5 children grew to become adults with serious behavioral and learning problems, many more lived successful, productive lives even when some of them also experienced initial behavioral and emotional problems. The determinants of resilience in these participants found by the study included individual assets such as optimism, tolerance, problem solving, sociability, flexibility, etc. Also, resilience was fostered by external sources of support such as an intact family unit (in spite of adversities), role models and guidance (eg. a supportive adult, partner or spouse, and even military service), caring and supportive social networks (eg. friends, religious groups), and education opportunities and significant experiences in school (eg. a supportive teacher, a favorite course, a turning point). This and many other studies on resilience (see for example, Benard 2004; Ungar 2012) demonstrate the need to identify, use and protect the assets of children and youth in contexts of adversity, and promote supportive engagement with others.

Relevant Classroom Instruction and School Management

Given the central position of education institutions to both mitigate risks and foster resilience in children, adolescents, youth and even adults, it is important to identify the research and evidence that point to such relevant school and education community support. Zins et al. (2007) stress that schools have a central role to play in supporting the emotional, social and cognitive learning of children and youth in an integrated way. They show that the social-emotional components can no longer be an "add-on" or "complement" to academic learning, but are an inherent and

enabling component to academic and school success—for all students but especially for those in contexts of adversity, risk and stress. The Collaborative for Academic, Social and Emotional Learning (CASEL) has done much research in this area. For example, a review of 80 nationally available school-based programs in the United States (34 percent of which formally integrate socioemotional skills in the school curricula) found that 83 percent of the programs produced academic gains (CASEL 2003). Another landmark study assessed 213 social and emotional support programs for 270,034 students. These psychosocial activities were integrated into the core instructional and management activities of schools such as classroom instruction, school management, extra-curricular activities, parental and community participation. It found improved social and emotional skills and positive engagement among education actors, and also reflected an 11 percentile-point gain in achievement (Durlak, et al. 2011). An earlier meta-analysis (Payton, et al. 2007) of 317 socioemotional programs involving a sample of 324,3003 students found improvement in achievement scores by 11 percentile points in children without pre-defined behavioral problems and 17 percentile points in at-risk children. The programs that correlated with the most positive effects across academic, social and emotional skills were those that had been directly implemented by school staff within their core instructional and management activities (not implemented by outside actors—researchers, university students, counselors—and not outside the regular classroom and school practices).

Community and Parental-School Involvement

Lastly, at the school level, education resilience evidence calls for engagement from a broader education community composed not only of students, teachers and school managers, but also of parents and other community actors (Benard 2004). Family support and involvement in schools has been correlated with high student academic performance, along with high educational aspirations and study materials (Rumberger 1999). Community and parental participation has been identified as an important determinant of students' school success, along with school policies and practices, caring classrooms and school environments, and positive relationships between students (Christenson and Havsy 2004). Family support and involvement is even more important in contexts of adversity, conflict and violence. In Afghanistan, where more than 8,000 schools have community-based management committees (called Shuras), Glad and Hakim (2009) found that the participation of mothers and fathers—and other community members—not only created a positive school climate but also protected schools from attacks. A study of 10 community driven development programs in seven Sub-Saharan countries found positive contributions to social cohesion, although positive and negative impacts depended on the context of each case study (King, Samii, and Snilsveit 2010). Also, school-community participation can contribute to school success through relevant learning expectations and support (Bryan and Henry 2008; Barrera-Osorio etal. 2009). In post-civil war El Salvador and Nicaragua parental involvement in school management proved to support improvement in standardized test scores (Barrera-Osorio, et al. 2009). Finally, school-community support in contexts of adversity can not only promote student resilience but can contribute to transform education practices and even education systems. For example, a multiple case study of an education program in several at-risk or marginalized communities in the United States found that community-based capacity building, group empowerment, relational community building and cultural change can lead to

19

transforming social relations and institutions (Maton, 2005/2008).

Education Systems Resilience Alignment

A mass of evidence has been generated to support the notion that education systems in contexts of adversity would do well to support the identification and mitigation of risks faced by students; the identification, use and protection of assets in education communities; and the relevant school-community supports for children and youth in contexts of adversity. These supports must come in the form of resilience-relevant policies, programs, and human, financial and material resources. A case study of the education system in Rwanda after the 1994 genocide found explicit reference to the role of the education system in "creating a culture of peace, emphasizing positive non-violent national values, and promoting the universal values of justice, peace, tolerance, respect for other, solidarity and democracy" (Arden and Claver 2011: 7). Equally, in post-conflict countries around the world (e.g. Guatemala, El Salvador, Nepal, Afghanistan, Central Africa Republic and Madagascar), education systems proactively provided the structures to sustain the participation of parents and communities in schools through legal status of community schools, financial support to pay teachers and school maintenance, and through systematic procedures for creating community-based school committees, school improvement plans, and per-capita based grants (Barrera-Osorio et al. 2009). These are only example of the different ways education system structures and services can align to elements that have been identified by different research studies as contributing to resilience in education settings.

The above sample of research evidence contributed to the design of the ERA framework. Given the overlap and dynamic relations be-tween each of the areas discussed above, the ERA framework integrated them across four components, which are presented next.

A four-level integrated process for fostering education resilience

The ERA Program is based on the previously discussed human, institutional and social resilience premises that have been operationalized for education systems. It seeks to continue to fill the evidence gaps in order to improve the quality and relevance of education services in crisis situations, post-conflict contexts and chronic adversities, as well as to prevent or prepare for overwhelming difficulties. Its ultimate goal is to contribute to an informed in-country dialogue on how to align existing education policies, goals and programs for a resilience approach to education service delivery.

ERA's systemic framework is divided into four education resilience components and their corresponding associated policy goals. The first two components aim at better understanding the adversities experienced by education communities (students, parents, teachers and education administrations), but also grasp their assets and engagement processes. It is precisely these individual assets and opportunities for group engagement that can foster recovery, competence and social cohesion. The third and fourth components consider how schools and education systems can mitigate the previously identified risks and support education communities by fostering their resilience assets and engagement processes. In order to provide strategic guidance to education systems, ERA is grounded in an inductive and context-based approach by providing a set of tools for collection of local resilience evidence that can inform in-country

dialogue and decision-making on how schools and communities can foster resilience and how education systems can deliver relevant services for contexts of adversity. Therefore, the levers within each ERA resilience component propose general questions that can guide the collection of resilience-relevant evidence. These levers can be specified further or even adapted to each particular context of adversity and needed response: emergency, reconstruction or on-going development.

The four general resilience-based policy goals (managing and minimizing risks; using and protecting local assets; fostering school-community support; and aligning education services) can guide the review of the local evidence and an in-country stakeholder dialogue to specify the best approach for these policies in each context. It can also provide policy makers a lens to learn from approaches in other contries with similar challenges.

Mindful of resilience as a complex process, the ERA framework identified the above four policy goals as the strategic guidance and concomitant evidence to be collected if systems are to better support at-risk children and youth. The next section will discuss how the ERA tools can support policy makers and education stakeholders to take well-informed decisions, all the while maintaining the experience of adversity and associated needs of the learner as a central consideration.

Figure 1, on the next page, depicts the components and levers within the ERA framework.

Figure 1. The Education Resilience Approaches framework

Positive learning outcomes
in spite of adversity

POLICY GOALS

Manage and
minimize risks

Use and
protect assets

Foster school-
community
support

Deliver resilience
aligned services

RESILIENCE LEVERS

- What adversities students face
- How the education system is addressing risks in schools

- How students seek resilience through control, competence and being accountable
- How students seek resilience through their socio-emotional well-being via engagement with others (peers, teachers, families, etc.) and identity formation

- How schools provide support and opportunities to students through actions or approaches regarding access, permanence, teaching and learning
- How school and community partnerships support student outcomes in contexts of adversity

- How the education system provides a strategic direction for relevant education in adversity contexts
- How education programs integrate learning, socioemotional well-being and protection
- What human, material and financial resources are accessible to support at-risk education communities

RESILIENCE COMPONENTS

Education in adversity

Assets and engagement

Relevant school & community support

Aligned education system support

Education resilience process
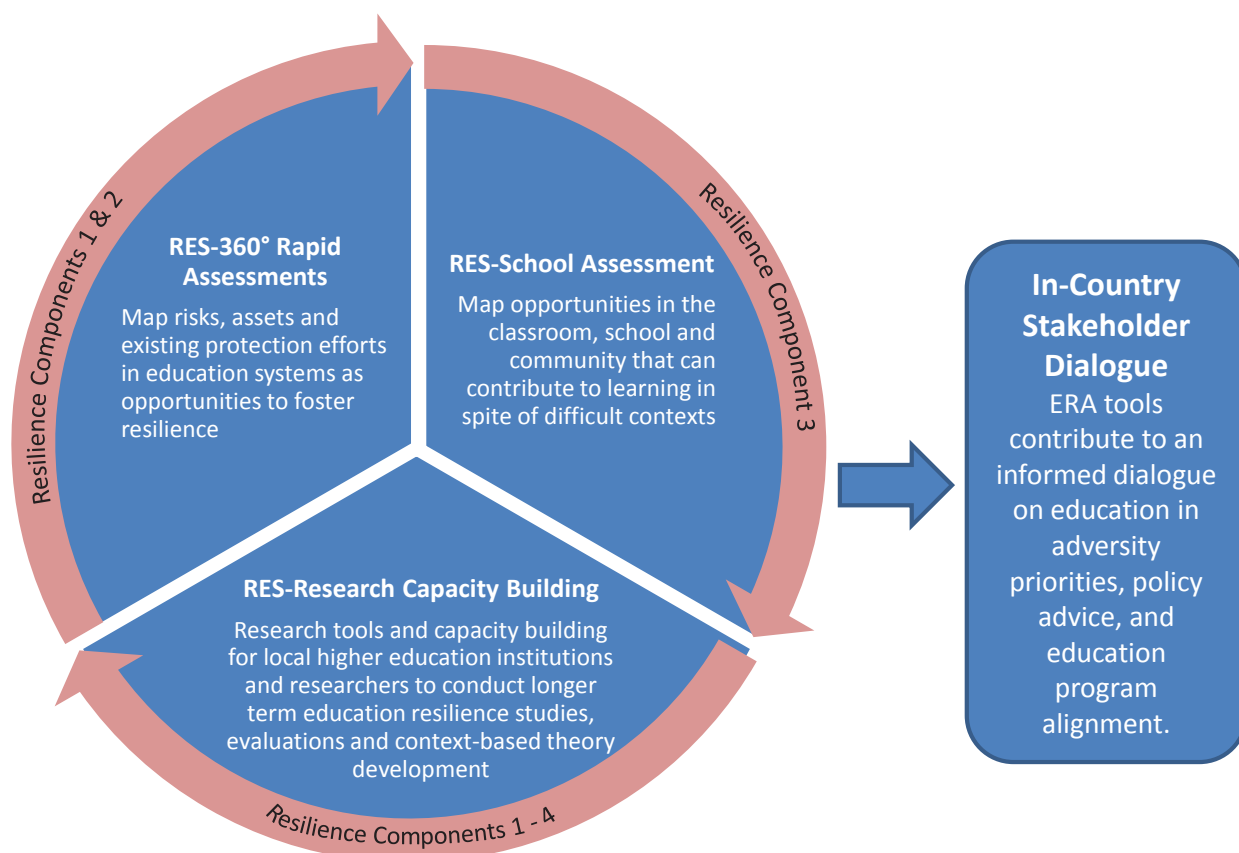
The ERA process and tools

A systematic process for collecting contextualized evidence to foster education resilience

The main development objective of the ERA Program is to provide a systematic evidence-based process to improve the capacity of education systems in fragile, conflict and violence-affected situations (FCS) to deliver relevant, high-quality education services. Each of the diagnostic and research tools is aligned to a specific resilience component and related resilience lever, which guides the collection of resilience relevant evidence. The evidence of

resilience relevant evidence. The evidence can contribute to an in-country stakeholder dialogue to: (i) develop academic and non-academic services that support both learning and students' well-being in contexts of adversity, and; (ii) identify education sector contributions—as part of a multi-sector effort—to mitigate the social determinants of conflict and violence, and other crises. The ERA Program's three inter-related evidence collection tools are presented in figure 2 below.

