

WORKING  
GROUP 02

C H A P T E R

# 5

## **From perpetrator to peacebuilder: rethinking education in conflict- affected societies**

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**T**his chapter explores the nexus between education and conflict, positioning education as a contested domain that shapes, and is shaped by, a broad range of social, political, economic and cultural dynamics in conflict-affected societies. On the one hand, violent conflicts and structural violence have detrimental effects on educational processes and outcomes. On the other hand, education itself can (re)produce structural violence in society. Bringing together the fields of social science and cognitive neuroscience, this chapter provides a multi-faceted lens through which to address the challenges of education in different conflict contexts from around the world, highlighting that the search for a collective peaceful future is complex.

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# 5.1

## Introduction

There is more than one way to tell a story. On the tumultuous path humanity has forged through history, it is easy to forget that it is often those in power who tell the story – the ‘truth’ – while myriad alternative accounts are buried or suppressed. With increasing political polarization, global refugee crises and violent conflicts over dwindling natural resources, this raises questions of how we understand our history, how we understand ourselves in relation to the society in which we live, and how we understand each other. At the heart of these questions is the role of education, and how we learn to handle differences, disagreements and controversies about our social and cultural values, political interests and distribution of resources. With strong neoliberal forces pervading all facets of life, education can

be a perpetrator, producing or reproducing structural violence in society. Up against such forces, education can also be a liberator, promoting critical thinking, reflection and critical consciousness in the face of such structural inequalities. Education can also be a victim, facing violent attacks for the contesting ideology it promotes as well as a tactical target during the war. Finally, education can be a peacebuilder, providing relevant knowledge and skills for employment and stability in people’s lives, representing bottom-up, participatory forms of learning about how to deal with differences in a non-adversarial manner and to redress educational policies and practice that fuel conflict. These perspectives provide the multifaceted lens that we loosely call the victim–perpetrator–liberator–peacebuilder



(VPLP) framework, and through which this chapter will address the challenges of education in different conflict contexts around the world, highlighting the nuances in our search for a collective, peaceful future.

Violent conflicts and structural violence have detrimental effects on educational processes and outcomes. In contexts that are directly affected by physical violence, educational processes are disrupted and discontinued, whereas education systems that are characterized by structural inequalities maintain unequal access, thus reproducing unequal outcomes for different social groups. In this chapter, we broadly conceptualize ‘conflict’ in education in physical, cultural and structural forms – from disruption of learning and experience of violence to exclusionary policies, intergroup threat perceptions and animosity, inequitable access to educational resources, and educational practices that involve cultural repression, misrecognition and stereotyping of socially disadvantaged groups. Education

may also be used to defend ‘societal security’, the ability of a society to reproduce its essential features, and portray certain cultural groups as an ‘existential threat’ (Buzan, 1991; Buzan, Wæver and de Wilde, 1998). Teaching and learning processes may stereotype and demonize the ‘other’ through curricula and pedagogies, which fuels intergroup antagonism and threatens societal security. In order to provide safe environments for human development and prosperity, it is crucial to examine how learning environments are disrupted by conflict and subverted by structural violence, and what types of social, physiological and psychological effects are endured by learners in these communities, as well as the kinds of interventions that can mitigate the impacts of such obstructions.

Conceptualizing education as a societal process that shapes human behaviour and social action, this chapter provides a critical analysis of education from a conflict perspective by drawing upon theories and concepts from

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We contend that solutions to current inadequacies in education are best addressed by the promotion of diversity with equity, not only in access to and outcomes in education, but also in the ways educational systems exacerbate or ameliorate existing forms of conflict-promoting conditions in global societies.

the social, neural and cognitive sciences.

In **section 2**, we begin with an overview of conflict and the global learning crisis, created by violent conflicts and mass displacement, and the multitude of ways in which populations, and particularly learners, have been affected by physical, cultural and structural violence. We develop our analysis using a framework for multidirectional interactions between education and conflict in which education is viewed simultaneously as a victim, perpetrator, liberator and peacebuilder (Pherali, 2016).

In **section 3**, the analysis moves on to the specific biological and behavioural responses to conflict by considering a broad range of factors that impact on learning, such as inter-generational dynamics, experiences of relationships, concerns about disenfranchisement and inequalities as well as individual differences in cognitive abilities related to learning.

In **section 4**, our attention moves to the notion of diversity with a focus on equity, engaging with concepts of cultural, ethnic, religious and social diversity, and we argue that ignorance of social and cultural diversity can be detrimental to peace (see **WG2-ch4**) for more on diversity and social justice. We contend that solutions to current inadequacies in education are best addressed by the promotion of diversity with equity, not only in access to and outcomes in education, but also in the ways educational systems exacerbate or ameliorate existing forms of conflict-promoting conditions in global societies.

In **section 5**, we present an innovative framework for education in conflict settings which highlights the need to approach education policies with knowledge from diverse fields of social science and neuroscience. We argue that this would encourage policy-makers to consider education beyond the technical process involving school enrolment, teacher recruitment, training and redeployment, assessment and financing, and

