

# EDUCATION TO MITIGATE FRAGILITY: GRAPPLING WITH COMPLEXITY

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#### **Disclaimer**

This paper and the views expressed in it are the work of the author and should not be taken to represent the views of PEIC or EAA.

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### INTRODUCTION

ssues of conflict-affected and fragile states have been on the global radar for decades now. International security and development concerns – including armed violence and delayed development in affected countries, and real and perceived threats to global security, – have broadened the constituencies focused on these contexts. Specialized agendas such as peacebuilding, conflict sensitivity and state-building have built up bodies of literature and established multi-sectoral approaches to try to mitigate the situations in fragile contexts. Within the education sector, the 'education and fragility' agenda addresses the imperative of reducing the risk of conflict and minimizing fragility dynamics using education as the instrument to do so.

Questions remain as to what we have actually learned about the capacity of education interventions to mitigate fragility. The literature indicates that education can both mitigate and exacerbate the dynamics of fragility in a given context. Under such circumstances, we must shift our perspectives to note that, in such complex environments, the "how" of our education interventions may be just as, if not more, important than the "what". A focus on the "how" demands an enhanced emphasis on the context itself and the multi-faceted, interlinked complexity it embodies. Without this, our interventions may be built on weak or misguided assumptions based on "linear" understandings of change processes which characterise change as straightforward – and oversimplified – cause-and-effect. Developing the capacity to take into account the complexity of fragile contexts poses great challenges but is critical to achieving outcomes that utilise education to help mitigate conflict.

This study will review the development and evolution of the education and fragility agenda, situating it within the evolution of the fragile states agenda. It will pose the question as to what we know about how education can mitigate fragility, and examine a possible explanation for why we still do not know much: that education in fragile contexts and as an intervention to interrupt those fragility dynamics presents a complex problem situated within a complex system for which our traditional approaches are not adequate. The study will then propose new approaches that can better help us grapple with the complexity encountered in such contexts and offer some practical steps forward to initiate a change in our *modus operandi*.

### FRAGILE STATES AND FRAGILITY

#### A. Terminology and labels

Since at least the height of imperialism, the concept of state "weakness" has been a part of the diplomatic lexicon. A speech by the British Lord Salisbury in May 1898 claimed a division of nations between those living and those dying, "the weak states . . . becoming weaker and the strong states . . . becoming stronger" (Morten 2005). Such an interpretation of the characteristics of nation-states remains with us to this day in the language of state fragility. The contemporary history of the fragility agenda since the 1990s is an evolution of thought primarily in the fields of international development and security, with additional insights from political scientists and other academics. A number of developments in the security and international development fields over the last few decades – from structural adjustment, to the end of the Cold War, to a focus on good governance, to the 'war on terror' – have contributed to the current shape of the fragile states agenda for the international community.

A range of terms has been used over the years by academics and practitioners regarding state fragility: states have been fragile, weak, failing, and, at worst, failed or collapsed. Definitions vary given the perspective and purpose of those creating them, including political scientists, security analysts, and development practitioners. Though often glossed over, defining the nature and purpose of the nation-state itself has been critical to determining whether it is considered "fragile". Many assumptions exist regarding what the state is or is not, and what it is or is not required to provide at a range of levels from 'strong' to 'fragile' or even 'failed'. The traditional Weberian definition of the state – in which the state claims a monopoly over the legitimate use of physical force within a given territory – is often at the root of discussions of state fragility: the presence of conflict is taken as a basic indicator of fragility and failure if one adopts a fundamentally security-focused perspective on nation-states. This traditional definition has been expanded for contemporary states, which are often assessed based on their capacity to provide certain basic political or public goods to populations living within them (Rotberg 2007). From a development perspective, the state is defined by its capacity to assist and accelerate development within its borders (Khan 2002).

In reality, the fragile states agenda has tended to define fragile contexts "according to what they are not rather than what they are" (ODI 2010, 1, original italics). No consensus exists as to a definition or clear typology of fragile states or contexts. Instead, general agreement has arisen that fragile states are all unique and different from one another, with unique and different problems (quoted in Mosselson et al 2009). At the same time, use of the "fragility" label facilitates and legitimises a wide range of interventions by external actors for the overt purposes of security and/or development, as well as the promotion of foreign policy objectives. The rationale that a state is unwilling or unable to protect the social and political rights of its citizens, for example, furnishes the mandate for intervention by outside actors for security or humanitarian reasons (FRIDE 2007).

While no singular, operational definition of fragile states or fragility exists, some common indicators can be identified based on the explicit or assumed definitions of states and covering a range of characteristics primarily in terms of functionality and fragility 'outputs'. Functionality refers to the capacity or will of the state to perform a set of functions for its citizens' security and well-being. 'Outputs' are the results of state fragility such as violent conflict, poverty, global

security threats, refugee movements, etc. (Cammack et al 2006). Some indicators overlap the two categories. Common indicators include:

- violence, either the presence of violence or the risk of descent into violence;
- control over territory, in terms of security whether the state can control its borders, and the activities and factions within those borders and the provision of political or public goods whether the state can provide services across the whole, or at least a large part, of its territory;
- effectiveness or capacity, i.e. a state's ability to provide political goods (such as freedoms and rights, security, law and order) as well as public goods (basic services such as education, health care, etc.) to the people living within its borders (Rotberg 2007);
- *fulfilment of international obligations* whether a state can, for example, prevent global security threats such as those from terrorism, transnational economic crime, or the use of its territory for violence against other states (African Studies Centre 2003);
- *legitimacy*, generally considered as legitimacy in the eyes of the people within the state but also within the international community; and
- poverty and inhibited development exemplified by missed development targets.