The ERA Program will contribute to closing the significant gaps on studies and evidence on education resilience in developing countries—especially within countries affected by conflict, violence and other fragilities. With added knowledge on the incentives, processes and effects of education resilience, an evidence-based rubric on education system approaches that contribute to learning in the face of adversity will be developed (forthcoming).

Figure 2. The ERA Program tools

Resilience in Education Systems: 360° Rapid Assessment (RES-360°)

The ERA Program's RES-360° tool is a process to ascertain the risks, education community assets and potentially relevant education programs in a country (resilience component 1 and 2). The application of the tool is designed for short (4-6 weeks) to medium (2-6 months) term diagnosis. It is intended to support in-country education dialogue and planning with more systematic and systemic resilience-based evidence. The RES-360° provides flexible approaches to use information gathered from existing databases, interviews, focus groups and a locally developed survey (the RES-360° questionnaire). This information is collected and analyzed locally and can respond, for example, to the following needs:

1. Planning in situations that require a quick response
2. Planning in situations that seek to empower stakeholders to identify the key risks they are facing and the available resources and coping strategies
3. Aligning current education services with local efforts in schools and communities for more effective responses in adverse situations
4. Providing evidence to Ministries of Education to foster their commitment to support long-term education strategies oriented towards resilience, risk mitigation and prevention

Implementation of the RES-360° involves the collection of data at the national and school levels and provides examples of how existing education policies and programs (for access, quality, equity and education management) can be aligned to achieve both their original education goals and foster the resilience of students. Its ultimate goal is to contribute to national education program relevance and effectiveness in contexts of adversity.

Resilience in Education Systems: School Assessment (RES-School)

The ERA Program's RES-School tool complements the RES-360° 's national-level focus by developing in-depth understanding of relevant school-based interventions to foster resilience among students, at the school-level (resilience component 3). It does so through the implementation of a questionnaire to assess how resilience can be fostered through the core school functions (access and permanence, teaching and learning, school management, and school-community relations). The focus is on resilience-building opportunities through school policies and management, classroom instruction and parental/community participation.

Implementation of the RES-School is also in the form of a rapid assessment approach, but it emphasizes the interactions of school actors to promote: (i) education purpose in adversity; (ii) student guidance—especially from teachers—on how to understand adversity; (iii) relevant teaching and learning practices, and; (iv) collaborative parent-teacher efforts focused on learning, socioemotional well-being and protection of students.

Resilience in Education Systems: Research (RES-Research)

The RES-Research is an education resilience research training module for higher education institutions, local researchers and agencies working in fragile, conflict and violence

affected contexts. It is designed to support researchers, program designers and evaluators in fragile and conflict- affected situations (FCS) to harness the benefits of collecting education resilience evidence in their own countries through mixed-method approaches (across resilience components 1 to 4). It is also a resource to support the design of resilience research training in higher education institutions and other research centers in contexts of adversity.

The RES-Research guides the formulation of resilience-focused research questions, the definition of relevant samples, and the selection of appropriate data collection and analysis tools, among others steps in the research design process. The RES-Research manual takes participants through the various steps required for a rigorous mixed methods research on resilience in educational settings. These steps provide practical and theoretical information regarding resilience and how to study it. It also stresses the preparation of policy oriented studies rathen than studies for only academic audiences.

In general, all three ERA tools can provide a valuable contribution to an informed discussion among education stakeholders on how education systems and schools can help stu-

dents to understand adversities in their lives, how education can provide relevant meaning and purpose for students at-risk, and how to address the dual learning and socioemotional needs of these students. While each ERA tool can be applied separately, they have been designed to work together. For example, while the RES-360° maps the priority risks and assets of education communities to align the support of education programs, the RES-School can help collect information on how students, parents, teachers and school administrators provide opportunities to foster resilience in schools. The RES-Research provides a process to introduce local researchers and higher education institutions to a resilience approach, so they themselves can sustain the on-going evidence needs in their countries. This comprehensive approach to build on existing analytical capacities in countries affected by acute or chronic adversities seeks to sustain the research, evidence building, advocacy, policy feedback and program design required in these contexts.

How does ERA-generated evidence contributes to policy recommendations and program design?

To inform in-country dialogue, evidence collected through the application of the ERA tools provides systematic data and initial analysis on risks, resilience assets, and school and education system approaches relevant for contexts of adversity. It is not intended to provide direct prescriptive or linear answers to programing and policy interventions. Rather it creates the foundations for a country dialogue on how the education system can better support at-risk learners and for contextualized policy advice. Such informed discussions are likely to lead to the following decisions: (i) prioritized communities and issues to be addressed; (ii) relevant entry points for education programmatic and policy interventions; (iii) appropriate sequencing and prioritizing of interventions from the short to longer term; (iv) partnership with different agencies, ministries or other stakeholders, and; (v) feasible options given any resource and operational constraints.

ERA and SABER

The ERA Program forms part of the wider Systems Approach for Better Education Results (or SABER), albeit with broader methodological approaches to better assess the challenges and relevance of education systems and service delivery in contexts of fragility, conflict and violence. These are explained here. First, is the need to capture the complexity and heterogeneity of the drivers of fragility and conflict in each context (economic, political, ecological or social). To capture these demands, ERA works across multiple levels of analysis – the student, the school, the community and the institutional environment. Each of these levels, or combination, may require separate case studies. Therefore ERA does not produce only one country report, but it supports various case studies on education resilience that can be integrated into one country report.

Second, ERA's policy goals are defined in each context through an inductive analysis, which seeks to answer guiding questions within each of the four ERA components and their levers. These levers will guide a broader set of contextualized evidence—supported by available resilience theory and practice—regarding locally experienced risks, community education assets, relevant education services and alignment of education systems to a resilience-based approach. The evidence collected by each lever contributes to an informed country dialogue to align education systems to a resilience approach (see Annex 2 for examples).

Third, fragile, conflict and violence-affected contexts present challenges of a more operational nature to conduct assessment and data collection; these include questions of what is logistically possible, ethics and principles of "do no harm" when working with vulnerable populations. Also, there is a need to capture

multiple perceptions of risks, assets and educational relevance across actors and contexts within a country. Thus the ERA tools do not define ex-ante a set of risk, resilience and education relevance indicators to impose across contexts.

Lastly, information collected by the Case Reports and RES-Research studies will inform the development of a Resilience in Education Systems SABER rubric (SABER-RES, forthcoming as a fourth ERA tool) to support cross-country learning on the four education resilience policy goals: (i) managing and minimizing risks, (ii) using and protecting assets, (iii) fostering school-community support, and (iv) aligning education services to a resilience approach. This is not a global benchmarking of "fragility" or "resilience", but a lens through which to learn from the generation of multiple case studies in contexts of adversity, especially outside of the traditional studies in Western societies (as the US and Europe). A SABER rubric will complement the present ERA tool set (RES-360°, RES-School and RES-Research) and guide policy makers to learn from global experiences.

In summary, ERA represents an interactive model that seeks to guide the alignment of existing education policies, programs and school practice to other assets within education communities. In so doing the focus is not on creating parallel new programs, but on making existing education services and school practices more relevant to contexts of adversity through mechanisms that, we know from resilience theory, help learners and education systems respond and transform in the face of adversity. While ERA identifies overarching policy goals, they are intended to guide the collection of context-based evidence to inform a locally led dialogue on the specific policy directions to mitigate risks, use and protect education community assets, foster relevant sup-

port in schools, and align education systems to a resilience approach. However, regardless of the variations in its genesis and reach ERA sits firmly within the SABER approach to understand education systems in their integrity and it can complement the application of other SABER domains in difficult contexts. ERA, and the other SABER domains (presented in figure 3 below) share the common purpose of working towards achieving positive learning outcomes for all learners.

Figure 3. SABER policy domains

What Matters Most to Students in Contexts of Adversity: A Framework Paper
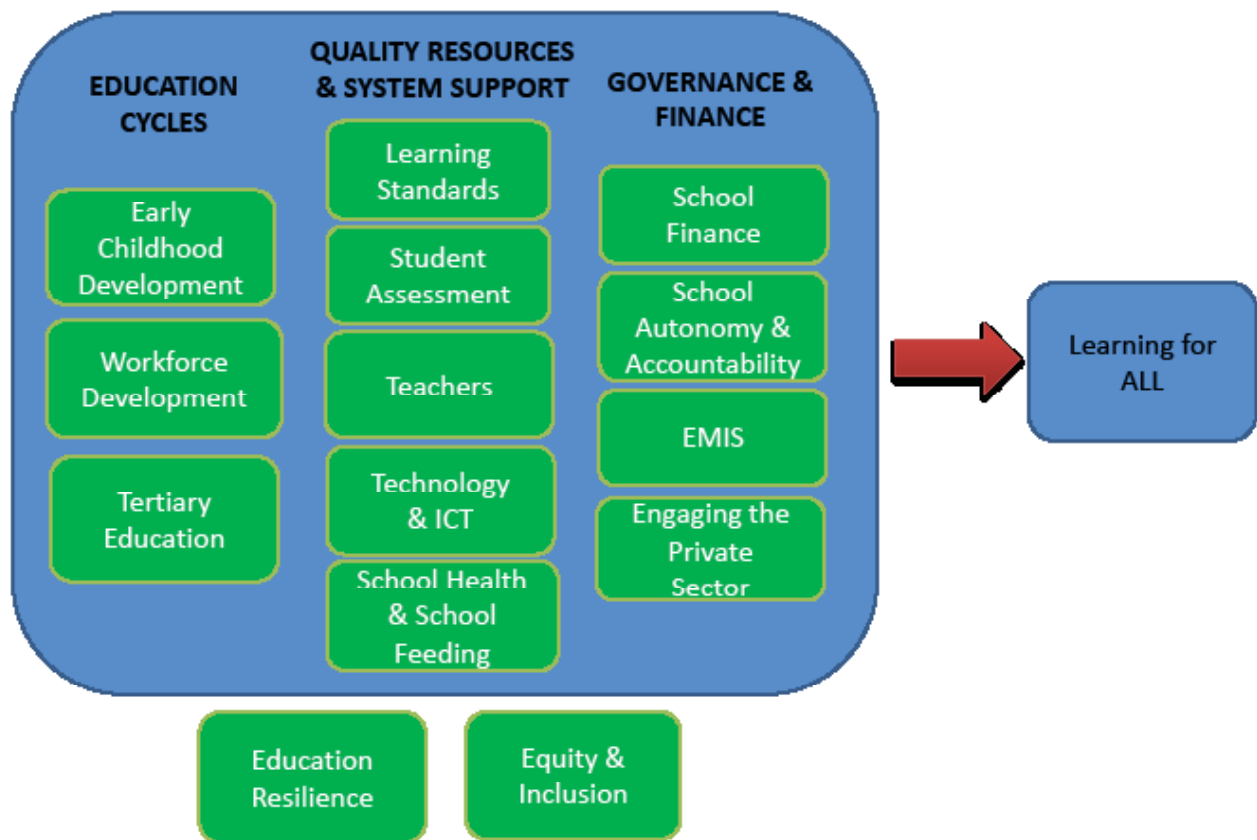
The foundational pillars of ERA

This paper concludes with further explanation of the four foundational pillars for the development and application of ERA: a resilient worldview, building on local capacities, mixed-methods for evidence building, and education system alignment with interventions that foster resilience.

Adopting a resilience-based human, social and worldview

The worldview that ERA proposes is that individuals, groups and communities can recover, perform and even transform positively in the face of adversity. These agency, empowerment and transformative premises do not preclude or negate the challenges faced, nor the responsibility of society and its public institutions to promote the welfare of its populations, especially the most disadvantaged. Adopting a resilience approach provides a means for education systems to understand both the risks and assets in education communities in order to align their institutional policies, programs and available resources to better address the needs of at-risk learners.

Building on existing local intellectual leadership and research capacity

Understanding education resilience in a specific setting requires taking into consideration the particular cultural, community, political and economic factors in that context that influence the learning environment of children, youth and adults. Therefore, mobilizing the local intellectual leadership and research

capacity of countries in adversity not only provides an insider advantage to data collection, but also sustains research findings, their dissemination and their input into in-country education policy dialogue. The importance of working with local actors and indigenous capacities and skills is well recognized in international development work. It is also especially relevant to resilience-based research, policies and action. This is because a critical focus of resilience is on local assets, opportunities and actors that can support fostering it. Therefore, ERA makes it a priority to build on local analytical and policy advice capacities, at whatever level they may exist in FCS.