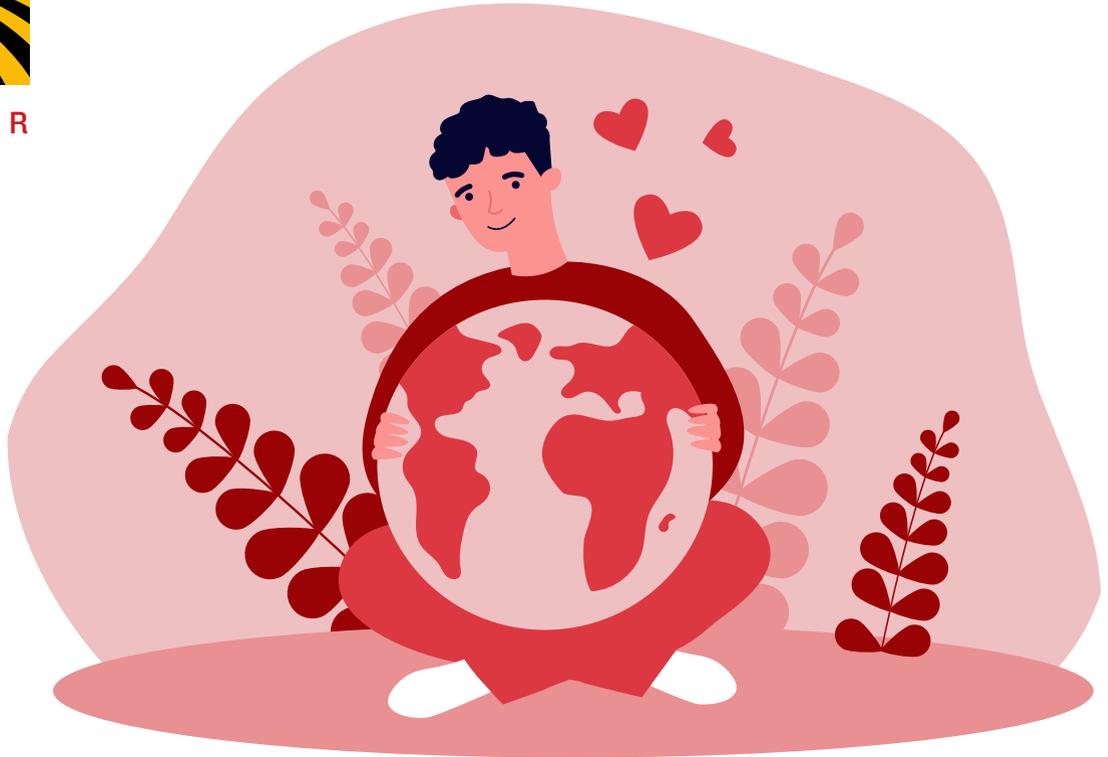


move towards education as an emergent and contested process. Essentially, we claim that, from a conflict perspective, education is fundamentally a political process, whose power dynamics must be considered beyond its role in economic development and, at the micro level, that the social, political and economic conditions of a society have neural effects on learners. Finally, noting that education should nurture civic identities, diversity and social justice, we discuss educational implications for various stakeholders in conflict-affected contexts.

Before moving on, it is important to note the interdisciplinary nature of this chapter, and how we have gathered evidence for our arguments. The lead authors have come together from different academic fields in the natural and social sciences to work towards providing a framework for the integration and synthesis of neural and social science perspectives to better understand the causes and consequences of conflict on learning and well-being. The arguments are based on our critical

analysis of evidence in selected bodies of literature, combined with the authors' years of research in the fields of education, conflict and international development, neuroscience, history education, and peace and conflict. Our analysis is informed by critical scholarship that goes beyond the dominant argument about education in relation to economic development, which, though important, is insufficient to explain or find educational solutions to social instabilities. Hence, we focus on contentions around history education, identity politics and social justice, and encourage engagement with a grassroots/civic approach to education, rather than top-down 'expert' opinions on how education is understood and how educational programmes are designed. Recognizing that all research is to some extent subjective, and methods are inherently 'messy' (Law, 2004), we contend that our respective expertise or 'subjectivity' is offset by our interdisciplinary approach, and the clustered educational framework we put forward.

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## 5.2

# Theorizing the inter-relationships between education, conflict and peace

Many earlier works on social conflict point out that the deprivation of underlying individual human needs and values is at the root of protracted social conflicts (Burton, 1987,

1990; Azar, 1990). Building upon these ideas, further studies have highlighted the importance of social identities in the dynamics of conflict (e.g. Ashmore, Jussim and Wilder, 2001; Korostelina, 2007;





**McKeown, Haji and Ferguson, 2016; Langer and Kuppens, 2019).** In identity based conflicts, rebel groups tend to share common identities (e.g. social class, cultural/linguistic community, religion, ethnicity or caste), exhibit a profound sense of loyalty to their group and hold a deep belief in their common fate, interests and experiences of deprivation and stress. Mobilized by their leaders, groups adopt communal goals of changing existing social situations and confronting outgroups in the struggle for power and resources (**Kriesberg, 2003**).

Within the educational domain there is a continuum of power from suppressed minorities to identity conflicts between relatively equal communities, whereby competing groups' notions of peace and conflict acquire different meanings as they are viewed from different perspectives leading to a plurality of understanding (**Leonardsson and Rudd, 2015; Zembylas, Charalambous and Charalambous, 2016**). Disadvantaged identity groups are likely to be under-

represented, or they might feel that curricula, language of instruction and educational policies in general repress their cultural or religious identities. This process can result in rejection of education or noticeably low educational attainment among children of deprived identity groups. In situations where there is competition for power or resources, group leaders use communal stereotypes, beliefs and narratives, as well as ingroup loyalties, to mobilize their followers (**Johnson, Terry and Louis, 2005; Louis et al., 2007**). These adopted identities are connected to economic and political interests, and reinforce the negative perceptions of outgroup members. In this process, formal education often plays an influential role by reproducing these divisive narratives and hegemonic ideologies through policies concerned with educational access, assessment mechanisms and the curricular framework. The Bantu Education Act of 1953, for example, legitimized racially separated educational provisions in South Africa, and the divided

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schooling between Catholics and Protestants in Northern Ireland has created barriers to children from different religious groups to come together for collective learning and social experiences (Gallagher, 2004). In any society, education systems represent the values, cultures and philosophies of the dominant social groups and hence, educational processes tend to operate within a complex political economy that ensures unequal distribution of power and resources across different social or cultural groups.

Identity-based conflicts therefore lead to categorical violence, which develops into direct, cultural and structural violence (Galtung, 1969). While direct violence describes open cases of aggression, structural violence is understood as injustice and exploitation built into a social system of inequalities, and cultural violence is based on prevailing attitudes and beliefs that discriminate against certain groups in society. In this sense, education systems that underpin unequal power relationships between diverse social groups

and promote exclusive cultural, historical and political worldviews through education policies, curricula and pedagogical practices can implicitly perpetrate structural and categorical violence. Before we turn to the VPLP framework, which provides different lenses through which to explore these power relationships, we note that we are mindful that these four strands of interaction are by no means exhaustive or exist in isolation. We would also argue that a quality education should always serve freedom, dignity and peaceful coexistence, and that liberation does not mean reversal of unequal power relationships, but instead lays the foundations for progress towards equity, mutual respect and recognition of all forms of diversity. Hence, the concepts we draw on to develop our analysis in this chapter provide a lens rather than a theoretical explanation for the education–conflict–peace nexus, and often overlap, evolve and expand depending on the context and nature of the conflict, complex political dynamics and educational programming. Nevertheless, we



treat the framework as a broadly accommodative tool that enables practitioners, researchers and policy-makers to understand the politics of education in conflict-affected and fragile settings.