The varied emphasis on these indicators by key actors – generally international actors - is linked to their differing perspectives, approaches, entry points and interventions. Further specifications of agendas under the broad fragile states umbrella have grown up in recent years with their own objectives and bodies of related practice and literature. State-building, for example, has focused on the legitimacy and capacity of the state, while conflict sensitivity and peacebuilding have honed in on reducing the risk of violence and establishing sustainable peace.

Debate continues about the role of the state and the implications for addressing fragility, especially given the lack of an agreed operational definition. Hutton claims that the role of the state as an origination point for fragility remains central to debates, seeing the state as having re-emerged as the bulwark of international and internal stability in recent years (2014, 1). Other shifts, however, have been made to reframe fragility beyond the borders of the state to both within and across them (see Barakat et al 2008). Fragility does not necessarily impact all places or people within certain borders, nor does it do so in generalised ways. Likewise, fragility is increasingly viewed as cross-border, with regional causes and implications. Removing the state as the unit of analysis also reduces some of the negative connotations applied to states when labeled fragile. It allows a separate view of part or all of the society within those borders for assessing and addressing fragility (GSDRC). The Organisation for Economic Co-operation and Development (OECD) - which put forward an early definition of fragile states as those lacking capacity or will to provide basic services - is, for example, changing the focus of its annual report on fragile states to "states of fragility" from 2015, assessing fragility as an issue of universal character that can affect all countries based on specific indicators related to the forthcoming Sustainable Development Goals (SDGs).

Focusing on degrees of fragility helps to operationalise the term. For example, in a policy paper marking ten years since the World Bank established a taskforce to analyse how best to approach fragile states, Chandy (2011) notes the origins of the term within the Bank as "Low-Income Countries Under Stress (LICUS)", which morphed into "fragile states" around 2004. On this definition, fragile states were typically those that fell to the bottom of development indices, and middle-income countries were not included. While chronic poverty and inhibited development remain a common thread in categorisations of contexts as fragile, debate has arisen about whether to exclude middle-income countries impacted by crisis and violence (Lemay-Hébert & Toupin 2011, 7). The existence of differences in development levels in pockets of exclusion within countries further highlights the need for a nuanced approach.

#### B. New developments, emerging trends

Shifts in definitions have matched shifts in the evolution of the operationalisation of the fragile states agenda. Over the years, we have seen the international security agenda, which viewed fragile states as potential global threats (particularly after 9/11), merge with the international development agenda, which became newly interested in fragile states on the realization that global development targets could not be met without them (see also Novelli 2013). The fragility inherent to these contexts both makes them unlikely to achieve development targets such as the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) and increases the likelihood of the incidence of armed conflict in them (Mosselson et al 2009). Instability is further feared internationally as a trigger for transnational violence or other destructive forces such as terrorism or organised crime. Consequently, recognition that contexts exhibiting similar characteristics were both threats to international security and to their own development has brought these issues to the fore. The majority of perspectives, approaches and interventions taken in such contexts reflect the core developmental and security aspects of fragility, often in blended measure.

The specialised approaches that address different elements among the common indicators of fragility, such as state-building and peacebuilding, exemplify this merger. The growth of the peacebuilding field, particularly its transition from society-based conflict transformation processes to operationalised development and security approaches such as security sector reform, is one example of this specialisation. Inherent links between fragility and peace exist in that "peace requires a state sufficiently competent and legitimate to authorize, recognize and regulate the function of institutions both below and above it" (quoted in Hutton 2014, 3).

As objectives and strategies have become linked across different agendas, the boundaries between these agendas have been reduced both in policy and in practice (Ndaruhutse 2011, 12). The multi-dimensional challenges laid out in the Principles for Good International Engagement reflect how the different spheres – of development, humanitarian intervention, security, peacebuilding – have become interdependent. This blending of spheres has sometimes resulted in a "security first" approach that often privileges stabilisation over other outcomes. Links between defence, diplomacy and development, as demonstrated in comprehensive strategies and whole-of-government approaches, have attempted to combine use of these tools in the search for security, structurally blurring the lines between these areas, their objectives and anticipated outcomes (Ndaruhutse 2011, 12). Wide gulfs in perspectives and approaches exist, and development actors are often concerned that their efforts will be instrumentalised or diverted towards security purposes.

The global architecture and available tools for addressing issues of fragility have also evolved. State-building efforts have given rise to research and tools on governance, both generally and sector-specific, with a focus on building legitimacy. Within the UN system, new infrastructure for peacebuilding was established via the UN Peacebuilding Commission and Peacebuilding Support Office in the mid-2000s. Many aid agencies have also developed units devoted to peacebuilding (Fitzduff & Jean 6). Growth has also occurred in the non-governmental sphere where NGOs have proliferated as links between security and development have grown (Causton 2009, 9). International NGOs are increasingly involved in peace-related activities, particularly as bilateral donors channel funds through them, and are both partnering with UN agencies and engaging with governments (Fitzduff & Jean, 2011, 6; Lemay-Hébert & Toupin 2011, 10-11). The number and scope of actors working in these hybrid spaces have increased over recent years.