Mixed-methods for more comprehensive and contextualized education resilience evidence

A key premise of resilience research is the need to understand resilience as a broader process that reflects not only on individuals but also their wider social dynamics, their interactions within it and the implications for State and social services. To effectively capture this broader complexity ERA relies on the collection of mixed-method data. A well designed and well implemented mixed-method approach offers the advantages of combining the strengths of qualitative and quantitative data approaches while offsetting their associated limitations, thereby providing more comprehensive and contextualized evidence. Notably, qualitative elements can help to understand the context and setting where the research takes place; probe into the complexity of factors, processes and inter-relations; and, give voice to the participants. Quantitative components can allow for larger generalizable samples and identifying, isolating and correlating factors and determinants related to a particular phenomenon.[12]

---

12   See for example, Creswell and Clark (2006); Cresswell (2005).

Ownership and alignment of resilience approaches by education systems

For education systems to align their existing education goals, programs and services to foster resilience, they first should be willing to adopt a resilience approach and own its implications. This willingness may be characterized by the following three core commitments, or premises:

PREMISE 1: THE EDUCATIONAL SYSTEM EXPECTS ALL STUDENTS TO SUCCEED IN SPITE OF ADVERSITY

- Even in contexts of adversity, education systems must support the quality of student learning, teaching and the needs of education institutions. This is achieved by recognizing and supporting the inherent capabilities of education actors.

PREMISE 2: THE EDUCATION SYSTEM SEEKS TO CONTRIBUTE TO SOCIETAL GOALS THROUGH THE EDUCATION SERVICES DELIVERED

- In contexts of adversity (protracted and chronic crises, such as conflict and violence), education systems need to be sensitive to community and social needs and to place an explicit value on the ability and efforts of the system to mitigate risks and promote social cohesion and equitable opportunities for all.

PREMISE 3: THE EDUCATION SYSTEM STRENGTHENS ITS EVIDENCE BASE THROUGH ASSESSMENTS AND RESEARCH

- Education systems view evidence on education resilience provides as useful information to inform planning, design, availability, accessibility and relevance of educational services in contexts of adversity. Educational research and evaluation also includes a focus on social and institutional transformations, especially in highly vulnerable areas and in support of marginalized populations.

In conclusion, an education resilience approach is sustained by a worldview that positive change is possible; that different methods are needed to understand the complexity of recovery, performance and positive transformation in the face of adversity; and that any positive change must be led from within. ERA does not replace the strategic planning processes of education sectors, nor does it propose designing and implementing parallel "projects" for education resilience. Rather, the emphasis is to identify local opportunities and align them with existing educational services in order to make them more relevant to learners in difficult contexts.

How does ERA develop in-country capacity?
In accordance with resilience good practice, the ERA Program focuses on local capacity building. While this is perhaps most explicit within the RES-Research tool, it also constitutes a core dimension of the RES-360o and the RES-School. Accordingly, these tools comprise stand-alone manuals as well as Tool Kits with more detailed "how to" to implement each phase of the mixed-methods process (organizing and conducting focus groups, managing experiential exercises, analyzing questionnaire data, etc.). These detailed toolkits are an added guide for junior researchers, higher education courses, or researchers unfamiliar with either qualitative or quantitative processes. However, in keeping with the need for flexibility as well, the data collection and analysis process can also be tailored to the specific country or community needs, especially when applied by more experienced research teams.

Conclusion

In today's constantly changing contexts of risks and uncertainties there is both a clear rationale and great interest from education systems to understand and build the resilience of students, teachers and schools. Yet interventions to promote resilience cannot be defined globally; they require localized, contextualized and culturally situated approaches if they are to meaningfully define adversity, reveal education community assets and offer effective policy options and interventions for each context. Although education resilience is a complex concept, the ERA Program helps to lift the lid on this by proposing principles and processes that can guide education systems to foster protection, recovery and performance opportunities for learners and their communities in spite of adversity. (See Annex 1 for some resilience in education systems criteria, Annex 2 for country examples of an education resilience alignment process, and Annex 3 for the initial learning from four country case studies where the ERA framework and/or tools were piloted.)

ERA also plays an important role in bridging education systems' response to crisis within their longer-term development and planning activities. In this way, while ERA supports education institutions to develop longer-term contextualized responses to adversity, it also lends itself to immediate applicability during a crisis. Over the longer term, ERA's support to identify risks and the resources and education strategies to address them can contribute to preparedness and prevention activities for the education sector. Creating a smoother bridge between emergency and longer-term responses is essential to sustain any early gains and education innovations by institutionalizing them within education systems overtime.

Finally, ERA tools can also constitute a "senti-

nel" (or signals) of peaks in fragility and adversity that may spur proactive interventions. By having a better understanding of risks and assets in education communities today and continueing to monitor them over time, education systems can better prepare their response to latent or pervasive risks. This is all the more pertinent given the protracted and complex nature of many crises today. To do so, ERA provides a framework for cross-sector and cross-agency coordination focused on fostering local capacities for sustainable in-country response and mitigation of crisis—supported by international partners.

Of course international cooperation has much to contribute to a resilience approach in fragile, conflict and violence-affected countries and situations, including resources, knowledge and convening opportunities for national and international dialogue. ERA is in line with the broad goals of international cooperation for fragile, conflict and violence-affected situations. Of note here is "The New Deal", developed in Busan, Korea, to support the achievement of the Millennium Development Goals in such contexts. The New Deal prioritizes finding resilience pathways away from the sources of violence and conflict, by creating trusting relationships and focusing on results across countries and providing aid in FCS. The Education Resilience Approaches Program (ERA) is a highly appropriate contribution to this end.

Annex 1: Resilience in education system criteria

The ERA Program is focused on providing evidence-based criteria on how best to build on existing education services and better align them within a resilience approach that addresses the learning, socioemotional well-being and protection of students in contexts of adversity. This annex presents a sample of such general criteria to guide a resilience-based alignment of education access, quality and management strategies. These criteria are extracted from global evidence and the work of agencies and networks operating in fragile, conflict and violence-affected situations (FCS). As used here, "criteria" should not imply a global standard or rule, but rather some tangible guidance through which an informed dialogue on education systems relevance to situations of adversity can be held, and decisions made. Moreover, as presented earlier, the foundation of ERA and its tools rests on contextualized evidence and relevant meaning by local actors in each situation. While the criteria is listed separately, it should be noted that addressing challenges related to access, quality and management often requires an integrated approach that touches upon good practice components related to more than one of the criteria.

ACCESS STRATEGIES[13]

Ensuring universal access to education and removing barriers for at-risk children and youth to access learning spaces is a requirement for successful education resilience interventions.

In the first instance, it can support the protection of these students by physically removing them from sources of adversity on the streets. It is also a pre-requisite if students are to benefit from resilience interventions that then support their cognitive skills and socioemotional well-being within a nurturing peer environment. The equitable access that removes barriers for traditionally excluded groups supports system level education resilience by sending a clear message from the national level that all students are valued and included. Here, ERA evidence points to available criteria associated with promoting universal access at the national level and with adopting equitable interventions to reduce particular disparities in education access.

Resilience criteria to ensure universal availability of education services within a country

- **Inclusion:** Education policies stress that the system is to include all students. Associated plans make adequate resources available to realize this across not only primary, but also secondary and higher education levels to avoid drop out in transitional phases.

- **Infrastructure:** Enough schools and classrooms are constructed to host students and avoid lack of enrollment or drop out owing to overcrowding. Schools have adequate complementary infrastructure such as water and sanitation facilities to support the attendance of female students.

- **Materials and resources:** An adequate number of teachers have been trained to support the provision of education delivery. Education policies include accurate projections of student population to provide enough time to adjust teacher supply to meet changing needs.

---

13   The INEE Minimum Standards handbook defines access as "an opportunity to enrol in, attend and complete a formal or non-formal education programme. When access is unrestricted, it means that there are no practical, financial, physical, security-related, structural, institutional or socio-cultural obstacles to prevent learners from participating in and completing an education programme".

- **Location:** Schools are well located to mitigate for low attendance or drop out due to unsafe access routes or inappropriate travel distances (a particular barrier for girls and young women). In cases where schools are located at a distance, transportation is provided to support the safe and timely passage of students.

Resilience criteria concerning equitable interventions to address particular vulnerabilities in access

- **Equity:** Education policies stress equity principles to promote access among marginalized groups that could include ex-child combatants, over-age learners, children from indigenous communities, children living on the street, and children with special needs, among others based on the particular social dynamics in each context.

- **Affordability:** The education system addresses barriers that may be posed by direct and indirect school costs, including opportunity costs of schooling, notably regarding child labor and foregone family incomes associated with attending school. This may include strategies to provide free uniforms, transportation and learning materials for students who may otherwise be financially excluded, and the use of flexible and alternate school schedules to avoid immediate drop outs and low attendance. This is complemented by national policies and objectives, for example to diminish and eliminate the occurrence of child labor over the medium and longer term.

- **Avoid in-school exclusion:** Interventions

to support physical access to education for marginalized groups exist at the school level. Examples include the removal of administrative and bureaucratic barriers to access education / paperwork requirements for displaced persons, or the adopting of flexible education provision modalities such as distance or radio-based schooling for seasonally migrating pastoralist communities, the provision of transportation for rural children to access far away schools, or state security presence to protect school campuses in otherwise unsafe to access areas. Finding alternative disciplinary practices to expelling students as first response to behavioral and other infractions are also in place to avoid processes that continue to exclude some students even when education services are available.

- **Provision of education at all levels:** Expanding access at the primary level is not be at the expense of secondary and higher education availability. A diverse representation of students (not only from traditionally elite groups) should be supported to continue education into secondary and higher levels. This can be done through scholarships and strategies such as the provision of satellite campuses for higher education in less accessible communities or distance learning.

QUALITY STRATEGIES[14]

Education resilience interventions are premised on the need for a quality learning experience. Quality education requires students benefit from responsive and relevant learning

---

14   The INEE Minimum Standards handbook defines quality education as "affordable, accessible, gender-sensitive and responds to diversity. It includes 1) a safe and inclusive learner friendly environment; 2) competent and well-trained teachers who are knowledgeable in the subject matter and pedagogy; 3) an appropriate context-specific curriculum that is comprehensible and culturally, linguistically and socially relevant for the learners; 4) adequate and relevant materials for teaching and learning; 5) participatory methods of instruction and learning processes that respect the dignity of the learner; 6) appropriate class sizes and teacher-student ratios; and 7) an emphasis on recreation, play, sport and creative activities in addition to areas such as literacy, numeracy and life skills" (2010, 122).

opportunities that allow them to develop those aspects of human resilience that matter most. While quality education in its broadest form also encompasses certain aspects (and thus strategies) concerned with accessibility, the focus here is on those soft intangible components that define the experience of at-risk children and youth once they are in the classroom, which can promote resilience processes.

Resilience criteria for improving the quality of learning

- **Content:** Curriculum and teacher training includes elements of peace-building, reconciliation, care and developing empathic relationships (valuing and respecting diversity, conflict resolution, etc.).

- **Pedagogical approaches:** Teaching methods are learner-centered and support the transfer of non-cognitive or socioemotional skills (especially relevant life skills) as well as cognitive ones, such as peer-to-peer learning, community projects, student-led committees to support classroom management, etc.

- **Formal and non-formal teaching strategies:** Programs of formal and non-formal learning strategies that exist currently or used to exist can be framed and adapted with resilience approaches to better promote the cognitive strengths and socioemotional needs of students and teachers.

- **School climate and school relationships:** This may include the provision of classroom management support or the strengthening of school administrations to better promote peaceful and socially cohesive values and to care for students, allowing them to construct meaning and purpose within their educational experience.

- **Psychosocial support:** In contexts of acute, chronic and compounded risks, psychosocial services are needed for students and teachers. Psychosocial support may be provided through the school itself (where school counselors are available) or through the community, NGO or higher education institution service programs.