## 5.2 .1

### EDUCATION AS VICTIM

Education is a major victim of violent conflicts that occur around the world (UNESCO, 2011; *Save the Children*, 2013). One of the reasons for attacks on education is that education represents the authority of the state, and schools are one of the few institutions that are widely spread across state territories, thus representing the state's economic, social and political visions. Where rebel groups do not have the military strength to directly face state security forces, they are more likely to attack soft targets such as educational institutions, teachers and school children that will serve their propaganda (GCPEA, 2018). Schools are also targeted violently because of rebel groups'

rejection of the type of education that is on offer. National education policies, curricula and pedagogical practices may also be perceived as assimilative, repressive and offensively ideological to the culturally diverse communities. For example, the Maoist insurgents in Nepal attacked schools that taught Sanskrit as a subject and burnt Sanskrit textbooks during the rebellion (1996-2006) to challenge oppressive caste-based structures that aspects of Sanskrit education legitimize (Pherali, 2011). In Afghanistan, schools are attacked by the Taliban and ISIS for promoting Western-style education and educating girls (Burde, 2014). Attacks on education cause deep levels of psychological stress in populations; rebel groups benefit from it by creating political pressure on the state as well as by affirming their control over local communities. A particularly poignant case is that of the attacks on 'Western education' by the militant group Boko Haram in Nigeria, which demonstrates the fragile, soft target of education as victim (see text box 1).

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### BOX 1: EDUCATION AS VICTIM: BOKO HARAM IN NIGERIA

Boko Haram is a militant group in Nigeria which targets schools for teaching English, mathematics and science, and for enrolling girls. Literally meaning ‘Western education is forbidden’, Boko Haram’s hostile ideology towards secular education has gained notoriety for its repeated attacks on primary and secondary schools (and teachers, administrators and students) (GCPEA, 2018) that promote liberal ideas, education for employable skills and international dimensions (Afzal, 2020). Particularly gruesome attacks took place in 2014 and 2018 in Chibok and Dapchi towns where about 279 and 110 schoolgirls respectively were kidnapped by Boko Haram. This news made international headlines, and many of the girls remain in captivity. Today, the region’s educational activities are grossly disrupted; UNICEF (2019) reports that around 802 schools remain closed, 497 classrooms have been destroyed and about 1,392 classrooms

have been damaged. This has resulted in about 2.8 million children needing education-in-emergencies support in the conflict-affected states of Borno, Yobe and Adamawa. The situation has also placed Nigeria on top of the list of countries with a high number of children out of school. Notably, it is not only the rebel groups that disrupt school routines, but also government forces who occupy school premises for military purposes (UNESCO, 2011). Additionally, government forces that are deployed to protect schools from militant attacks put schools at risk of being caught in the crossfire between the warring parties (Watchlist, 2005; Burde, 2014; Brooks and Sungtong, 2016). The potential risk of violence in the school environment results in long-term psychological vulnerability of teachers and students. Victimization of education also occurs through denial of girls’ access to schools. Erulkar and Bello (2007) point out that girls



Violent conflicts often cause mass displacement of vulnerable populations, which has debilitating impacts on the educational life of children.

in northern Nigeria have low levels of education and tend to marry at an early age. Moreover, since the Boko Haram

kidnappings in 2014 and 2018, enrollment of girls has been declining (GCPEA, 2018).

Violent conflicts often cause mass displacement of vulnerable populations, which has debilitating impacts on the educational life of children. At the end of 2019, violent conflicts and natural disasters caused the forced displacement of 79.5 million people worldwide, 24 million of whom have been living as refugees (UNHCR, 2020). The Internal Displacement Monitoring Centre reports that around 55 million people are internally displaced, and a vast majority of these live in dire living conditions, which have been further worsened by the COVID-19 pandemic (IDMC, 2021). For example, the protracted war in Syria has led to internal displacement of around 6.6 million people who have been forced to flee multiple times as the front lines of war constantly shift and basic

services, such as water, shelter and food supplies, breakdown (IDMC, 2021). Educational access for learners in these contexts is limited and when it is available, it usually lacks conflict sensitivity and appreciation of the socio-political environment of the host community, fuelling social tensions between the internally displaced persons (IDPs) and their host communities (Shanks, 2019).

Around half of the refugee population is under the age of eighteen and less than half of these have access to education. It is estimated that 37 per cent of primary-aged refugee children are out of school and a mere 24 per cent have access to secondary education. Access to higher education is a dismal 3 per cent among refugee populations. Refugee youth face the risk of

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being recruited into armed groups, or forced into child labour and sexual exploitation, and miss out on the opportunity to gain knowledge and skills to live productive and independent lives. Worryingly, the refugee crisis caused by violent conflicts or climate emergencies is becoming increasingly protracted (**Anselme and Hands, 2010**). At the end of 2014, the average length of exile reached twenty-five years in thirty-three protracted refugee situations – nearly three times as long as in the early 1990s (**UNGA, 2018**), creating prolonged vulnerability and marginalization for both IDPs and their and host communities (**IDMC, 2015**). Given the protracted nature of displacement, a refugee child's entire period of school and tertiary education can be spent in exile, resulting in increasing demands for secondary and higher education in refugee settings.

As identity-based conflicts permeate the fabric of social life in a vast number of societies, education becomes deeply embedded in the complex relations of identity and power

in existing intergroup conflicts. Given that conflicts are also bound up with issues of coercion and legitimacy, education becomes entangled in power struggles between conflicting groups. As demonstrated in the example of attacks on and rejection of education in northern Nigeria, it is not necessarily the idea of 'learning' that is being resisted. Rather, it is the type of education with certain values and visions that is being rejected by dissident groups such as Boko Haram.

## 5.2 .2

### EDUCATION AS PERPETRATOR

The last decade has seen a growing body of literature that examines the contested role of education in the production and exacerbation of violence (**McLean Hilker, 2011; Burde, 2014; King, 2014; Pherali and Sahar, 2018; Davies, 2019**). Formal education that lacks conflict sensitivity may be

History curricula and textbooks that provide dominant narratives about the past shape social, cultural and political struggles in contemporary societies.

socially destructive when it: fails to address problems around unequal access to and quality of education; maintains a segregated and unjust educational provision; promotes biased history through curricula and textbooks; and maintains exclusionary educational practices in which ethnic, cultural and religious minorities are deprived of their right to learn in their mother tongue (**Bush and Saltarelli, 2000**). In particular, the policy on language of instruction is a significant though complex issue: on the one hand, instruction in the mother tongue during primary years can achieve far better results than that in a non-native language (**Bühmann and Trudell, 2007**). On the other hand, offering education exclusively in the mother tongue and not allowing education in languages that create wider political and economic opportunities can also be problematic (e.g. apartheid in South Africa (**Baker, 2011**) (see also **WG2-ch8** and **WG3-ch5**). The imposition of the dominant language on multilingually diverse ethnic and indigenous communities through formal

education can be a repressive force and can destroy a group's resource base, thereby eroding culture, traditions and identity (**Pherali, 2016**). State-controlled education systems tend to privilege the historical knowledge and cultural values of the ruling political class via formalized curricula, pedagogical practices and assessment mechanisms. In this process, social groups with less power are obscured in what is considered legitimate and accredited knowledge in formal education systems.