### EVOLUTION OF THE EDUCATION AND FRAGILITY (E&F) AGENDA

While security and development approaches have grappled with macro-level issues and challenges of fragile contexts, efforts to understand these broad implications at sector levels, particularly for service delivery sectors, have grown up alongside. Within the field of education, a veritable "education and fragility" (E&F) agenda in its own right has evolved since the mid-2000s. The community of education development practitioners has focused much attention on how education can effectively be delivered in fragile contexts, how education systems can be sustained or rebuilt, how education may contribute to conflict and fragility, and how it can be used as a means for mitigating the dynamics of fragility.

The development of the E&F agenda over the last decade began with a number of activities related to education in fragile states taking place independently: an OECD Development Assistance Committee (DAC) work stream in 2005-6 undertook research on service delivery in fragile states, including education; the Education for All (EFA) Fast Track Initiative (the precursor to the Global Partnership for Education) established a Task Team in 2006 to address issues of support to fragile states to meet EFA goals; and bilateral donors such as DFID and USAID developed strategies and tools addressing the intersection of education and fragility. When the Inter-Agency Network for Education in Emergencies (INEE) Working Group on Education and Fragility was established in 2008, it began to serve as a "single locus of coordination, communication and collaboration" on these issues (Tebbe 2009). This shift matched the period of consolidation that Winthrop and Matsui (2013) see as marked by "outward collaboration and discussion with other sectors and sets of actors... [including] security specialists and development actors concerned about fragile states" (p. 18).

Mirroring to an extent the murkiness of broader fragility terms and taxonomies, the "education and fragility" agenda has had links to myriad global agendas. While E&F links clearly to the broader fragile states agenda, it has other influential relatives. Connections to the education in emergencies and Education for All (EFA)/MDG agendas have couched E&F in terms of a rightsbased imperative, the outcome of which is a focus on service delivery and ensuring the right to education in these contexts. Further ties to the poverty-reduction imperative of the fragile states agenda have substantiated this outlook, embodied in, among other things, a strong focus on increased and better financing for education in fragile states in the mid- to late 2000s. At the same time, the idea of the 'two faces' of education first promoted by Bush and Saltarelli - in its ability to mitigate or exacerbate conflict - established a further priority in considering education's contribution to stability and peace. As a result, the concept of education and fragility has been expansive in ways that consider both the delivery of services in fragile contexts and the impact of education on those fragility dynamics - and these are often seen simultaneously in the content or objectives of initiatives, such as Save the Children's Rewrite the Future Campaign or the 2011 EFA Global Monitoring Report (GMR) on armed conflict and education. This blending may mean that "education may be affected by strategic priorities and subordinated to political goals" (Burde et al 2011, 7). While education outcomes are generally weakest in fragile contexts, in an atmosphere of increased aid to fragile states as a means to increase global security, education receives heightened attention when framed as a tool towards these ends.

In broad terms, the evolution of the E&F agenda matched the increasing weight placed on the security and development elements of the broader fragile states agenda, and has been an extrapolation or application of this at the education sector level. Development actors gave more attention to education delivery in fragile contexts (e.g. the OECD DAC workstream and FTI Task Team) while security actors began to focus on how education can potentially mitigate dynamics of fragility. Research by USAID led to the USAID Education and Fragility Assessment Tool released in 2006. The INEE Working Group on E&F undertook a research programme in 2009-2011, comprising 4 case studies (Afghanistan, Bosnia-Herzegovina, Cambodia and Liberia) and a synthesis report. This represented a cross-agency effort to develop substantiating evidence of how education has impacted conflict and fragility dynamics. A framework for understanding these interactions was developed articulating fragility across five domains (security, political, social, economic and environmental) that is still in use, but overall the studies provided only weak qualitative evidence from which it was difficult to draw conclusions across the cases. Nonetheless, these efforts helped to open up the parameters of discourse around the simplistic development notion that "more education is always better" (Winthrop & Matsui 2013, 18). It was no longer assumed that delivery of quality education would in itself promote peace and stability, a conflation of development and security outcomes, without reference to issues such as equitable access on the part of different social groups.

This evolution mirrored similar conceptual undertakings in the fragile states agenda in recognition of the political nature of fragility and the limitations of technical responses. According to Tschirgi, "one of the key insights to emerge from two decades of peacebuilding research and practice since the end of the Cold War is that peacebuilding requires a coherent and sustainable political strategy. In the absence of such a strategy, well-intentioned interventions are unlikely to contribute to peacebuilding notwithstanding their intentions or technical merits" (2011, 2). At the sector level, new and deeper debates about the role of education in fragile contexts brought to light what Novelli et al term the "disjunction between education's transformatory potential and the narrow framing of education policy and programming" whereby the latter are "sometimes framed with narrow, technical parameters that bypass pivotal peace-related issues in post-conflict societies" (Novelli et al 2014, 63). Views of education in fragile contexts as a technical problem have been complemented by the acknowledgement that political economy is fundamental. "Linear" understandings of technical inputs that are assumed to achieve dual development- and security-related outcomes became less and less satisfactory as the contextspecific nature and complexity of fragile contexts were explored in research and practice. As a result, the E&F agenda has tried to adopt a more self-reflective approach towards considering the sometimes contentious nature and unintended consequences of education delivery in fragile contexts.