- **Safe and nurturing schools:** Schools that provide physically and emotionally safe spaces contribute to both learning and socioemotional well-being of all students. This may include policies and activities to monitor in-school behavior and relations, to eliminate corporal punishment and abusive behavior by teachers (and concomitant training for teachers on structured and positive classroom management approaches), and in making schools zones free of violence, conflict, guns, drugs, etc.

Resilience criteria for improving the quality of teaching

- **Basic needs of teachers:** Understanding that the basic needs of teachers are foundational to resilience. This includes accountable, transparent and supportive recruitment processes, incentives, and on-time payment.

- **Teacher training relevant to contexts of adversity:** Teacher preparation and development systems and institutions address teaching and learning in contexts of adversity, including the role of teachers and education communities (students, parents, community members) to support both learning and socioemotional well-being of students.

- **Incentives for pedagogical innovations:** Education systems and schools provide incentives to encourage teachers to innovate in their pedagogical strategies leading

to learning outcomes and responding to the psychosocial needs of at-risk students. This may include the integration of student-centered methods; the use of culture, music and art-inspired activities; combining extracurricular activities with academic remedial support, etc.

- **Psychosocial support:** The psychosocial needs of teachers (e.g., self-esteem, coping with trauma or other vulnerabilities) are foundational to them being able to support, in turn, students, families and communities.

GOVERNANCE AND EDUCATION MANAGEMENT STRATEGIES

Successful access and quality interventions require good management strategies and effective governance for their implementation. Here resilience evidence points to elements of education system planning and strategic direction for relevant education services in adversity prone contexts. At the level of schools, evidence points to participatory approaches (school staff, parents and community) as the primary criteria for a resilience approach to school management. An important management element to emphasize is effective monitoring and evaluation of resilience-based interventions that are implemented.

Resilience criteria to inform education system management of resilience fostering reforms

- **Strategic direction for education resilience:** Education systems ensure that strategic plans (comprising goals, objectives and indicators) incorporate an understanding of adversity and its impact on students (such as cognitive impairment) as well as the local assets and opportunities to be supported by the education system

to foster school success and the well-being of students.

- **Participatory and innovative Iistitutions:** Systems, incentives and opportunities for innovation, flexibility and constant learning builds resilience in educational systems. Organizational strategies that support technology-based connectivity, commitment and responsibility are useful for any organization, but especially so for those in situations of adversity, conflict, violence. Connectivity also involves forging external linkages between agencies, across sectors and with clients and beneficiaries.

- **Timely emergency response:** On-time strategies and adequate resources to meet the basic material needs of populations in emergencies and to mitigate the impacts of conflict are in place. Prevention plans and response readiness to manage and reduce future risks have been developed.

Resilience criteria to inform education system/school management and the implementation of resilience fostering reforms

- **School administration and community participation strategies:** Opportunities are provided for engagement between students, teachers, parents and community to make educational decisions and ensure a supportive and safe environment for children and youth that is conducive to learning and staying in school.

- **School principal leadership:** Principals are the primary leaders in a school resilience approach that promotes understanding of the risks students face and identifies the assets that each member of the education community contributes (students, parents, teachers and other community members). Head teachers also promote relevant use of the curriculum, teaching methods and

school management that supports academic, cognitive and non-cognitive (socio-emotional) skills, and encourage a community approach (especially parent-teacher interactions).

- **Institutionalized community participation in school management:** To sustain the participation of parents and other community members in school management and decision-making, policies and structures are put in place by Ministries of Education. This formal education system guidance includes parental participation in school boards, preparation of school plans and public financial support. The emphasis is not on administrative functions but rather on shared accountability for student learning, socioemotional well-being and protection.

Resilience criteria for monitoring and evaluating education strategies

- **Monitoring the equity of education services:** Equitable access opportunities for all is tracked, especially access for groups living in conflict or subject to discrimination or exclusion (on the basis of gender, ethnicity, nationality, religion, sexual orientation, political affiliation, poverty, etc.).

- **Monitoring the safety in and around education institutions:** Safety is monitored including safety in schools and beyond the school fence perimeters (e.g., routes to and from school), as well as any support needed is received from the security and justice sectors. Drop out rates and absenteeism owing to fear of going to school is also monitored so they can eventually be mitigated.

- **Monitoring indicators of school-community relations and school climate:** Monitoring indicators have been developed include

for monitoring of positive relations among parents, other community members and school staff. Monitoring data on risks and education community interactions can include tracking of the opportunities provided to students to make meaning of adversities, to formulate meaningful goals and plans for the future, and to develop new relevant skills.

Annex 2: Examples of resilience alignment

The following tables provide some concrete examples in hypothetical contexts of adversity of the ways education systems may align themselves to a resilience approach. These hypothetical samples have been determined by global criteria and lessons learned. In practice, the education resilience alignment options should be considered based on the ERA evidence collected in each country and an informed in-country dialogue on education in contexts of adversities.

The alignment process starts by recognizing the key objectives in existing strategic plans or those to be developed (interim strategies, guiding goals in education in emergencies, etc.). Secondly, it compares the view of risks as expressed by central education system actors (e.g., Ministries of Education) with that of local education communities (students, parents, teachers, and school administrators). Thirdly, it makes explicit the assets available to foster resilience, both in terms of relevant education programs and local assets identified in education communities. Lastly, the ERA process invites a dialogue among stakeholders to identify how existing programs or education system activities can be better aligned to address the prioritized risks (by both local and national actors) making use of the local education community assets identified through the ERA qualitative and quantitative evidence collection in the country.

Simply put, the resilience-based proposal is that existing education programs (or those to be developed), when aligned to the strengths of education communities exposed to adversities, are foundational to better address adversities and risks prioritized by local and national education stakeholders.[15]

---

15   A wealth of global resources exist that can complement the local resilience evidence to collected in each context. These include, but are not limited to, the World Bank's SABER policy goals and levers, the INEE Minimum Standards for Education and the UNESCO-IIEP Guidebook for Planning Education in Emergencies and Reconstruction. Using these resources in conjunction with the ERA assessments, education actors can better align activities, interventions and policies to the specific needs of learners in contexts of adversity. For additional resources in this regard, see the references cited in the ERA Program's RES-Research Manual.
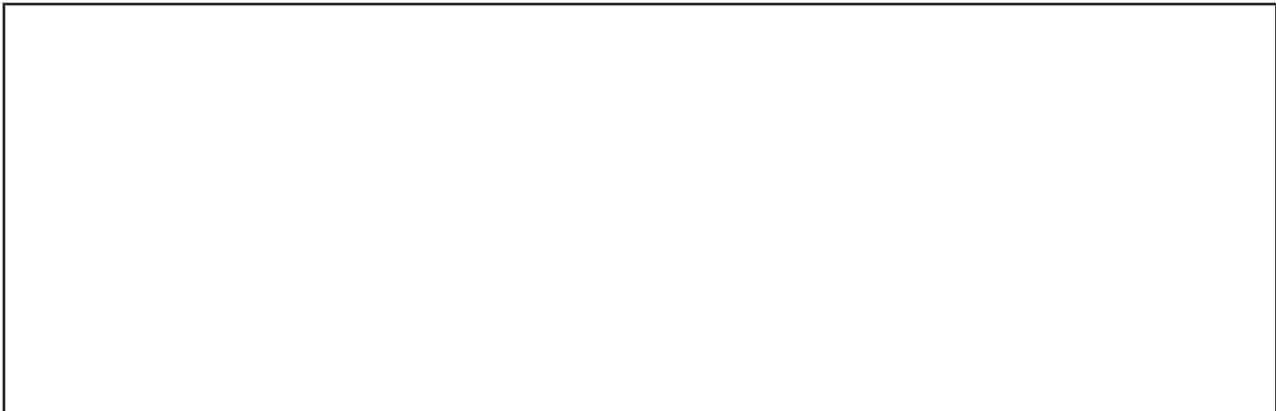
1) Examples of Education <u>Access</u> Strategies Aligned to a Resilience Approach

Hypothetical Context: *A post-conflict country affected by high rates of youth gang violence fuelled by international narco-trafficking. The education system has high enrollment rates at the basic level which drop considerably at the level of upper secondary (grades 9-11).*

Education strategic plan component: Expand universal access to education beyond the primary cycle (increase enrollment rates at secondary level from 65% to 95% over the three year planning cycle).

Shared understanding of adversity	ERA-identified assets	Relevant school-community support	Possible resilience alignment strategies (for both policy level reform and operational plans)
Priority risks at the national level	**National protection policies, strategies and / or programs**	**Resilience relevant school-based violence reduction programs**	**Resilience aligned secondary education programs**
Youth Gangs: Violent and criminal youth gangs challenge state authority and rule of law such that youth violence is classified as an epidemic at the national level.	**Lower and Secondary Education Programs:** Increase attendance rates for basic education cycle and increase the number of students continuing education to the secondary level.	Community Institutions Support School Management: Encourage UN agencies, NGOs, religious groups and other civil society organizations to strengthen the capacity of the existing school committees to train and monitor education provision at the school level in both primary and secondary schools (including the new flexible education programs). School committees can then help ensure that relevant and up-to-date information on community perceptions of interventions is collected.	Flexible Secondary Education Programs in Violence Affected Neighborhoods: The education system targets neighborhoods prone to gang violence as primary sites for flexible secondary education programs and remedial support for students at basic education levels.
Priority risks at the local level	**Teacher Training Investments:** Technical and financial support is being provided to centralized national teacher training institution in the capital which designs and implements all pre- and in-service teacher training.	**Schools Work with Wider Community to Implement Crime Prevention through Environmental Design (CPTED) Approaches:** Involve schools in wider efforts to promote non-violence through effective use of space and design by conducting CPTED trainings at the community level. Schools provided with a small budget to improve the school	**Resilience aligned teacher training institutions focused on learning in contexts of adversity**
Narco-Trafficking: is an important and increasing source of employment and income for young people who are dropping out from grades 7-12.	**Coordination for Crime Prevention:** Politicians are discussing the introduction of a national inter-sectoral crime prevention strategy.		**Teacher Support and Training on Nonviolent/Non-expulsion Discipline:** Encourage teacher training institutions to mandate more nonviolent classroom management skills and conflict resolution training in pre- and in-service training curricula.
Gang-Related Violent Attacks: are occurring both within and outside education institutions and in particular on access routes to and from schools. They include kidnappings and demands for payment of 'war taxes' resulting in a widespread	**School and community level**		

Education strategic plan component:
Expand universal access to education beyond the primary cycle (increase enrollment rates at secondary level from 65% to 95% over the three year planning cycle).

strengths		
perception that being outside of the immediate home and school campus is dangerous. **Violent Expulsion-Based Discipline:** Students report high levels of corporal punishment being used at the school level. Punitive approaches to truancy and other school based misdemeanors include suspension from classes and exclusion from the school campus.	**Participatory School Management:** There are well-established school-based management functions that operate through the participation of parents and communities. **Support from Community Institutions:** Respected religious institutions and NGOs continue to offer extracurricular activities (including dance, sports and arts) in some of the most violence prone areas. Several also work on providing information on pertinent social issues such as sexual reproductive health and domestic violence. **Students Seek School Safety:** Despite problems of latent violence on school campuses, students report that access to education and the physical fact of being in school makes it among the safest place to be in their community. **National Disaster Prevention Programs:** Schools implement a national disaster risk reduction strategy which is appreciated by students and communities.	climate (adopting principles of crime prevention through environmental design). __Resilience relevant school-based monitoring__ **Parental monitors in schools:** Involve the school-based management committees in designing strategies to support teachers to use nonviolent disciplinary through actions such as parental classroom monitors. Where resources allow train parents on child protection principles and reporting standards (thereby introducing school / community based capacity development) **Community policing linked to schools:** Work with the local municipalities to assign a community based policing team to each school to build positive rapport between schools and state security. __Resilience relevant school based DRR__ **Combine Natural Disaster Mitigation with Life Skills to Reduce Other Risks:** Introduce life skills messages regarding drugs, violence and criminal risk avoidance and management (whereby community priorities are determined by school committees, teachers and students) to supplement the existing school level	**Policies to Prevent Physical-Based Discipline in Schools:** Ministry of Education may consider policies against physical punishment in schools and support more restorative discipline strategies. __Resilience aligned cross-sector security strategies__ **Inter-Sector Coordination to Mitigate Criminal Activity Around Schools:** Coordinate with the Ministry of Interior to increase presence of state security on especially vulnerable urban school access routes. Coordinate with the Ministry of Transportation to subsidize or provide free transportation in rural areas where distances are longer but remain unsafe, and to establish better lighting on main school access thoroughfares. Include parents and communities in the implementation of this strategy. **School Safe Zones Advocacy:** Consider introducing a "schools as safe spaces" campaign to mobilize civil society at national and grassroots level to conduct advocacy and awareness campaigns on the need for violence-free schools. Link this to the school based CPTED principles.