History textbooks often contain narratives of self-glorification and demonization of the national 'enemy' which produce and harden nationalist ideologies. History curricula and textbooks that provide dominant narratives about the past shape social, cultural and political struggles in contemporary societies (**Symcox, 2002; Evans, 2010; Carretero, Berger and Grever, 2017; Davies et al., 2018; Hartman, 2019**). These tensions include contentions around teaching of the history of mass violence in the Second World



War in Russia and Estonia (**Borger, 2020**), the Holocaust in Poland (**Santora, 2019**), political prisoners in Chile (**Keough, 2020**), the occupation of Korea, forced labour and comfort women in Japan (**Nozaki, Vickers and Jones, 2005; Korostelina, 2008**) and territorial expansion controversies around the Nanking massacre during the Japanese occupation of China during the Second World War (**Vickers and Jones, 2005**). Rather than confront these tensions, schools and educational authorities frequently either opt out altogether from the teaching

of controversial issues due to emotional, political or national security concerns, or engage in teaching biased historical narratives to serve nationalist interests. Unfortunately, many teachers appear to eschew complicated discussions in classrooms due to discomfort or the belief that teaching about history is irrelevant in the face of ongoing violence and problems in the country (**Zembylas, 2014; Zembylas, Charalambous and Charalambous, 2014; Zembylas et al., 2018; Benwell, 2021**).





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There are widespread examples from around the world where formal education has been complicit in fuelling grievances among marginalized groups. The dominance of hill high castes and their native language on ethnic minorities in Nepal (Pherali, 2011), depictions of Tamils as the historical 'other' in Singhalese textbooks (Nissanka, 2016) and misrepresentation of the Second World War atrocities performed by Japanese troops in China and Korea (Ku, 2016) all exemplify how education can become a problem from a conflict perspective. In Rwanda, post-independence educational policies and the ethnicity-based quota system denied many Tutsi children access to education (McLean Hilker, 2011). Even though educational exclusion was not the primary cause of the genocide, it was an integral part of the wider structural violence perpetrated on Tutsis. King (2014) notes that pre-genocide education played a complicit role in cultivating the beliefs that Tutsis had collaborated with colonizers to marginalize and oppress the majority Hutus.

Consequently, education became a part of the synergetic interactions between the psychocultural factors of 'categorization' (exclusive identification of individuals being a member of a particular group), 'collectivization' (a process of essentialization that considers everyone in the group as being the same) and 'stigmatization' (attributing disapproval and scapegoating), which led to rationalization of the proximate causes of genocide (King, 2014). Similarly, an analysis of multination civic textbooks reveals that in Cyprus, Argentina, post-genocide Rwanda, China, South Africa and Mozambique, textbooks promote a discourse of cultural assimilation rather than celebrate diversity, while strong elements of ethnic nationalism and prejudices are found in textbooks from Bosnia-Herzegovina, North Korea, China, Romania, Serbia, Croatia and Ukraine (Quaynor, 2012).

Box 2 provides an example of education as perpetrator in the continued conflict between Russia and Ukraine.

... education maintains socio-economic divisions and fuels political tensions that often lead to violent conflict.

### BOX 2: EDUCATION AS PERPETRATOR: TEACHING HISTORY IN UKRAINE AND RUSSIA

History education is a significant factor in the conflict between Russia and Ukraine, in which competing historical narratives speak to dynamics at the level of international relations as well as those at the level of national educational policies and practices. The governments of the Russian Federation and Ukraine use state-controlled history education to define their national identity and to posit themselves in relation to each other. Thus, history education in Ukraine positions Russia as an oppressive and aggressive enemy and emphasizes the idea of victimhood as at the core of national identity.

History education in the Russian Federation condemns Ukrainian nationalism and proclaims commonality and unity of history and culture with Russian dominance over 'younger brother, Ukraine' (Korostelina, 2010). In Ukraine, history teachers in different regions support competing narratives, reproducing conflict in their classrooms by altering the teaching programme and textbook narratives and promoting their vision of a nation, the rights of their groups to participate in the nation-building process and defining enemies and allies within and between the nation. History teachers' social identity affects how they present the ingroup and other groups to school pupils and how they

use textbooks in their teaching (Korostelina, 2015).

Education plays an implicit but central role in reproducing these deeply rooted hierarchical



and manipulative structures through the elite policy-making process, justification of patterns of exclusion and inclusion, social boundaries, labelling and stereotyping of biased histories in curricula and teaching, and repression of cultural and social values of minorities and enemy groups both at national and global levels (Davies, 2010). In doing so, education maintains socio-economic divisions and fuels political tensions that often lead to violent conflict. This understanding has important implications for education policies and programming in general, but more specifically, in conflict-affected environments where educational reforms need to be understood beyond the framework of service delivery. Uncritical, technocratic and apolitical education inculcates submission to the economic and political interests of the corporate sector and disconnects learners from the process of critical reflection and the basic principles of humanity such as love, compassion, mutuality and social justice.

Bourdieu (1974, p. 32) argues that education ‘is in fact one of the most effective means of perpetuating the existing social pattern, as it both provides an apparent justification for social inequalities and gives recognition to the cultural heritage, that is, to a social gift treated as a natural one’. Social hierarchies are generally manifested in ethnic, caste-based or regional divisions in which opportunities for modern education and development are more likely to be seized upon by historically privileged sociocultural groups, leaving the poor and disadvantaged trapped at the margins without any prospect of social mobility.