The discussion of education's role in fragility has increasingly focused on the themes of conflict sensitivity and peacebuilding. Conflict mitigation was integrated into the 2010 update of the INEE Minimum Standards for Education as a cross-cutting issue. The INEE Conflict Sensitive Education (CSE) Pack, an inter-agency tool, was developed and launched in 2011 and in 2012 UNICEF initiated a 14-country Peacebuilding, Education and Advocacy (PBEA) Programme with funding from the Dutch Ministry of Foreign Affairs.

As seen with the CSE Pack and the conflict analysis-based design of the PBEA country programmes, the field has begun to grapple with the context-specific nature of fragility and the need for solid analysis to inform programming. An increasing focus at the system or sector level for addressing fragility has also gained ground within education, focused on sector planning, capacity development of Ministries of Education and reforms of national systems. Increasingly, conflict sensitivity is promoted as integral to sector plans and policies, with conflict analysis as fundamental to the planning process. The "Crisis-Sensitive Education Policy-making, Planning and Curriculum" programme, a joint initiative of UNESCO IIEP and Protect Education in Insecurity

and Conflict (PEIC) to develop capacity in these areas, embodies a desire to institutionalise these concepts and processes at the sector level. The education sector planning methodological guidelines released by the Global Partnership for Education (GPE) in early 2015 mentions conflict risks in its first chapter on the context of the development of the education sector and recommends inclusion of conflict analysis.

### "WHY WE DON'T HAVE IT ALL FIGURED"? ONE POSSIBLE EXPLANATION - COMPLEXITY

In the context of merged security and development scenarios, and as demonstrated through the evolution of the E&F agenda, those working within the education and fragility space want, at a minimum, to ensure that they are not exacerbating fragility and, at best, use education interventions to interrupt the dynamics of fragility in ways that break the cycles of violence and poverty. After a decade of attention and effort, what then do we know about how education can influence fragility?

Research on the intersection of education and fragility has striven to identify some core proven truths about the relationship. Research efforts have chosen different elements among the common indicators of fragility outlined above – e.g. violence, control over territory, effectiveness or capacity, fulfilment of international obligations, legitimacy and poverty – as starting points in so doing. Studies have found, for example, that:

- Education can contribute to grievances (Barakat et al 2008)
- Education plays a role in socio-economic development (Dupuy 2008)
- Education plays a role in renewing the social contract (Rose & Greeley 2006)
- Education can serve as a barometer of government's commitment (Barakat et al 2008)
- Education can increase state legitimacy (Burde et al 2011)
- Education can assist in reducing horizontal inequalities (Dupuy 2008)
- Education and other social services can serve as entry points for delivering peacebuilding results (Mc-Candless 2012)
- Higher levels of education can breed peace (Østby & Urdal 2011)
- Educational provision and content can be politically manipulated (Barakat et al 2008)
- Lack of educational opportunity can contribute to the availability of recruits for organized violence (Burde et al 2011)

A growing body of evidence has also indicated the power of certain technical areas to impact on the relationship between education and fragility, both related to content and delivery of education and to the national context and sector processes. We know that issues of equity and inclusion are important, as well as issues of content, from language of instruction to curriculum (including peace/ citizenship education, etc.) to textbooks and learning materials. Access to secondary and higher education is relevant to fragility, particularly as it relates to youth. At the education system or sector level, governance is critical, including elements such as the appropriateness of decentralisation, as are policies and planning, data, financing and capacity. As studies have shown, these elements all interact with the dynamics of fragility in a given context.

At the same time, the contradictions are evident. Broadly, research has proven both that education can reduce the risk of civil unrest and violent conflict (Barakat et al 2008, Thyne 2006) and that education can increase the risk of civil unrest and violent conflict (UNESCO 2011). In other words, there is no generalisable causal link between education and an increase or decrease in fragility in a given context. The question, then is: why?

Smith et al, in their literature review of the role of education in peacebuilding, found that while most programming documents they reviewed did not explicitly mention a theory of change, the most common one that they could arrive at to apply to these programmes was an "action-oriented" theory of change. They describe this action-oriented theory of change as premised on the idea that "if a certain intervention (action) is applied successfully, a particular change will result" (Smith et al 2011, 33-34). In other words, technical education capabilities are applied in a given scenario and an assumed individual or societal change is expected. This is an example of the "linear" thinking outlined above.

However, this (retrospectively attributed) theory of change may be assuming that both problems and contexts are simpler than they are. For one, there are different types of problems – simple, complicated or complex – that require different approaches to solve them:

"A simple problem can be highly ambitious: Building a hospital is not easy, but it follows a well-understood formula. Given the necessary resources and expertise, one can reliably predict the cost, timeline, and end result with high accuracy. Complicated problems, like developing a vaccine, may take many attempts before a successful formula is developed, but each successive attempt builds on prior knowledge and experience, and once the formula is discovered, it can be repeated with equally predictable results. Complex problems, such as improving the health of a particular group of people, are entirely different. These problems are dynamic, nonlinear, and counter-intuitive. They are the result of the interplay between multiple independent factors that influence each other in ever-changing ways. The health of a population is influenced by the availability and quality of health care, but also by economic conditions, social norms, daily diet, inherited traits, familial relationships, weather patterns, and psychological well-being. The interplay of these factors creates a kaleidoscope of causes and effects that can shift the momentum of the system in one direction or another in unpredictable ways. Each intervention is unique, successful programs cannot be reliably repeated with the same results, and learning from past efforts does not necessarily contribute to better future results" (Kania et al 2014, 26; italics added for emphasis).