2) Examples of Education **Quality** Strategies Aligned to a Resilience Approach

Hypothetical Context: Following a violent secessionist movement from the country that now lies to its western borders, and the subsequent establishment of autonomous status, a newly formed country with a strong state building agenda is prioritizing the need to unify the current two curriculums that are in place and to align the education sector with the vision of a united country that is inclusive of all of its peoples.

Education strategic plan component: Establish a new curriculum for the new nation to improve primary education cycle learning outcomes and support the vision of an inclusive nation.

Shared understanding of adversity	ERA-identified assets	Relevant school-community support	Possible resilience alignment strategies (for both policy level reform and operational plans)
Priority risks at the national level **Parallel Education Systems:** In part of the country most affected by the civil war education services could not be delivered by the State. Consequently parallel education systems have been in operation. **Eroded Community Trust:** The Ministry is to create a unified education system but there is concern about community acceptance of change given eroded trust due to the civil war. **Priority risks at the local level** **High Illiteracy:** High levels of parental illiteracy mean academic support structures for students outside the classroom are weak.	**National protection policies, strategies and / or programs** **Curriculum Development:** The country is currently working with international donors to review regional curriculum models and reform processes that could be adapted to the country context. **Child Protection Law Discussed:** The country is in the process of drafting a new national child law. This law stresses the importance of child participation in service delivery. **School and community level strengths** **Faith-Based Institutions Support:** Many children attend education provided by religious institutions, and enrollment in	**Resilience relevant aligned community outreach** Coordination with Religious Leaders to Promote Education: Conduct community level outreach and sensitization with key persons and "gatekeepers" to promote the importance of access to education and its alignment with cultural and religious values in order to increase community acceptance. **Resilience relevant community infrastructure** **Establish Interim Period Child Friendly Spaces with a Clear Minimum of Educational Resources/ Content:** In communities where school facilities are inadequate, take advantage of the strong international community presence and work with relevant partners to establish child friendly spaces—in the spirit of the national child law—that include basic educational materials. These	**Resilience aligned curriculum development** **Coordination with Faith-Based Organizations:** Seek coordination and collaboration with faith-based organizations providing education services in order to include components of numeracy and enriched literacy in the curricula, including within their religion courses. Such an alliance can also help strengthen the trust of some communities in the public education system. **Coordination with International NGOs Present in Communities:** Encourage and engage local and international NGOs present in communities to support the development of the new curricula by sharing their lessons learned with the development committees. Where donor funding permits, prioritize the provision of learning materials especially in underserved areas.

Education strategic plan component: Establish a new curriculum for the new nation to improve primary education cycle learning outcomes and support the vision of an inclusive nation.

Eroded Trust in Education System: In focus groups parents identified low levels of trust in the public system which closed early on in the war when many teachers fled.

Students are Expelled from Schools: Many students (especially those learners who may have spent long periods out of school during the worst periods of the war) complain about being expelled from school or not being allowed access for a variety of reasons including lack of uniform, lack of school materials and behavioral problems.

these schools is at higher levels than for public schools.

Community Participation: Strong community-based structures including some community education committees exist, especially in areas where State education services were not delivered during the civil war.

International Support: Education communities comment on strong international community assistance (food aid, non-formal education services, micro-grant schemes for women). Secondary funding trends data suggests that the current period (this year and next) is likely to constitute a peak in terms of donor funds received in the education sector.

CFS should be established to cover the interim period during which school construction is expanded and unified within school construction standards that are under development. Ensure community involvement in the construction (including any labor needed to set up and then run) these CFS.

Parental Schools: To address the issues of literacy in communities most affected by the civil war, develop literacy programs for parents attached to new public schools. Faith-based and international organizations can support the provision of these services. In addition to literacy courses, parental schools can also address issues related to their childrens' learning, socioemotional well-being and protection from risks.

Resilience aligned child protection policies

Community Organizations Support: Partner with child protection organizations working on the child law draft to identify relevant child participation strategies that can also be aligned to the new curriculum and teaching and learning strategies being developed.

Hypothetical Context: *A post-conflict country is two years out of civil war and implementing and large education reform process which is also designed to support its global trading linkages. As a result it is looking to shift its language policy. At the same time a large number of former refugees are returning after several decades abroad.*

Shared understanding of adversity	ERA-identified assets	Relevant school-community support	Possible resilience alignment strategies (for both policy level reform and operational plans)
Priority risks at the national level	**National protection policies, strategies and / or programs**	**Resilience relevant community based teacher recruitment**	**Resilience aligned national curriculum**
Tensions Regarding Returnee Communities: There is suspicion and hostility within communities that remained during the conflict towards those that were displaced and are returning.	**National Curriculum in Process:** Creation of a unified national curriculum is underway beginning at the primary education level.	**Recruitment of Returnees to the Teaching Force:** Conduct community-based teacher recruitment and outreach campaigns in communities where significant numbers of returnees live in order to encourage their active participation and representation in the education system.	**Language Focus in Curricular Program:** Include streams focused on academic as well as more practical foreign language skills—French being one of them. Consider the introduction of ESL classes at the primary level for younger learners reintegrated into English-based schools. Scale up existing ESL programs at the secondary and tertiary level but increase the focus on writing and reading comprehension. Open up the ESL classes to adult learners who otherwise have no access to learning English.
On-Going Violence: Violence persists in border areas and there are very low levels of education infrastructure outside the capital. ←	**Emergence of Tertiary Level Teacher Training:** The only higher education institution in the capital is developing a teacher training program and the government is working with the higher education institution to align the course and its vision for pre-service teacher requirements. ←	**Resilience relevant community programming by civil society**	
		Catering to Host Population: Ensure that any community-based support for returnees is extended to the host populations as well (in order to diffuse any intergroup tensions). Stress the overarching national goals of inclusion and learning for all at the community level so that tensions regarding preferential treatment or discrimination against certain groups are diffused at the school level.	**Resilience aligned tertiary level teacher training programs**
Priority risks at the local level	**School and community level strengths**		**Teacher Support and Training on Inclusion and Equity:** Encourage teacher training institutions to mandate courses on the role of schools and classrooms to support inclusive and equity values. Include courses on ESL and foreign language in the teacher training curriculum,
Language Tensions: Former refugees are returning with the onset of a peaceful transition. Many fled to a neighboring country but were educated in French and cannot pursue emerging education opportunities offered in English. This has created a sense of isolation and difference.	**Returnees Educated Abroad:** Returnees have been overall well educated though the language of instruction and pedagogical approaches used differed from the current	**Social Cohesion Support:** Prioritize NGO and UN community	

Education strategic plan component: Reform process for a unified language of instruction policy (system is shifting from a multi-lingual system to English).

Education strategic plan component: Reform process for a unified language of instruction policy (system is shifting from a multi-lingual system to English).

Violence Against Returnees: Returnees experience sporadic incidents of violence and discrimination from their host communities (including in access to services and jobs).	vision. **Some English As Second Language (ESL) Programs:** The system currently operates ESL catch up classes at secondary and tertiary levels while primary education retains parallel schooling in French for the sizeable returnee population. ESL catch up classes currently focus on the acquisition of oral language skills. **Diaspora Support:** Returnees who speak French tend to be financially better off and maintain trading links and strong cultural ties with communities and family members that remain across the border.	intervention programming that includes "social cohesion components" in the annual Consolidated Appeals Process for which the MoE is a vetting partner along with the UN country team. supported by diaspora who studied in foreign higher education institutions.

3) Example of Education **Management** Strategies Aligned to a Resilience Approach

Hypothetical Context: *A country that has recently undergone a regime change after 35 years of dictatorship is changing the service delivery operational parameters. The new democratically elected government is seeking more local level participation through a decentralization process. The current system is extremely centralized, a legacy of the former political structure. The principle motivation for the new governments' agenda is thus to make tangible distinctions between it and the former regime, however current instability raises significant concerns about the feasibility and possible impacts of such a policy by the international community.*

Education strategic plan component: A revised operational plan to move towards decentralization by promoting higher levels of community participation in education service delivery in particular with regards to administrative and personnel components.

Shared understanding of adversity	ERA-identified assets	Relevant school-community support	Possible resilience alignment strategies (for both policy level reform and operational plans)
Priority risks at the national level	National protection policies, strategies and / or programs	Resilience aligned community capacity building for increased local participation in school management and risk reduction	Resilience aligned education decentralized management strategies
Limited Community Participation: There is very little culture of community participation as it was significantly repressed during the previous decades.	**Decentralized Education Plans:** The Ministry of Education is preparing a proposal for decentralized education management, which will include a process to provide grants for school improvement to local community education committees.	**Inclusive Community Participation:** Specialized and trusted organizations (NGOs, faith-based, foundations, etc.) support the creation of CECs made up of a wide spectrum of community members—including high numbers of women who have affiliations to the former regime—and strive to include high numbers of women. Consider engaging the young educated unemployed as classroom assistants to support teachers and provide an additional professional option or in the implementation of the school feeding program.	**Alliances with NGOs that have Expertise in Community Participation:** Work with civil society to support the creation of community education committees (CECs), focused on student learning, socioemotional support and protection.
Low Quality Learning: The quality of education is low and there is significant brain-drain out of the country.	**Quality Reforms Underway:** With high enrollment rates the country is now focused on quality and teacher reform by introducing a quality teachers initiative that aims to increase teacher standards at the pre-service level and provide in-service training for existing teachers to improve their skills and practice.		Resilience aligned teacher training programs
Tensions with Teachers: Teacher strikes occur (involving some violence with state security) owing to the introduction of the teacher quality initiative which unions fear will result in job losses and increases in irregular and term contracts.	Key Policies Regarding	**Violence Mitigation through CEC Training and Support:** CECs support local level monitoring of the corporal punishment law and increased	**Non-Cognitive Skills, Nonviolence and Learning:** Use resilience criteria collected through ERA to train teachers on the benefits of promoting non-cognitive skills, nonviolent classroom management and learning. Use the existing psychosocial programs and teacher learning circles to inform the model and as an entry point for any eventual wider reforms.
Priority risks at the local level			

Valuable Teaching Profession: Within the teacher reform initiative include a strong advocacy component to stress the value of teachers and promote the teaching profession among young people. Conduct national level campaigns to encourage young graduates to join the teaching profession. Ensure that messages regarding education delivery are non-partisan and promote an inclusive model for all children.

Resilience aligned school nutrition programs

Food Safety Nets: While food insecurity persists, CECs support extending the meals provided by school feeding programs in schools, especially to the most marginalized schools.

---

participation of female teachers and mothers in school decision-making. Community level training on monitoring and reporting can help empower CEC involvement in school management processes thereby helping to promote the design of informed locally relevant interventions and responses.

Women's Participation and the Abolition of Corporal Punishment: The government is actively seeking to increase the number of women in the workforce. A zero-tolerance on corporal punishment law was passed recently.

School and community level strengths

Innovative Community Programs in Schools: These were provided during the initial unrest and violence that preceded and immediately followed the revolution. Some emergency interventions introduced teacher learning circles and a few limited non-clinical school-based psychosocial interventions.

NGO School Feeding Program: A popular school feeding program exists at the primary education level supported by NGOs in different parts of the country.

Increased Poverty Due to Recent Conflict: The political instability that has dominated the national scene since the revolution has created significant socioeconomic insecurity at the local level. Students speak of higher food prices affecting food security as a particular concern at the household level.

Youth Unemployment: High unemployment rates and many young people lack hope for the future.

Stigmatization: Students whose fathers worked for the sizeable state apparatus prior to the revolution feel especially vulnerable to bullying and recrimination attacks within school and towards their families.