With reference to the above examples from Rwanda and Ukraine, education can help preserve the metanarratives of powerful groups, and promote contestation of intergroup relations, exclusion and marginalization. Representing the beliefs and values of their identity groups, history teachers are inevitably positioned within battles over meaning, either facing

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complicated encounters between representatives of various identity groups in their classrooms or representing marginalized or dominant groups themselves. By mobilizing history, those in power seek to legitimize present policies, define particular norms of behaviour and prescriptions of collective actions, demarcate social boundaries, enunciate foundations for protest and demand, and shape the distribution of power and authority (Alexander, 2004; Kern, 2009; Korostelina, 2017).

## 5.2 .3

### EDUCATION AS LIBERATOR

Education can be viewed through the lens of liberation, whereby the goal is for teaching and learning to promote emancipation from oppressive societal structures through transformation towards social justice and democracy. We would argue that at the heart of this educational current is

the field of critical pedagogy, founded by the Brazilian philosopher and educator Paulo Freire, in his seminal work *Pedagogy of the oppressed* (1970). Freirean philosophy believes in the awakening of critical consciousness (Freire, 1973) through critical reflection on everyday power structures. Beyond deeper understandings of one's personal circumstances, an important aspect of conscientization is 'praxis' – action-based change – which challenges oppressive power structures. Critical pedagogy has been critiqued and expanded upon. For example, there has been a greater focus on a critical pedagogy of place (Gruenewald, 2003), highlighting the importance of humanization – the process of 'becoming' in human development (del Carmen Salazar, 2013). There are, however, moral and ethical dilemmas around the potential use of violence that a liberatory education could potentially lead to and whether 'violence' can be justified as a form of resistance or defence for liberation. In human history, violence has been part of liberation

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The necessity for marginalized populations to ‘transgress’ oppressive power structures, and co-create new collective narratives of human development, has been emphasized in the emergent concept of ‘transgressive learning’.

theology, and extremist groups in several parts of the world engage in education for radicalization (Davies, 2019). However, we see education as a liberator of the oppressed (Freire, 1970) as well as of the agents of oppressive systems, in which the role of education must be understood as a facilitator of social transformation. This would involve a transformative learning process, providing critical awareness of systems of oppression; dialogic space to deal with disagreements peacefully; and enabling to find cooperative solutions to contestations. In this sense, education as a liberator is interlinked with its role as a peacebuilder.

The connection between Freirean philosophy and conflict-affected contexts is made by Magee and Pherali (2019), who emphasize important contributions in peace education that do not just address current violence, but also the root causes of violence in terms of the structures and cultures that reproduce unequal power relations (Galtung, 1990). The necessity for marginalized

populations to ‘transgress’ oppressive power structures, and co-create new collective narratives of human development, has been emphasized in the emergent concept of ‘transgressive learning’. Examples include protagonizing community actors in non-formal grassroots learning (Macintyre et al., 2020), and the contextual aspects of pedagogical practices in the classroom, in resistance to the neoliberal educational paradigm (Condeza-Marmentini and Flores-González, 2019). Such a liberating perspective of education is particularly important in contexts such as Colombia (Box 3), where a peace accord has officially been signed, but where deep structural inequalities remain largely unaddressed. In the context of continuous violence, educators and learners can challenge the dominance of top-down policies through an emphasis on local dynamics and increasing inclusion of marginalized populations. This localized approach transfers the production of knowledge into communities’ everyday lives, promoting self-governance and empowerment (Mac Ginty and

**BOX 3: EDUCATION AS LIBERATOR: POPULAR EDUCATION IN COLOMBIA, SOUTH AMERICA**

**Richmond, 2013; Mac Ginty, 2014; Korostelina, 2021).**

Despite the fanfare surrounding the historic peace deal between the Colombian Government and the Revolutionary Armed Forces of Colombia (FARC) in 2017, officially ending fifty years of civil war, Colombia is experiencing deep socio-ecological challenges surrounding land tenure and a neoliberal system that exacerbates inequality and biodiversity loss. Given the importance of education in bringing forth the necessary transformations for more environmentally sustainable societies (UNESCO, 2016), a particular challenge for Colombia is its educational system (especially in rural areas), with low coverage, lack of quality and equity, and in need of becoming relevant for rural communities and responsive to the social and environmental needs

of its population (Arango and Rodríguez, 2017). Yet, in Freirean philosophy, Colombia has a tradition of participatory action research (Borda, 2001), which promotes a form of reflexive research and learning that addresses local challenges through action-based change. Often, in community settings characterized by marginalization, such learning can place participants as the protagonists of the learning process, transforming the 'expert role' of the teacher into one of facilitation (Macintyre et al., 2020). People learn through practical projects in their own community, with a focus on traditional knowledge, emotional learning and skills such as conflict resolution, whereby education becomes a tool for personal and community development. In this way, community-based learning (CBL) can help: decolonize educational paradigms through participation of different



In this process, the role of teachers, who engage in transformative educational practices by both empowering learners to challenge dominant structures and engaging themselves in social actions that problematize the status quo, is crucial.

ontological communities in learning processes (Macintyre et al., 2020); engage students in practical challenges that relate directly to their community (Melaville, Berg and Blank, 2006); and contribute to social

justice in teacher formation (Farnsworth, 2010). Because of its commitment to inclusion, participation and supporting community processes such as local governance, CBL plays an important role in mitigating

conflict and promoting reconciliation and coexistence in divided and post-conflict societies (Haider, 2009).

The cultural landscape of the classroom serves as a microcosm of the broader community within which the educational process takes place. Educational spaces involving both formal learning in schools as well as community-level domains of resistance to hegemonic structures offer hope for liberatory educational experiences. The idea that pupils and educators are passive recipients of hegemonic curricula imposed by the state and can therefore do nothing about the 'banking model' of education (Freire, 1970) and its role in reproducing social inequalities is

essentially flawed (Pherali, 2013). It is important to recognize that 'resistance to the structural determinants of the education system can also emerge within the autonomy of a school, where the space of the classroom and of its surrounding communities can be exploited and expanded by educators in order to exercise counter-hegemonic pedagogies' (Pherali, 2013, p. 54). In this process, the role of teachers, who engage in transformative educational practices by both empowering learners to challenge dominant structures and engaging themselves in social actions that problematize the status quo, is crucial. On the other hand, in deeply divided societies where there is a prevailing 'conflict-ethos' (Bar-Tal, 2002, 2007) culture means

that official initiatives that may aim to cultivate peace, mutual understanding and empathy are met with strong resistance (for a detailed analysis and further literature see Zembylas, Charalambous and Charalambous, 2016) (see also WG2-ch8).