As per this definition, in a scenario in which we hope to use education to mitigate the dynamics of fragility, we are dealing with a complex problem.

Fragility itself relates to complex systems. Complex systems are those "in which at least two parts interact dynamically to function as a whole. The parts are interconnected, and each is composed of subsystems nested within a larger one. Complex systems exhibit properties that are not obvious from the properties of their individual parts. Typically, they are characterized by (i) a number of interconnected and interdependent elements (or dimensions); (ii) local rules that apply to each element; (iii) constant movement and responses from these elements; (iv) adaptiveness so that the system adjusts to guarantee continued operation; (v) self-organization, by which new settings in the system take form spontaneously; and (vi) progression in complexity so that the system sometimes becomes larger and more sophisticated over time" (Serrat 2009. 3). Using complexity to describe fragility is increasingly becoming accepted as more useful in reflecting the development challenges of fragile contexts (Milante & Jang 2014). The concept of fragility has continued to frustrate those wishing to operationalise it because it is only descriptive, and not predictive or prescriptive: there is no prescriptive set of approaches to undertake in a fragile situation that will predict given outcomes. There are no common and specific policy-related or programmatic options that follow from designation of a context as 'fragile'. The designation is only useful if it generates a mindset to work in these spaces that recognises fluidity, dynamism and, importantly, complexity. Honing in on this complexity may allow us to open doors to finding more appropriate solutions at multiple levels: local, regional and global (Milante & Jang 2014).

The question of how we can mitigate fragility using education does not elude us just because we have not consistently taken politics into account or have not undertaken enough analysis. As

noted by Serrat, "when facing volatile, uncertain, complex, and ambiguous environments such as those that characterize development work, mono-causal explanations founded on "rational choice," "best" specified top-down, are ever more recognized as inadequate, or at least insufficient" (Serrat 2009, 2). Too often the model of change is presented as a linear step-by-step progression from, for example, "spending cash to building schools and providing textbooks, to increased enrolment and engagement, to positive societal effects" (Ramalingam 2013, 12). Too often the theory of change identified by Smith et al is the default – the available solution becomes the solution and, with a mindset trained to believe in best practice, it is applied under assumptions that we will achieve our goal if we just do it "better" from a technical standpoint. As Ramalingam states, we behave based on the "underlying belief that the right solution is just around the corner—just a case of 'doing things righter'" (2013, 39). We must shift, however, from a belief in linear approaches to recognition and understanding that fragility, and thereby education's interactions with fragility dynamics, embodies a complex system that requires different approaches.

If our perspectives on how change happens are potentially misguided, then the solutions we currently have at our disposal to create positive changes are not fit for purpose. The World Bank's World Development Report for 2015 recognizes as much in its analysis of the ways in which people make decisions, not as rational beings but as influenced by automatic thought processes and mental models situated within historical and social networks and norms which intrinsically influence how we tackle a given problem. New research of this sort on human decision-making substantiates the disconnects between normative approaches to development, including in fragile contexts, and the outcomes we expect but do not achieve. The table below, borrowed from Ramalingam (2013), articulates a view of how we could reconsider how change happens and thereby what our respective approaches to it should be.

	Conventional aid thinking	New Perspectives
Systems and problems	Systems and problems are closed, static, linear systems; reductionist—parts would reveal the whole	Systems are open, dynamic, non-linear systems far from equilibrium. Macro patterns emerge from micro behaviors and interactions
Human agency	Individuals use rational deduction; behavior and action can be specified from top-down; perfect knowledge of future systems is possible	Heterogeneous agents that mix deductive/inductive decisions, are subject to errors and biases, and which learn, adapt, self-organize and co-evolve over time
Social structures	Formal relations between actors are most important; relationships are ahistorical and can be designed; actors can be treated as independent and atomized	Interpersonal relationships and interactions matter in form of culture, ties, values, beliefs, peers. Informal matters, relationships are path dependent and historical
The nature of change	Change is direct result of actions; proportional, additive and predictable; can hold things constant; simple cause and effect	Change is non-linear, unpredictable, with phase transitions

Ramalingam 2013, 142, adapted from Beinhocker, E.D. (2006) Origin of Wealth: Evolution, Complexity, and the Radical Remaking of Economics (Cambridge, MA: Harvard Business School).

More accurate, deeper understandings of how change occurs and why – as well as why complex systems (such as fragility) endure and how they do so – could support those working in fragile contexts to achieve greater impacts in terms of using education as a tool to mitigate fragility. Acting on those new understandings of change processes requires us to adapt our practice by adjusting our approaches in a manner that integrates the lesson stated above that the "how" is just as, if not more, important than the "what" of a given intervention. Our focus must be on improving design through more interrogative processes and adapting that design throughout the implementation phase. We cannot just contextualise our generic tools and approaches; instead, we must also do the opposite wherein we start from the context to ensure relevance.