Education strategic plan component: A revised operational plan to move towards decentralization by promoting higher levels of community participation in education service delivery in particular with regards to administrative and personnel components.

Annex 3: Evidence from the ERA pilots

In addition to conducting an extensive literature review (see, "Extended Bibliography"), the development of the ERA program benefited from a series of pilots resulting in final prototypes of the three ERA tools previously presented. This permitted the collection of rich and varied evidence regarding education resilience in different contexts of violence and conflict. The five initial pilot country case studies and their primary contributions to the ERA design are presented in the table 6 below.

A synthesis of the key findings of this pilot collection of evidence within the ERA framework is presented next, which confirms the importance of understanding risks and assets, the broader school and community contexts that can foster resilience, and the central role of education systems.

Dynamic Process

Resilience is a dynamic concept that involves human, community and institutional engagement processes

In line with the latest resilience research, the ERA pilots also provided evidence of the multiple dynamic levels for resilience. At the individual and group level, the ERA pilot with Palestine Refugees presented clearly the voices of adolescents and youth as they expressed not only the proximate adversities in their lives (such as extreme poverty, unemployed parents and incarcerated or killed family members, neighbors and friends) but also how education provided purpose to their lives and how their teachers, peers, parents and neighbors supported their learning, socioemotional well-being and protection. It also became clear that education resilience entailed much more than individual assets. Both in the Palestine Refugee study and Honduran critical school pilot,

Table 6. Sequencing of the ERA program development and respective country case studies

Country	ERA framework component
Rwanda	Development of the Education Resilience framework (institutional resilience component)
South Sudan	Initial prototype of an education resilience research approach with a university based in a fragile context (RES-Research)
Palestine Refugees (UNRWA)	Further development of the ERA framework and piloting of the qualitative education resilience training module (RES-Research). Findings guided the initial design of the resilience in schools questionnaire (RES-School)
Latin America (Colombia, Nicaragua and Honduras)	Development and piloting of the mixed-methods (qualitative and quantitative) education resilience research training module (RES-Research)
Honduras	Development and piloting of the RES-360^0 tool

students revealed how they interacted with community and institutional (school) opportunities to manage the adversities they were exposed to. The ERA pilot in Rwanda provided examples of education system level resilience by detailing how education policies provided meaningful and relevant guidance in the post-genocide period, especially focused on issues of unity, equity and social reconciliation. The first ERA pilot in South Sudan was crucial in defining from the outset the complex interactions between individual and country level resilience approaches. For example, many of the risk factors identified by workshop participants in their own lives (migrating from rural to urban communities, studying as southerners in Sudan (Khartoum), and the obstacles for females in higher education) provided a proximal parallel to some of the conflict issues between Sudan and today's South Sudan: the territorial and ethnic conflict, the differences in language and culture, systematic exclusion, etc. However, also present were the individual and national assets of university students attending the ERA workshop and of a post-Independence South Sudan as it entered a more pronounced state building phase.

Risks and Assets

The starting point for education resilience interventions is a collective understanding of how adversity affects students and schools

For education system policies, programs and services to be relevant in adversity, they need to reflect a collective understanding of the risks students face. Failure to do so can result, at best, in education services that are deemed irrelevant by students and their families and, at worst, that collude or ignite the risks already faced by students. Also, addressing explicitly the risks education communities face provides an opportunity to also address the potential positive meaning and purpose

that education can provide in such difficult situations. This was clearly expressed by the students in the Palestine Refugee, Honduran and South Sudan studies (this latter from university students). A collective understanding (at national and local levels) of the risks they faced—and as understood by the students themselves—was a important first step in fostering their resilience. Although the focus of resilience is on the assets and opportunities for positive change, these opportunities must be understood within overwhelming individual and social difficulties. Precisely because of this, the State and other services providers are called to make social services available and equitable to support a resilience process. These services are made relevant by addressing local risks and engaging with the assets of education communities.

Identifying and utilizing existing and indigenous assets is a key facet of education resilience

Early research on resilience focused on the protective factors—first internally and then in their environment—of populations in different contexts of adversity (extreme poverty, homelessness, armed conflict, etc.). However, it isnow known that resilience is a much more complex process, focused not only on individual strengths, but also on available opportunities and services. Honoring local assets and then providing empowering opportunities is foundational to a resilience approach. The study of post-genocide Rwanda highlighted the important role that existing community approaches to education delivery and management played in supporting the reform process. In particular, during the decentralization process— which included the education system— policy makers honored grassroots and home grown solutions by formalizing and systematizing them. Of note were the IMIHIGO-performance contracts where district mayors sign

performance contract with the President of the Republic, indicating districts targets and indicators that all mayors have to publically report on every year to the President. Other locally developed solutions included UBUDE-HE-Communal support; UMUGANDA-Community service; UMWIHERERO-Government Retreat; UMUSHYIKIRANO-National dialogue. Home grown solutions are already locally appropriate, benefiting from greater buy in and acceptance, and easier and more impactful to scale up. At the individual level, the almost 100 at-risk Palestinian students provided deep insights into their own strengths, assets and positive opportunities to succeed in school, at the same time that they relatedthe many adversities in their daily lives.

The importance of identifying indigenous assets is also associated to the need to work through local actors. This has been apparent across the ERA pilots that were conducted; even in contexts where capacity is deemed weak. By working with students from the University of Juba, in South Sudan, and with local researchers from West Bank, Gaza and Palestinian Refugee communities in Jordan, important topics for resilience were identified that would not otherwise have been obvious to external resilience researchers. This has also been the case working with researchers across Central America and Colombia who were better able to navigate the complexities of local power relations and politics in violence-affected contexts. However, focusing on assets does not preclude or undermine the need to address the roots of poverty, violence, injustice and many other social and institutionally created adversities. Identifying local assets serves to make relevant the social services to be rendered, as shown by the examples.

Schools and Communities

Parental caretakers and teachers, the adults most proximal to students, have a key role to play in promoting resilience among students

Existing evidence from 40 years of resilience research shows that after parents (and other primary caretakers), teachers are the most influential adults for children and youth in contexts of adversity. Similarly, data collected at the school level in both UNRWA schools and Honduras pointed to the crucial role that parents and teachers have to play in providing care, helping students develop competence and make meaning of adversity and of education, all determinants of resilience. Palestine refugee students were especially explicit in expressing their need for teachers and principals to understand the contexts they lived in, as these adversities followed them into the classroom. They also pointed to how their skills, leadership, knowledge, and desire to work in groups can be used in the teaching and learning process. For example, the interviewed Palestinian students referred explicitly to the importance of peer-to-peer learning, healthy competition and encouragement among students, and mutual support in times of crisis.

These findings were reiterated in Honduras where the critical school case evidence that was collected pointed to the need for school staff to be able to relate to the lives and adversities felt by students, and crucially to make explicit efforts to connect with them around these issues. Thus extra efforts to support learning, such as remedial classes and out-of-hours-support were recognized and greatly appreciated by students who gained an added impetus and motivation for their studies as a result. The Honduras pilot also pointed to the importance of schools and parents keeping a watchful eye on latent and non-explicit risks that they faced but that formed part of

48

the continuum of adversity they experienced. These included non-constructive disciplinary methods, expulsion of students to the dangers of the streets, and lack of positive relations among the community of adults who influence the learning environment of youth. This was especially expressed in students' concerns for teacher-parental relations which they sawas assets (when they were positive) and as risks (when they were poor or lacking).

Meaningful community and parental participation in schools fosters resilience

Both school effectiveness and resilience studies have highlighted the importance of school-community partnerships to support students to succeed in school (especially when living in situations of risks). In the ERA pilot studies, for example, the Honduras crucial case school found that mothers played a very supportive role in schools through supervision of students and the provision of socioemotional guidance. From the larger community, students' feedback regarding what helps them points to faith-based organizations, university pyschology interns and sport clubs. However, students participating in the ERA pilot in Honduras also indicate specific services that they deem relevant to perceived risks: these include sex education, youth violence prevention, and disaster preparedness. (Honduras is a country exposed to many natural disasters, such as hurricanes and earthquakes). In the Rwandan case study, the Ministry of Education was keenly aware of the value of mobilizing the community to create ownership and build support for reforms, as exemplified by organizing ministry officials to visit many villages of the country to rally support for equitable education reforms under a unified country. The Palestine Refugee pilot provided evidence of close community-school relations that fostered collective education and learning purpose for Palestinian children, adolescents

and youth. Honduras exemplified the explicit call of students, teachers and parents for more community participation in school—not based on school administrative functions but rather focused on shared efforts and accountability for the learning, well-being and protection of students.

Explicit Plans: Goals, Strategies and Interventions

Successful resilience interventions require commitment and explicit planning and resources from education systems

The examples of education resilience found in the ERA literature review, as well as in its pilot studies, were all embedded within the daily activities of students—in the relationships between teachers and peers in the classroom, during recess and extracurricular activities, and in the daily interactions between school staff and parents. Thus, ERA does not promote independent resilience projects, but rather advocates aligning existing education services to a resilience approach. In Rwanda, the education sector policies and strategic plans made explicit a clear vision and dedicated strategy to overcome the roots that had led to the genocide. The early, timely interventions followed by sequential reforms were also important. In the aftermath of the genocide, the new regime made it a priority to get children back into schools immediately, put them together, recruit teachers and return to classroom 'normalcy'.This was seen as a crucial way of creating stability, improving morale, healing emotional wounds and starting a reconciliation process. In Palestine refugee schools of the West Bank, Gaza and Jordan, international guiding policies such as girls' education, Education for All and human rights, provided a positive foundation to position education as a shared goal of the education community, and

schools as central institutions.

In general, the initial ERA pilots tested not only the relevance of this approach for education systems in contexts of adversity, but also provided additional evidence regarding the importance of understanding both risks and assets, the broader and complex social ecology of resilience, and the explicit role that education systems can play in fostering, supporting and scaling up the resilience in their education communities.

The general lessons learned from the pilot ERA case studies corroborated the four components of the program, previously presented, and are summarized in the following table.

Table 7. The ERA Program resilience policy goals and levers

RESILIENCE COMPONENTS

1. Manage and Minimize Adversity in Education
- Identification of adversities faced by students
- Identification of current responses to risks in schools

2. Use and Protect Positive Engagement and Assets in Education Communities
- Resilience through control, competence and being accountable
- Resilience through socioemotional well-being, engagement with others and identity formation

3. Foster Relevant School & Community Support
- Relevant approaches to access and permanence
- Relevant approaches to learning and teaching
- Relevant approaches to school management, school climate and community relations

4. Align Education System Services to the Resilience Assets
- Meaningful and relevant strategic direction for education in contexts of adversity
- Innovative education programs for learning, socioemotional well-being and protection
- Available and equitable human, material and financial resources

Annex 4: ERA contributions to risk and resilience M&E

The ERA conceptual framework, tools and data can inform the development of indicators to measure elements of education resilience in the delivery of services at both local and national levels. For example, the RES-360o tool can help educational institutions measure the

prevalence of local risks and coping mechanims at the school and community level. mechanisms at the school and community level. The RES-School can help assess and measure changes over time in the type and prevalence of activities in schools that foster resilience

in students and the participation of students, parents, teachers and school administrators. RES-Research has provided a framework useful not only for general research, but which also can be adapted to program evaluation.The table below presents examples of how ERA can provide elements to improve the relevance of M&E for schools in fragile, conflict and violence-affected contexts.

Examples of how participating education systems may adapt ERA instruments to contribute to their monitoring and evaluation activities

1. **Using ERA instruments to support systems to monitor, evaluate and undertake institutional learning**
    - ERA can guide the development of non-traditional monitoring tools (case studies, questionnaires, scales, etc.) to complement other performance evaluations of the education system (access, learning, equity, retention and graduation).
    - ERA can supplement annual performance reviews, monitoring and impact assessments of programs and educational services.

2. **Using ERA variables and indicators to monitor changes in risks at the school and community level**
    - For vulnerable populations (young people out of school, demobilized child soldiers, etc.), ERA instruments can be used alongside other indicators to assess student welfare, hope and attitudes.
    - In partnership with other sectors, ERA instruments may include risk indicators that are not necessarily collected by the school system or school and therefore provide a new perspective on the factors impacting the learning process.