Giroux, Freire and McLaren (1988) coined the term ‘teachers as transformative intellectuals’ who view themselves not merely as deliverers of the educational goals set for them, but rather as individuals with the intellectual agency to enhance the critical powers of their learners. They also suggest that ‘... teachers must take active responsibility for raising serious questions about what they teach, how they are to teach, and what the larger goals are for which they are striving. This means that they must take a responsible role in shaping the purposes and conditions of schooling’ (Giroux, Freire and McLaren, 1988, p. 126). Transformative teachers are conscious of their role as facilitators of social action in which they view schools as economic, cultural and social

sites that are closely linked with the issues of power and control. As described in ‘Education liberator’ above, teachers are more facilitators of collaborative and emancipatory learning than sources of ‘legitimate’ knowledge. They utilize learners’ lived experiences in their teaching and learning practice and inspire pupils to resist injustice and act proactively to take control of their learning. Teachers as transformative intellectuals possess a capacity to reflect critically and pursue conscious actions to achieve social justice.

In this way, community-based learning initiatives tend to speak more to the contextual needs of education, incorporating local and indigenous dimensions into how to live peacefully within communities. These localized responses to conflict may contradict top-down approaches to how education can support peacebuilding, due to an agenda driven by a logic of stability that benefits market orientations. While attention to universal values is important for education, a

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... education for peacebuilding is characterized by an action-oriented multidisciplinary learning process that goes beyond knowledge-based classroom activity around peace.

lack of recognition of grassroots knowledge/aspirations and homogenizing peace initiatives might be counterproductive.

## 5.2 .4

### EDUCATION AS PEACEBUILDER

Like education for liberation, education for peacebuilding is characterized by an action-oriented multidisciplinary learning process that goes beyond knowledge-based classroom activity around peace. The aim of such an education is to build capacities in learners to interrupt the continuum of symbolic, structural and physical violence (Galtung, 1976). In this sense, the curriculum for peacebuilding demands critical classroom-based interactions with practical activities that relate to social, cultural and political issues that are based in local communities. Bush and Saltarelli (2000, p. 23) also note that peacebuilding education

should involve ‘a bottom-up rather than top-down process driven by war-torn communities themselves, founded on their experiences and capacities ... firmly rooted in immediate realities, not in abstract ideas or theories’. Gill and Niens (2014) provide a useful synthesis of diverse theoretical concepts in a framework for peacebuilding through education. They suggest that a ‘dialogic humanising pedagogy’ that builds on the foundations of critical theory and the Freirean pedagogy of participation, emancipation and transformation can overcome the limitations of the narrow economic model of education to inculcate fundamental attributes of humanity – love, compassion and humility (Gill and Niens, 2014).

Educational policies that promote equitable access to education can benefit socio-economically disadvantaged populations and potential ethnic tensions can be minimized. Schools can, for example, promote instruction in the mother tongue of the region, especially in early years, rather than impose a dominant

national language on minority groups. However, caution should be taken to ensure that children do not feel stigmatized through the public acknowledgement of their language practices (**Zakharia and Bishop, 2012; Bekerman, 2016; Charalambous et al., 2020**).

Nevertheless, peacebuilding initiatives in conflict-affected environments lack explicit links to peacebuilding theories and tend to focus on immediate humanitarian needs with ‘a greater emphasis on protection and reconstruction’ rather than ‘transformation’ that ‘requires a more explicit commitment to political, economic and social change’ (**UNICEF, 2011, p. 7**). Here, the idea of transformation relates to what Galtung (**1976**) identifies as ‘positive peace’, a social condition that not only ensures the cessation of physical violence but also addresses forms of injustice, discrimination and structural violence. In this process, educational reforms are concerned with the potential contribution of education in mitigating conflict not only by enhancing human capital

and thus enabling economic growth through educational investment but also by increasing the capabilities of individuals to function successfully, such as by being safe, staying healthy, being educated, having employment and contributing to society (**Sen, 1999**).

Novelli, Lopes Cardozo and Smith (**2017**) adapted Nancy Fraser’s (**1995, 2005**) theory of social justice by combining the notions of redistribution, representation and recognition with an additional component of reconciliation in what they call the 4R framework. They use this framework to examine the underlying causes of conflict and promote peacebuilding through educational change in conflict-affected societies. The authors claim that education can promote peacebuilding through equitable distribution of educational resources and services; representation of diverse communities in educational decision-making; recognition of cultural diversity in the curriculum; and most importantly, promotion of conflict-sensitive





The most important area in which education can be instrumental in peacebuilding is through its enhanced role in promoting reconciliation.

and reconciliatory pedagogical approaches to address legacies of conflict (Novelli, Lopes Cardozo and Smith, 2017). In addition to promoting a culture of peace through teaching and learning, education has the potential to redress inequalities within the educational domain as well as at the societal level by adopting a social justice framework (Fraser, 1995, 2005). These principles of social justice are applicable in all contexts but particularly in contexts of mass displacement where refugees and internally displaced people are deprived of access to education (e.g. in Jordan, Lebanon and Syria), where the host governments are unable or unwilling to pursue policies of equity and parity of participation

in education.

The most important area in which education can be instrumental in peacebuilding is through its enhanced role in promoting reconciliation (see Box 4). This involves not only supporting educational and public debate about the legacies of conflict but also evaluating the extent to which historical and contemporary economic, political and sociocultural injustices are redressed in/through education (e.g. via quota systems, school relocation, textbooks, teacher allocation). Reconciliatory education can contribute to social integration and community cohesion by

**BOX 4: EDUCATION AS PEACEBUILDER: COMMON HISTORY TEXTBOOKS IN NORTH-EAST ASIA**

re-establishing trust between schools and communities as well as between different identity groups who may have been involved in past conflict (Novelli, Lopes Cardozo and Smith, 2017).

The common history textbook in North-East Asia is a collaborative work of nearly 50 Chinese, Japanese and South Korean scholars published in 2005 in the form of one history textbook intended for middle school students in each of the three countries. The textbook was published a few years after the Japanese Government endorsed several history textbooks that were considered factually inaccurate and extremely biased against other Asian nations – particularly China and South Korea (Korostelina and Lässig, 2013). After protests from the South Korean and Chinese Governments and the refusal of many Japanese teachers to use the controversial Japanese

history books, the Japanese Government agreed to work with the South Korean and Chinese Governments to produce a cooperative regional history textbook that would provide content and a narrative that all three nations could agree upon. To address conflicts in the region, the scholars agreed to present controversial issues from different perspectives and avoid judgements in the textbook. For example, Japanese and Korean participants disagreed strongly about the legality of various treaties signed between the two countries in modern times. The project participants decided to avoid taking sides and represent different narratives, leaving judgement to the readers. All other controversial topics were examined from all sides of the debate (Yang and Sin, 2013). This initiative has produced textbooks that teachers can use as complementary materials to standard history textbooks, though the uptake and impact of this requires



... it is necessary to address conflict-fuelling structural causes through a more interventionist, proactive and potentially transformative peace.

more research. The purpose of the resulting textbook is, incidentally, recognized in its subtitle, which is: 'Facing

the future using history as a mirror: building together a new framework of peace and friendship in East Asia'.