In our approaches to fragile contexts, both generally and within the education sector specifically, we have taken some steps towards grappling with this complexity. These shifts can broadly be categorised by a deepening understanding that the "how" of approaches in fragile contexts is just as, and often more, important than the "what." New research and evidence has moved us "beyond the recognition that 'context matters' to specify just *how* it matters and what limits the capacity of institutions to implement policies and deliver results" (Wild & Foresti 2013, 2). Increasingly we take on board the notion that interventions in fragile contexts are "political". The World Bank's World Development Report (WDR) from 2004 on service delivery, for example, demonstrated that services are political in that they are premised on the relationship between citizens and the state – and that this relationship is badly fractured in fragile contexts. Deepening understanding of the context and its interplay with interventions is now commonly accepted as a prerequisite to action and, at the same time, recognition is spreading that, as development practitioners, we do not stand outside of the systems we work in or with, but are essentially part of these dynamics and patterns (Serrat 2009).

Within education, we have seen, for example, the development and use of the INEE Reflection Tool for designing and implementing conflict-sensitive education programmes in conflictaffected and fragile contexts in an effort towards self-reflective analysis. The tool walks the user through a process of reviewing existing or anticipated programming for conflict sensitivity and possible adjustments to practice across the phases of the project cycle (i.e. assessment, design, implementation and management, monitoring and evaluation). At the same time, used by a group of Ministry of Education officials at an inter-governmental workshop in December 2012, the tool was found to be less relevant for Ministry officials given its focus on a defined project cycle more common among NGOs than governments who do not necessarily work in a timebound, projectised manner. Promotion of the integration of political economy, conflict and other contextual analysis into policy and planning processes, as seen for example in the 2011 Guidance Notes for Educational Planners on Integrating Conflict and Disaster Risk Reduction into Education Sector Planning, has been another clear trend. This tool has been updated by the UNESCO International Institute for Educational Planning, in collaboration with PEIC, in the form of policy guidance and training materials on education for safety, resilience and social cohesion. This initiative includes strengthening crisis-sensitive planning (covering issues of conflict and disaster) with education ministries and local education offices. It likewise covers curriculum and textbook renewal, to strengthen elements of learning to live together/ respect for diversity/responsible citizenship, in the attempt to promote both student welfare and the broader processes of social cohesion.

#### **INTEGRATING THE "HOW"**

The points below articulate some tactics that we might utilise in a strategy to focus our attention on the "how" in the design, implementation and monitoring of our interventions. They do not comprise a checklist of best practices, nor are they "silver bullets". Instead, they attempt to elaborate on different ways to approach complex problems in complex systems.

#### **Theories of Change**

Deeper and broader consideration of theories of change can help us to challenge our own assumptions about inputs and outcomes. A theory of change is a statement about how an intervention hopes to foster change to produce intended outcomes (Schirch 2015). Examining the "conceptual pathway[s] of dynamic sub-system interactions can help [us to] forecast how the intervention will trigger reactions in the system, and how the system itself will respond" (de Savigny & Adam 2009, 50). Because change does not occur in a linear, cause-and-effect manner, articulating and interrogating our underlying assumptions about why a certain intervention may have a potential outcome is fundamental. As development practitioners, we all maintain assumptions about what drives fragility and about what the technical capacities we offer may do to mitigate those dynamics. Behavioural economics tells us that we are not rational beings: the ways in which we think may be counterproductive to the achievement of our intentions when action (or inaction) is based on false assumptions (World Bank 2015). Critically, theories of change have to be developed "on the ground" and in inclusive and participatory ways to tease out these assumptions and understandings, especially given that these are inherently social and political processes.

Theories of change must be informed by investigation and analysis, in particular by the political economy, conflict and other contextual analyses undertaken in fragile contexts. By providing a practical link between analysis and programme design, theories of change can increase the relevance and utility of these analyses, avoiding possibilities wherein analysis is just an exercise to document assumptions about what is driving or mitigating conflict (Schirch 2015). Theories of change must also be evidence-based in that, in the course of developing our theories of change, we must interrogate the underlying assumptions of them with existing evidence that supports or contradicts them. Similarly, theories of change should be linked to monitoring and evaluation efforts – if we have clearly stated upfront our beliefs in the pattern of change surrounding our given intervention, we can use this to be more rigorous and explicit in our monitoring, also adjusting as need be throughout implementation.

Multiple, interlocking theories of change are possible – and perhaps even required – given the complex systems in which we operate. A youth education programme for displaced youth may, for example, develop both a global theory of change that articulates broad, cross-case assumptions, targets and anticipated outcomes, coupled with country-level – or even more local-level – theories of change that specify the assumptions, targets and outcomes in the implementation context relevant to that context's dynamics. Likewise, the education unit within an NGO's or UN agency's country office may develop an overarching theory of change for its programme along with intervention-specific theories of change for projects. Alternatively, stakeholders developing an education policy may require multiple theories of change as the policy's scope encompasses a wide range of elements with varying assumptions or anticipated outcomes.

## Emergent strategies and change processes based on iterative analysis and adaptation

Developing emergent strategies builds on the belief that, in complex systems, we can sense and leverage opportunities towards addressing the problems we see, but we cannot be certain of outcomes. Emergent strategies accept that "a realized strategy emerges over time as the initial intentions collide with, and accommodate to, a changing reality. The term 'emergent' implies that an organization is learning what works in practice" (Kania et al 2014, 29). As stated above, the taxonomy of fragility is merely descriptive and neither predictive nor prescriptive, since each context is different. As such, fragility dynamics in a given context "have no unique cause (and) there is no unique solution, so the appropriate strategy is to experiment with many different solutions, searching for synergies between these that will enhance their effectiveness" (Frej & Ramalingam 2012, 3). We cannot predict what will work so we must learn what works in practice.