3. **Using the ERA variables and indicators to monitor education system and service delivery strengths**
    - ERA instruments can discover "hidden" resilience factors and processes such as positive interpersonal relationships, betterment attitudes and proactive behaviors among school and community actors.
    - ERA instruments also identify variables and indicators related to processes for meaning-making in adversity, future purpose and planning and other positive facets related to the role of education in the well-being of students and teachers.
    - The variables and indicators can also be useful for monitoring social cohesion commitment at the school level and gauging positive interactions between the school and community to better measure school climate and participation.

Extended bibliography

Allwood, M.A., D. Bell-Dolan, and S.A. Husain. 2002. "Children's trauma and adjustment reactions to violent and non-violent war experiences." *Journal of the American Academy of Child and Adolescent Psychiatry* 41: 450-457.

Arden, R., and Y. Claver. Forthcoming. *Rebuilding and strengthening resilience in education systems: Rwanda case study*. Washington, DC: World Bank.

Armstrong, F., and M. Moore. (eds.) 2004. *Action Research for Inclusive Education: changing places, changing practice and changing minds.* New York: Routledge Falmer.

Azimi, A. 2004. "The Mental Health Crisis in Afghanistan." *Lemar-Aftaab* (March 1), http://www.reliefweb.int/rw/rwb.nsf/db900sid/OCHA-64C37Z?OpenDocument.

Baird, M. 2010. *Service Delivery in Fragile and Conflict Affected States.* Background paper for the World Development Report 2011.

Bajaj, M. (ed.). 2008. *Encyclopedia of Peace Education*. Teachers College Columbia University. Charlotte, North Carolina: Information Age Publishing.

Barrera-Osorio, F., T. Fasih, H.A. Patrinos, and L. Santibañez. 2009. *Decentralized Decision-Making in Schools: The theory and evidence of school-based management*. Washington, DC: The World Bank.

Benard, B. 1995. "Fostering resilience in children". *Eric Digest*: EDO-PS-95-9, http://resilnet.uiuc.edu/library/benard95.html.

Benard, B. 2004. *Resiliency: What we have learned*. San Francisco: WestEnd.

Bird, L. 2003. *Surviving School, Education for Refugee Children from Rwanda 1994 – 1996*. Paris: UNESCO-IIEP.

Bird, L. 2007. *Children in crisis: education rights for children in conflict affected and fragile states.* Save the Children UK. Background paper prepared for the Education for All Global Monitoring Report 2008, Education for All by 2015: will we make it?

Bonanno, G. A., and A. D. Mancini. 2011. "Toward a lifespan approach to resilience and potential trauma." In S. M. Southwick, B.T. Litz, D. Charney, and M. J. Freedman. (eds.), R*esilience and mental Health: Challenges across the lifespan*. Cambridge: Cambridge University Press.

Borman, G., and I. Overman. 2004. "Academic Resilience in Mathematics among Poor and Minority Students." *The Elementary School Journal* 104(3): 177-195.

Boyden, J. 2003. "Children under fire: Challenging assumptions about children's resilience." *Children, Youth and Environments* 13(1): 1-29.

Brinkerhoff, D.W. 2007. "Capacity Development in Fragile States." Discussion Paper No. 58D, May 2007. A theme paper prepared for the project "Capacity, Change and Performance". European Center for Development Policy Management.

Bronfenbrenner, U. 1979. *The child in classroom (in ecology): The ecology of human development, experiments by nature and design*. Cambridge: Harvard University Press.

Brown, J.H., M. D'Emidio-Caston, and B. Benard. 2001. *Resilience Education*. Thousand Oaks: Corwin Press.

Bryan, J., and L. Henry. 2008. "Strengths-based partnerships: a school-family-community partnership approach to empowering students." *Professional School Counseling, The Free Library* (December 1), http://www.thefreelibrary.com/Strengths-based partner ships: a school-family-community partnership...-a0191213599.

Buckland, P., and M. Sommers. 2004. *Parallel Worlds, rebuilding the education system in Kosovo*. Paris: UNESCO-IIEP.

Burnham, J.J. 2009. "Contemporary fear of children and adolescents: Coping and resiliency in the 21st century." *Journal of Counseling and Development* 87: 28-35.

Burnham, J. J., and L.M. Hooper. 2008. "The influence of the war in Iraq on American youth's fears: implications for professional school counselors." *Professional School Counseling, The Free Library* (August 1), http://www.thefreelibrary.com/The influence of the war in Iraq on American youth's fears:...-a0184131461.

Bush, K.D., and D. Saltarelli. 2000. *The two faces of education in ethnic conflict: Towards a Peacebuilding Education for Children.* Florence: UNICEF Innocenti Research Center.

Caralli, R.A., J.H. Allen, and D.W. White. 2011. *The CERT Resilience Management Model: a maturity model for managing operational resilience.* Upper Saddle River: Addison-Wesley.

Carlson, L.A. 2003. "Existential theory: helping school counselors attend to youth at risk for violence." *Professional School Counseling, The Free Library* (June 1), http://www.thefreelibrary.com/Existential theory: helping school counselors attend to youth at risk...-a0106913865.

Cefai, C. 2008. *Promoting resilience in the classroom: A guide to developing pupil's emotional and cognitive skills.* Philadelphia: Jessica Kingsley Publishers.

Checchi and Company Consulting Inc. 2009. "Mid-term evaluation of partnership in Advancing Community Education in Afghanistan (PACE-A) by USAID in the Islamic republic of Afghanistan." Checchi and Company Consulting Inc. Afghanistan Support Project, Washington DC, USA.

Christenson, S., and L. Havsy. 2004. "Family-School-Peer Relationships: Significance for Social Emotional and Academic Support." In J. Zins, R. Weissberg, M. Wang, and H. Walberg. *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press Columbia University.

Chrobok, V., and S. Akutu. 2008. *Returning Home. Children's perspectives on reintegration. A case study of children abducted by the Lord's Resistance Army in Teso, Eastern Uganda.* London: Coalition to Stop the Use of Child Soldiers.

Clemens, E.V. 2006. "Counseling adolescent students affected by the war in Iraq: using history as a guide." *Professional School Counseling, The Free Library* (April 1), http://www.thefreelibrary.com/Counseling adolescent students affected by the war in Iraq: using...-a0144762549.

Clemens, E.V., and A. Shipp. 2005. *Short duration, lasting impact: Counseling students affected by the War in Iraq*. Session presented at the annual conference of the American Counseling Association, Atlanta, GA.

Cohen, L., V. Chavez, V., and S. Chehimi. 2010. *Prevention is Primary: Strategies for Community Well Being.* San Francisco: Jossey-Bass.

Collaborative for Academic Social and Emotional Learning. 2003. *Safe and sound: An educational leader's guide to evidence-based social and emotional learning programs.* Chicago: CASEL.

Comer, J., N. Haynes, E. Joyner, and M. Ben-Avie. (eds.). 1996. *Rallying the whole village: the Comer process for reforming education.* New York: Teacher College Press.

Creswell, J. W. 2005. *Educational research: Planning, conducting, and evaluating quantitative and qualitative research* (2nd ed.). Upper Saddle River: Pearson Education.

Creswell, J. W., and V. Plano Clark. 2006. *Designing and Conducting Mixed Methods Research.* Washington, DC: Sage Publishers.

Daud, A., B. af Klinteberg, and P.A. Rydelius. 2008. "Resilience and vulnerability among refugee children of traumatized and non-traumatized parents." *Child and Adolescent Psychiatry and Mental Health* (2)7.

Doll, B., S. Zucker, and K. Brehm. 2004. "Resilient Classroom: Creating Healthy Environments for Learning." *Guildford Practical Interventions in the School Series*. New York: The Guilford Press.

Dowdney, L. (ed.). 2007. *Trauma, Resilience and Cultural Healing: How do we move forward?* London: Coalition to Stop the Use of Child Soldiers.

Durlak, J., R. Weissberg, A. Dymnicki, R.D. Taylor, and K.B. Schellinger. 2011. "The Impact of Enhancing Student's Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions." *Child Development* 82 (1): 405-432.

Econometria Consultants. 2001. *Evaluación de Impacto del Proyecto "MA: mi cuerpo mi casa" del Colegio del Cuerpo en Cartagena de Indias.* Final report of the evaluation. For The World Bank, Colombia.

Education for All (EFA). 2008. *Guidelines for Capacity Building in the Education Sector.* Education for All Fast Track Initiative (EFA).

Emmons, E., and Hagopian. 1998. "A school transformed: the Case of Norman S. Weir." *Journal of Education for Students Placed at Risk* 3(1): 39-51.

Fitz-Gibon, A. (ed.). 2008. "Positive Peace: Reflections on Peace, Education, Nonviolence and Social Change." Essays evolved from the Twenty-First Annual Conference of Concerned Philosophers for Peace, State University of New York, College of Cortland.

Garmezy, N. 1985. "Stress resistant children: the search for protective factors." *Recent Research in Developmental Psychopathology.* Oxford: Pergamon Press.

Garmezy, N., A.S. Masten, and A. Tellegen. 1984. "The study of stress and competence in children: a building block for developmental psychopathology." *Child Development* 55(1): 97-111.

Gizir, C.A., and G. Aydin. 2009. "Protective factors contributing to the academic resilience of students living in poverty in Turkey." *Professional School Counseling* 13(1): 38-49.

Glad, M., and W. Hakim. 2009. "Knowledge on Fire: Attacks on education in Afghanistan (draft)." Study conducted by Care on Behalf of the World Bank with the assistance of CoAR.

Greenberg, M., C. Kusche, and N. Riggs. 2004. "The PATH Curriculum: Theory and Research on Neurocognitive Development and School Success." In J. Zins, R. Weissberg, M. Wang, and H. Walberg, *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press Columbia University.

Gulati, R. 2009. *(Re)(Organize) For Resilience: Putting customers at the center of your business.* Boston: Harvard Business Press.

Hawkings, J.D., R.F. Katalano, R. Kosterman, R Abbot, and K.G. Hill. 1999. "Preventing adolescents health risk behavior by protecting behavior during childhood." A*rchives of Pediatrics and Adolescent Medicine* 153:22-234.

Henderson, N., and M. Milstein. 2003. *Resiliency in Schools: Making it Happen for Students and Educators.* Thousand Oaks: Corwin Press.

INEE. 2010. *INEE Minimum Standards for Education: Preparedness, Response, Recovery.* International Network for Education in Emergencies.

INEE. 2011. "The Multiple Faces of Education in Conflict Affected and Fragile Contexts." *International Network for Education in Emergencies (INEE) Working Group on Education and Fragility.*

INEE. 2012. "Disaster Risk Reduction Tools and Resources." Active webpage of the International Network for Education in Emergencies with various disaster risk reduction studies and tools, http://www.ineesite.org/index.php/post/disaster_risk_reduction_tools/.

Jackson, C.M. 2006. "Helping students cope in an age of terrorism: strategies for school counselors". *Professional School Counseling, The Free Library* (April 1), http://www.thefreelibrary.com/Helping students cope in an age of terrorism: strategies for school...-a0144762548.

Jenson, J.M., and M.W. Fraser. 2006. *Social Policy for Children & Families: A Risk and Resilience Perspective.* Thousand Oaks: Sage Publications.

Kaufman, R. A. 2000. *Mega planning: Practical tools for organizational success*. Thousand Oaks: Sage Publications.

Kaufman, R., R. Watkins, and I. Guerra. 2001. "Getting Valid and Useful Educational Results and Payoffs: We are what do, say, and deliver." *International Journal of Educational Reform* 10 (4).

King, E., Samii, C. and Snilsveit, B. 2010. "Interventions to Promote Social Cohesion in Sub-Saharan Africa". *Journal of Development Effectiveness* 2(3): 336-370 .

Kirk, J., and Winthrop, R. 2007. "Promoting Quality Education in Refugee Contexts, Supporting teacher development in Northern Ethiopia." *International Review of Education* (Special Issue on Quality Education Africa: Challenges and Prospects).

Klasen, F., G. Oettingen, J. Daniels, M. Post, C. Hoyer, and H. Adam. 2010. "Post-traumatic resilience in Former Ugandan Child Soldiers." *Child Development* 81(4): 1096–1113.