The book's use as a tool for reconciliation and peacebuilding is also highlighted in three separate prefaces written by editors from each nation and directed towards students in the other countries (Korostelina, 2020).

The 4R framework is a useful resource for analysing the interrelationships between education inequalities and conflict (FHI, 2016), and pathways to redress the inequalities. Further, it acts as an advocacy tool through which development partners, national governments, civil society organizations and school communities are able to reconceptualize education as a transformative process. It forewarns the potentially negative social and political outcomes of education unless provisions are made for education to be deliberately and programmatically

designed and delivered with the aim of paving the path for peaceful shared futures that address the visions of all groups in a society. More importantly, educational debates need to be informed by high-quality political economy analyses to better inform programmatic responses to implementation of the 4R principles in education where authoritarian regimes monopolize power and resources; hegemonic cultural groups dominate discourses about national identity; elite political classes resist representation of marginalized communities in educational decision-making; and the terms of reconciliation are hijacked by those in power. The point is that rather than traditionally technocratic 'do no harm' or stabilization approaches, it is necessary to address conflict-fuelling structural causes through a more interventionist, proactive

Peace education can promote the values of tolerance, acceptance and forgiveness which may be considered an integral part of 'transformative peacebuilding'.

and potentially transformative peace. Such a deep transformation particularly focuses on redressing structural inequalities and injustices at system levels. This perspective assumes that a culture of peace can only result from an authentic process of transformation, both at individual and collective levels (Clarke-Habibi, 2005). Peace education can promote the values of tolerance, acceptance and forgiveness which may be considered an integral part of 'transformative peacebuilding' (Lederach, 1997). In various cases, illustrated in the text boxes above, tensions and possibilities relating to education can be examined by using the 4R framework, which could explain the rejection of education by Boko Haram; issues of recognition and identity politics in Ukraine; and popular education as a process of enhancing the idea of representation and history education in Japan, Korea and China to promote reconciliation.

Since 2000, there has been a significant growth in research and policy debates around education in emergencies as a

response to a broad range of challenges (e.g. access, quality of learning, attacks on children and teachers, lack of funding and technical capacities, etc.) faced by educational communities in humanitarian settings (INEE, 2010; Burde et al., 2017; Burde, Lahmann and Thompson, 2019). Thanks to the relentless advocacy of the Inter-agency Network for Education in Emergencies, there is now more recognition of the importance of education in humanitarian settings. And as a result of the Education Cannot Wait initiative, a dedicated funding mechanism has been established in the global education architecture. However, the field of education in emergencies has been criticized for its lack of engagement in broader critical education theories (Novelli, 2019; Brun and Shuayb, 2020) and for reproducing the status quo rather than advancing policy and practice for social transformation (Shah, Paulson and Couch, 2020). Hence, we argue that the analytical lenses presented in this paper are also relevant in educational planning, policies and practice in the field of education in emergencies.



5.2 .4 .1

### SOCIAL COHESION AS PEACEBUILDING

Building upon the interactions between education and peacebuilding, we now turn to the idea of social cohesion, an important dimension of sustainable peacebuilding. Some theories that emerge from the analysis of links between aggregate years of schooling and social cohesion point out that education contributes to expansion of social and human capital which positively affect social cohesion (Putnam, 2004). However, this depends upon the extent to which the aggregate years of schools are distributed across diverse social groups. Social cohesion refers to two broad features of a society. Firstly, it refers to ‘the absence of latent conflict whether in the form of income/wealth inequality, racial/ethnic tensions, disparities in political participation, or other forms of polarization’ and secondly, ‘the presence of strong social bonds measured by levels

of trust and norms of reciprocity (i.e., social capital), the abundance of associations that bridge social divisions (“civil society”), and the presence of institutions of conflict management (e.g., a responsive democracy, an independent judiciary)’ (Manca, 2014, p. 261). Education can serve as a fundamental policy mechanism for governments to enhance social capital and social cohesion as more educated people cultivate wider, deeper and stronger social networks and tend to make more active contributions to society’s social and political processes (Putnam, 2004). Along these lines, Colenso (2005) points out three interlinked analytical approaches that promote social cohesion: (1) paying attention to the political economy and governance of education by promoting transparency and equitable participation in education policy formulation, planning and management in education; (2) making a concerted effort to promote equity and reduce inequality through redistribution of education resources and outcomes; and (3)

...analysis of links between aggregate years of schooling and social cohesion point out that education contributes to expansion of social and human capital which positively affect social cohesion.

... education should reduce causes of inequality and disparity and prevent feelings of marginalization and mitigate forms of injustice which often result in conflict and tension.

reforming teaching and learning practices with a particular focus on certain competencies that build trust and mutually beneficial relationships between students. These approaches align with the 4R framework discussed earlier and point out the processes through which education's role as peacebuilder can be enhanced.

Colletta and Cullen argue that 'social cohesion is the key intervening variable between social capital and violent conflict' (2000, p. 13). They posit that the greater the integration between social capital relating to vertical linking (i.e. state and markets serving communities and individuals by ensuring inclusion, rule of law, democratic participation, access to and equality of opportunity, efficient and non-corrupt bureaucracy, and open society) and horizontal bridging (i.e. reduction in gender-based, ethnic, caste, religious and regional inequalities), the more likely 'the society will be cohesive and will thus possess the inclusive mechanisms necessary for mediating or managing conflict before it turns violent' (Colletta and

Cullen, 2000, p. 13). On the contrary, weak social cohesion represents weaker 'reinforcing channels of socialization (value formation) and social control (compliance mechanisms)', therefore increasing the 'risk of social disorganization, fragmentation, and exclusion and the potential for violent conflict' (Colletta and Cullen, 2000, p. 13). On the one hand then, low social cohesion is fuelled by exclusion, authoritarianism, inequalities and corrupt bureaucracy, which increase the chances of conflict. On the other hand, high social cohesion, underpinned by inclusion, rule of law, vibrant representative democracy, mechanisms to ensure equity in political and economic opportunities, and tolerance for diversity, reduces the chances of violent conflict. Shuayb (2016, p. 230) argues that equality and justice are two important dimensions of social cohesion, highlighting that education should reduce causes of inequality and disparity and prevent feelings of marginalization and mitigate forms of injustice which often result in conflict and tension. In



this process, education is a major contributor to strengthening social cohesion through formation of human capital and expansion of social networks amongst more marginalized groups. More importantly, through inclusive curricular provisions, such as the teaching of more balanced history and recognition of different races, religions, ethnicities, castes and gender identities (see section 2.4.1 on binational history initiatives) education can not only address economic inequalities but also redefine social formation processes.