Iterative analysis and adaptation go hand-in-hand, allowing us to take nuanced steps towards solutions. Articulating an approach called "problem-driven iterative adaptation", Andrews, Pritchett and Woolcock cite attention to active, ongoing and experiential learning and iterative feedback of lessons into new solutions as a core principle of this approach (Andrews et al 2012, 8). They state that:

"The experimentation we refer to does not involve (always) performing a scientific experiment where the context is suspended and the intervention (by construction) is not allowed to change or vary over the life of the experiment. Rather, it is about trying a real intervention in a real context, allowing on-the-ground realities to shape content in the process. This is also not about proving that specific ideas or mechanisms universally 'work' or do not work. Rather, it is about allowing a process to emerge through which attributes from various ideas can coalesce into new hybrids. This requires seeing lessons learned about potential combinations as the key emerging result. The necessary experimentation processes require mechanisms that capture lessons and ensure these are used to inform future activities" (Andrews et al 2012, 16).

Adaptation of interventions necessarily proceeds in ongoing feedback loops based on real-time collaborative analysis. This is not an "add-on" to traditional project or programme approaches but a reconfiguration of typical approaches with the likelihood that expectations and outcomes are more realistic. Interventions maintain strategic intent without pre-specifying the outcomes, working with a compass instead of a map. Whereas "a map assumes that you're going over terrain that somebody has been over before... a compass, on the other hand, keeps one oriented towards the ultimate goal regardless of the unanticipated obstacles and detours that may appear during the journey" (Kania et al 2014, 31-2, quoting John Cawley).

An obvious first step is analysis of the complex system that is the context of our potential intervention. It is now accepted wisdom within the E&F agenda that conflict analysis for the sector must look across the whole system and must serve as the basis for developing and choosing strategies (Smith 2010; Sigsgaard 2012). Maintaining our theme that privileges the "how" over the "what", how we undertake and use analysis requires still further attention. We have learned over the years that we must ensure "process-oriented conflict analyses that build ownership and strategic coherence around action" (McCandless 2012, 49). In grappling with complexity, collaborative and participatory analysis is not simply "good practice": because in complex systems the behaviour of one affects all others, we must collectively analyze and cocreate solutions. A "collective systems thinking exercise among an inclusive set of... stakeholders is critical to designing more robust interventions and their evaluations" (de Savigny & Adam 2009, 50). Collective approaches are also necessary for political and practical expediency; for example, participation in conflict analysis by the Ministry of Education can facilitate adaptation of programmatic language and approaches that opens up space for education programming that seeks to address conflict. In this way, both the exercise of analysis and the participants

themselves are integrated into broader change processes that provide a more holistic view of the problems and potential solutions.

#### "Nudging" to leverage small changes

The WDR 2015 posed the question of how we can challenge and change existing patterns of social behaviour that are deeply entrenched at multiple levels of society (World Bank 2015). In complex systems where it is impossible to engineer large-scale direct change, we may be able instead to nudge systems towards the desired properties. A recent assessment of DFID's scale-up in fragile states substantiates this: "scaling up brings internal pressures towards fewer, bigger programmes. The unpredictability of fragile states, however, as well as the need to work experimentally... requires smaller, more reactive or opportunistic programming" (ICAI 2015, 9).

The idea that small changes can create larger ones influences the concept of "nudging", that presenting choices differently can steer people towards different decisions. At the heart of this concept is the idea that shaping individuals' or communities' sets of choices can ultimately reshape behaviour towards more constructive outcomes, which can aggregate into broader processes of positive social change. Where default behaviour perpetuates conflict dynamics, it may be possible to nudge by finding ways to make it more difficult for the community intolerance is perpetuated, an integrated school gardening programme that finds simple means to incentivize collective action for collective benefits (in a conflict-sensitive fashion) may encourage longer-term behaviour change within the community. Iterative approaches can assist us in identifying and leveraging these types of small interventions that may result in system-wide change.

#### Triangulated monitoring and evaluation and outcome harvesting

As noted, when trying to address complex problems within complex systems, as in the case of education to mitigate fragility, we cannot rely on our traditional array of assumptions about inputs, outputs and outcomes or impacts. As such, learning by doing is fundamental to our approaches, and should be integrated into our ongoing monitoring and evaluation processes in more substantiated, targeted and holistic ways. Rigorous monitoring is necessary not simply for reporting but, critically, to support learning. Whereas "traditional development models capture knowledge when it is too late to apply lessons to live projects... we need ways to develop and challenge our hypotheses while we execute and be less concerned about the accuracy of our original hypotheses" (Walji & Vein 2013). And, "given that all evaluations are necessary simplifications of real-world complexity, system thinking helps to determine how much – and where – to simplify" (de Savigny & Adam 2009, 34).