Kostelny, K., and M. Wessells. 2008. "The protection and psychosocial well-being of young children following Armed Conflict: Outcome Research on Child-Centered Spaces in Northern Uganda." *The Journal of Developmental Processes* (3)2: 13-25.

Kostelny, K., and M. Wessells. 2010. *Psychosocial assessment of Education in Gaza and Recommendations for Response.* UNESCO.

Krovetz, M.L. 2008. *Fostering Resilience: Expecting all students to use their minds and hearts well.* Thousand Oaks: Corwin Press.

Leach, F., and M. Dunne, M. (eds.). 2007. *Education, Conflict and Reconciliation: International Perspectives.* New York: Peter Lang AG International Academic Publishers.

Liebenberg, L., and M. Ungar. (eds.). 2008. *Resilience in Action*. Toronto: University of Toronto Press.

Luthar, S. 1991. "Vulnerability and Resilience: A Study of High Risk Adolescents." *Child Development* 62(3): 600-616.

Luthar, S.S., D. Cicchetti, and B. Becker. 2000. "The construct of resilience: A critical evaluation and guidelines for future work." *Child Development* 71(3): 543-562.

Masten, A.S. 2001. "Ordinary magic: Resilience processes in development." *American Psychologist* 56: 227-238.

Masten A.S., and J.D. Coatsworth. 1998. "The development of competence in favorable and un favorable environments: Lessons from research on successful children." *American Psychologist* 53:205–220.

Masten, A.S., D. Heistad, DJ.J. Cutuli, J. Herbers, J. Obradović, C. Chan, E. Hinz, and J. Long. 2008. "School Success in Motion: Protective Factors for Academic Achievement in Homeless and Highly Mobile Children in Minneapolis." *Cura Reporter: University of Minnesota* 38(2): 3-12.

Masten, A.S., and J. Obradović. 2006. "Competence and resilience in development." *Annals of the New York Academy of Sciences* 1094:13-27.

Matta, N., and P. Morgan. 2011. "Local Empowerment Through Rapid Results." *Stanford Social Innovation Review.*

Maton, K.I. 2005. "The Social Transformation of Environments and the Promotion of Resilience in Children". In R. DeV. Peters, B. Leadbeater, and R.J. McMahon (eds). *Resilience in Children, Families and Communities: Linking context to practice and policy.* New York: Kluwer Academic/Plenum Publishers.

Maton, K.I. 2008. "Empowering community settings: agents of individual development, community betterment, and positive social change." *American Journal of Community Psychology* 41:4–21.

McEwen, B. 2012. "Brain on Stress: How the social environment gets under the skin". *Proceeding of the National Academic of Sciences (PNAS).* Volume 109, supplement 2.

McGinty, S. 1999. *Resilience, Gender and Success At School.* New York: Peter Lang Publishing.

Myntti, C., R. Zurayk, and M. Mabsout. 2009. "Beyond the Walls, The American University of Beirut Engages its communities." Paper prepared for the Arab regional conference in Higher Education (ARCHE +10), Cairo, Egypt, May 31– June 2 2009.

Neenan, M. 2009. *Developing Resilience: A Cognitive-Behavioural Approach.* New York: Routledge.

New Deal. 2011. "A NEW DEAL for engagement in fragile states." http://www.pbsbdialogue. org//documentupload/49151944.pdf.

New York City Global Partners. "Best Practice: Providing Safe and Engaging Schools for Low-Income Drug Affected Neighborhoods." www.nyc.gov/globalpartners/innovationex change.

Nicolai, S. 2004. *Learning Independence: Education in Emergency and Transition in Timor Leste, since 1999.* Paris: UNESCO-IIEP.

Nicolai, S. 2007. *Fragmented Foundations: education and chronic crisis in the occupied Palestinian territory.* Paris: UNESCO-IIEP and Save the Children UK.

Nicolai, S., and C. Triplehorn. 2003. "The role of education in protecting children in conflict." *Humanitarian Practice Network* 42.

Obura, A. 2003. *Never Again, Education Reconstruction in Rwanda*. Paris: UNESCO-IIEP.

OECD. 2007. "Principles for Good International Engagement in Fragile States and Situations." Organization for Economic Cooperation and Development, Principles formally endorsed by ministers and heads of agencies at the Development Assistance Committee's High Level Forum on 3-4 April 2007.

OECD. 2008. "Service Delivery in Fragile Situations: Key Concepts, Findings and Lessons." Off-print of the *Journal on Development* 9(3).

OPM/IDL. 2008. "Evaluation of the Implementation of the Paris Declaration: Thematic Study – The applicability of the Paris Declaration in fragile and conflict-affected situations." http://www.dfid.gov.uk/aboutdfid/evaluation.asp and http://www.oecd.org/dac/evaluationnetwork.

Pat-Horenczyk, R., O. Peled, T. Miron, D. Brom, Y. Villa, and C. Chemtob. 2007. "Risk Taking Behaviors Among Israeli Adolescents Exposed to Recurrent Terrorism: Provoking Danger Under Continuous Threat?" *American Journal of Psychiatry* 164(1):66-72.

Paton, J., R.P. Weissberg, J. Durlak, R. Taylor, K. Schellinger, and M. Pachan. 2008. *The positive impact of social and emotional learning for kindergarten to eigth-grade students.* Chicago: Collaborative for Academic, Social and Emotional Learning (CASEL).

Pearson, Q.M. 2003. "Helping children cope with fears: using children's literature in classroom guidance." *Professional School Counseling, The Free Library* (October 1), http://www.the freelibrary.com/Helping children cope with fears: using children's literature in ...-a0110962186.

Penson, J., and K. Tomlinson. 2009. *Rapid response: Programming for education needs in emergencies.* Paris: UNESCO-IIEP.

Pigozzi, M. 1999. "Education in Emergencies and for Reconstruction: A developmental approach." *United Nations Children's Fund.* Working Paper Series, Education Section, Programme Division. New York: UNICEF.

Reddy, T. 2004. *Higher Education and Social Transformation: South Africa Case Study.* South Africa: University of Cape Town.

Reich, J, A. Zaura, and J.S. Hall. (eds.). 2010. *Handbook of Adult Resilience.* New York: The Guilford Press.

Rose, P., and M. Greeley. 2006. "Education in Fragile States: Capturing Lessons and Identifying Good Practice." Study for the DAC Fragile Group, Service Delivery Workstream, Sub-Team for Education Services. http://www.ids.ac.uk/files/Education_and_Fragile_States.pdf.

RRI. 2012. *Rapid Results Institute: Multiple publications*. http://www.rapidresults.org/

Rumberger, R.W. 1995. "Dropping out or middle school: A multilevel analysis of students and schools." *American Educational Research Journal* 32(3): 583-625.

Rutter, M. 1979. "Protective factors in children's responses to stress and disadvantage." In M. Kent and J. Rolf. (eds.) *Primary prevention of psychopathology, Vol. 3: Social competence in children*. Hanover: University Press of England.

Rutter, M. 1987. "Psychosocial Resilience and Protective Mechanisms." *American Journal of Orthopsychiatry* 57(3): 316-331.

Sakarya, S., M. Bodur, O. Yildririm-Oktem, and N. Selekier-Goksen. 2012. "Social Alliances: Business and social enterprise collaboration for social transformation." *Journal of Business Research* doi:10.1016/j.jbusres.2012.012.

Schelble, J.L., B.A. Franks, and M.D. Miller. 2010. "Emotion Dysregulation and Academic Resilience in Maltreated Children." *Child and Youth Care Forum*.

Sinclair, M. 2002. *Planning Education In and After Emergencies.* Paris: UNESCO-IIEP.

Soroor, S., and A. Popal. 2005. "Bridging the gap: understanding the mental health needs of Afghan youth." Report commissioned by the Ministry of Children and Youth Services, Afghanistan. http://ceris.metropolis.net/Virtual%20Library/EResources/SoroorPopal2005.

Staub, E. 1989. *The Roots of Evil: The Origins of Genocide and Other Group Violence*. New York: Cambridge University Press.

Staub, E. 2011. *Overcoming Evil: Genocide, Violent Conflict and Terrorism.* New York: Oxford University Press.

Stemberg, R.J., and R.F. Subotnik. (eds.). 2006. *Optimizing Students Success in School with the Other Three Rs: Reasoning, Resilience and Responsibility.* Greenwich: AIP-Information Age Publishing.

Stolker, R. J. M., D.M. Karydas, and J.L.Rouvroye. 2009. *A Comprehensive Approach to Assess Operational Resilience.* Eindhoven: Eindhoven University of Technology*.* http://www.resilience-engineering.org/RE3/papers/Stolker_Karydas_Rouvroye_text.pdf

Theron, L. 2009. "Resilience as Process: a group intervention program for adolescents with learning difficulties." In L. Liebenberg and M. Ungar. (eds.) *Theory in Resilience in Action*. Toronto: University of Toronto Press.

Todd, P., and K. Wolpin. 2003. "On the Specification and Estimation of the Production Function for Cognitive Achievement." *Economic Journal* F3-F33.

UNESCO-IIEP. 2011. *Integrating Conflict and Disaster Risk Reduction into Education Sector Planning.* Paris: UNESCO-IIEP.

UNESCO-IIEP. 2010. *Guidebook for planning education in emergencies and reconstruction.* Paris: UNESCO-IIEP.

Ungar, M. 2004. *Nurturing Hidden Resilience in Troubled Youth.* Buffalo: University of Toronto Press.

Ungar, M. (ed.) 2005. *Handbook for Working with Children and Youth: Pathways to Resilience Across Cultures and Contexts.* Thousand Oaks: Sage Publications.

Ungar, M. 2007. *Playing at Being Bad: The Hidden Resilience in Troubled Youth.* Toronto: McClelland & Steward.

Ungar, M. 2011. "Social Ecology of Resilience: Addressing contextual and cultural ambiguity in a nascent construct." *American Journal of Orthopsychiatry* 81(1): 1-17.

Ungar, M. (ed.). 2012. *The Social Ecology of Resilience: A Handbook of Theory and Practice.* New York: Springer.

Valikangas, L. 2010. *The Resilient Organization: How adaptive cultures thrive even when strategy fails*. New York: McGraw Hill.

Veale, A. 2010. *Individual through community resilience in social reintegration of children associated with armed forces and groups.* London: Coalition to Stop the Use of Child soldiers.

Wachtel, T., and L. Misky. (eds.). 2008. *Safer Saner Schools: Restorative Practices in Education.* Pennsylvania: International Institute for Restorative Practices.

Wehlage, G.G., R.A. Rutter, G.A. Smith, N. Lesko, and R. Fernandez. 1989. *Reducing the Risk: Schools as Communities of Support.* London: Palmer Press.

Weick, K.E., and K.M. Sutcliffe. 2007. *Managing the unexpected: Resilient performance in an age of uncertainty.* San Francisco: Jossey-Bass.

Werner, E. 1990. "Protective Factors and Individual Resilience." In S.J.S. Meisels. (ed.) *Handbook of Childhood Intervention*. Cambridge: Cambridge University Press.

Werner, E., and R. Smith. 2001. *Journeys from Childhood to Midlife: Risk, Resilience and Recovery.* Ithaca: Cornell University Press.

World Bank, The. 2001. *Educar en medio del conflicto, experiencias y testimonios, retos de esperanza*. Colombia: The World Bank.

World Bank, The. 2005. *Reshaping the future, education and post-conflict reconstruction.* Washington, DC: The World Bank.

World Bank, The. 2011. *Learning for All: Investing in People's Knowledge and Skills to Promote Development, World Bank Group Education Strategy.* Washington, DC: The World Bank.

World Bank, The. 2011. *World Development Report 2011: Conflict, Security and Development.* Washington, DC: The World Bank

Zins, J., M. Bloodworth, R. Weissberg, and J. Walberg. 2007. "The Scientific Base Linking Social and Emotional Learning to School Success." *Journal of Education and Psychological Consultation* 17(2-3):191-210.

Zins, J., R. Weissberg, M. Wang, and H. Walberg. (eds.). 2004. *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press Columbia University.

Questions, comments or suggestions?
Contact **education resilience@worldbank.org**

The World Bank
1818 H Street, NW
Washington DC 20433 USA
www.worldbank.org/education/resilience
educationresilience@worldbank.org