Triangulating our monitoring via parallel processes is one method. De Savigny and Adam in their study on systems thinking for health systems strengthening propose four integrated components to "deal with the complexity of large-scale system-level interventions": a process evaluation (for adequacy); a context evaluation (for transferability); an effects evaluation (to gauge the intervention's effects across all sub-systems); and an economic evaluation (to determine value for money) (de Savigny & Adam 2009, 60). Accordingly, "this requires baseline, formative (during early implementation) and summative (during advanced implementation) evaluations, with special attention during the formative evaluation phase to generate lessons in order to fine-tune the intervention – to improve performance and to understand how the intervention really works given the characteristics of systems" (de Savigny & Adam 2009, 60). By viewing our interventions from multiple angles we can better understand their interfaces with the system in which they take place and ensure more rigorous monitoring and evaluation.

Outcome harvesting is a method by which to gauge the intervention's effects. Outcome harvesting is a process by which outcomes – i.e. a change in the behaviour, relationships, actions,

activities, policies, or practices of an individual, group, community, organisation, or institution – are identified, formulated, verified and understood (Wilson-Grau and Britt 2012). Rather than measure progress towards predefined results, outcome harvesting identifies what actually happened - whether intended or unintended, negative or positive - through a participatory process. Outcome harvesting was the method recently chosen by UNICEF's Evaluation Office for the final outcome evaluation of the PBEA programme. Thereby, the forthcoming final evaluation report identifies a range of peacebuilding outcomes via education-specific or cross-sectoral activities across the areas of the programme (policy, institutional capacity, individual capacity, access to conflict-sensitive education, and knowledge and learning).

### A COMPASS INSTEAD OF A MAP: WAYS FORWARD FOR EDUCATION IN FRAGILE CONTEXTS

Where, then, do we go? For one, we should urgently consider the skill-sets of the people that we bring into the community of international development practitioners to ensure that they are the right fit. We can look at the skill-sets that are needed, and in particular the capacity to adjust to local context. Results of a survey undertaken for the WDR 2015 found that development practitioners do not necessarily "understand the circumstances in which the beneficiaries of their policies actually live and the beliefs and attitudes that shape their lives" (World Bank 2015, 180). Increased efforts to professionalise education practitioners via, for example, training in the INEE Minimum Standards for Education and specialised masters degree programmes at Western universities, in principle represent strengthened accountability by raising the quality of international (and local) staff working in the field. What may still be lacking, however, is the expertise to enter the minds of government officials, students, teachers and their communities. As mentioned above, grappling with fragility requires a mindset to work in these spaces that recognises, and can function within, their fluidity, dynamism and complexity. The focus on process over technical responses requires an anthropological perspective and approach outlined in the tactics above. According to a study from Burde et al on education for conflict mitigation, "respondents from all organizations nearly universally note that the most successful programs are those that work closely with communities and belong to commu¬nities, ideally stemming from existing local work" (Burde et al 2011, 25). Building the skills of practitioners to lead and manage processes fundamentally premised on local context and local actor engagement can help to override inherent biases and improve decision-making about interventions.

Second, given the importance of local context, it may be useful to focus research and evidencegathering on interrogating the "how" rather than the "what" of education interventions. It is less important, for example, for policy analysts to understand the specific changes made to a national curriculum, as these will be context-specific. Instead, they can gain insight by capturing the tacit knowledge of how that review process was undertaken – e.g. what political will and buy-in had to be mobilised at what levels within the education system, how were entry points established, what concepts needed to be clarified or adjusted for context, etc. Case studies can serve as a complementary measurement approach to more quantitative monitoring and evaluation indicators in order to capture critical information about how potential results were achieved (UNICEF 2013). Case studies, for example, have been a primary means of capturing outcomes from UNICEF's PBEA programme across many of its country offices. Wherever possible, such studies should be linked directly to theories of change developed at the outset of an intervention to connect the dots between intention, assumptions, and perceived and real outcomes.

Finally, we can move to increase the decentralization of projects and programmes where results can only be achieved by responding to local conditions not global agendas. Decentralisation implies not only more leeway at the country level, but also at subnational levels as environments vary considerably across regions and communities. In an context of results-based programming and value for money, donor agendas set in headquarters can stifle local staff's ability to lead processes that develop appropriate responses and achieve results rooted in local dynamics. Advocacy must be undertaken to refocus donors' views on the real results that can only be achieved with locally specific approaches. Case studies of process-based and iterative approaches

that work to achieve results using education to mitigate fragility – such as the findings expected from UNICEF's PBEA final evaluation – can support advocacy efforts with donors.

Organisational change in approach is required and education policy-makers and managers must be empowered to see their work through new lenses and adjust accordingly. Multi-sectoral initiatives may be developed to fill the skills gap. For example, drawing on peacebuilding experts to consider and develop methods for addressing these skills gaps may benefit the education sector. Inter-agency efforts could be initiated to consider the implications of the approaches and ways forward, such as how to best to develop appropriate theories of change or how nudging can be integrated into education programming in conflict contexts. Cross-sectoral efforts with other social service sectors may be undertaken to review and develop recommendations and plans for organisational changes within and across agencies.

First and foremost, we must remember going forward that the "how" is just as, if not more, important than the "what" of our interventions in situations of fragility, that we must "do no harm", and that we must be humble in our ambitions. Transformative impact in fragile contexts will take a generation or more to achieve and is dependent on endogenous dynamics and actors (ICAI 2015). We may contribute to these transformations where the structures within which we work and our skills maximise the positive elements that education can bring to fragile situations and of minimise the potential harm. There are no "silver bullets" or checklists that provide an easy way forward; identifying the right problems in each context is a critical step. To do so, we have compasses, not maps, to help us find our way.

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