In post-war societies, restoring social services such as education demonstrates the capacity of the state to exercise its fundamental responsibility to look after its citizens, and hence, contributes to trust-building between the two entities. The provision of education also serves as a ‘peace dividend’ to the wider community, though only in circumstances where it is designed to ameliorate historical social division, inequality and discrimination. Where education has become historically exclusive and socially

... expanding educational opportunities to historically disenfranchised populations can, in the longer term, reduce social gaps, thereby enhancing the role of education as a

divisive, reforms in the education sector need to reflect inclusivity, equity and recognition of cultural diversity (e.g. local language, history, culture and values) in which excluded communities have genuine ownership of the educational provision rather than it being provided as state patronage or tokenism (Smith and Ellison, 2015). These processes are not only limited to teaching and learning, but more fundamentally to the 'structural changes to the education system itself, as well as administrative changes related to more inclusive participation, representation and recognition of various interests in education governance and decision-making' (Smith and Ellison, 2015, p. 28). In this sense, expanding educational opportunities to historically disenfranchised populations can, in the longer term, reduce social gaps, thereby enhancing the role of education as a peacebuilder. These may include protection of schools from violence; provision of scholarships for children from disadvantaged backgrounds; provision of school feeding programmes; free distribution of

books; recruitment of teachers and administrative staff from marginalized communities; allocation of resources to build schools in historically neglected areas; skills training for former rebels; and reforming school management committees to diversify representation. Schools can particularly focus on reconciliatory programmes that connect with local communities and begin to engage in wider debates about how to revise curricula to promote a balanced history of peoples and recognition of cultural diversity (Novelli, Lopes Cardozo and Smith, 2017).

From an educational perspective, Allport's (1954) contact hypothesis is a useful tool for bringing people together from across dividing lines and encouraging change in negative intergroup attitudes (e.g. reducing issues of stereotyping, prejudice and discrimination). Contact theory assumes that the lack of contact between groups promotes bias and prejudice, and over a period of time, differences are legitimized at social and political institution levels (Allport,



... contact hypothesis is a useful tool for bringing people together from across dividing lines and encouraging change in negative intergroup attitudes

1954). This leads to reinforcement of negative attitudes towards the outgroup, further solidifying the boundaries between the ingroup and the outgroup (Hewstone and Greenland, 2000). Allport (1954) proposes four key conditions under which negative intergroup attitudes may be mitigated. Firstly, all members of contesting groups have a sense of equal status. As they engage in dialogue, they should feel listened to and that their opinions are valued by other members. Secondly, there is a collective commitment to achieving a goal of mutual understanding and peace. In other words, members of the dialogic team have the confidence or at least the hope that a mutually beneficial collective outcome is possible. Thirdly, all groups are interdependent and there is a willingness to cooperate as discussions take place. Finally, and most importantly, institutional support mechanisms that help facilitate the intergroup dialogue are put in place (Allport, 1954; Pettigrew, 1998). Educational spaces such as integrated schools have structural mechanisms and

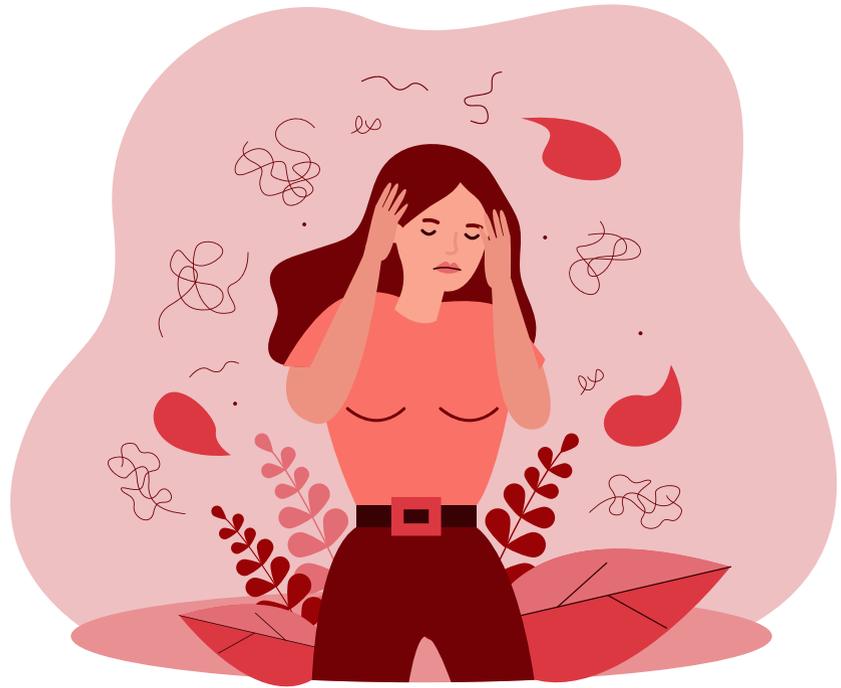
‘facilitating conditions’ (Pettigrew, 1998) to promote such dialogues in safe environments where educational ethe speak to the idea of mutual understanding and horizontal collaboration. While some societal conditions might prevent integration as political forces draw support from identity-based groups to mobilize their actions, there may be grass-roots initiatives that try to navigate structurally divisive conditions to promote intergroup dialogues and educational spaces that can usefully serve that purpose. However, such contact should include considerations of power imbalances, informal practices of segregation, and persistent patterns of inclusion and exclusion (Pettigrew and Tropp, 2013; McKeown and Dixon, 2017).

Bridging the divide between social groups can be achieved by the introduction of a new or existing social category that unites groups across social boundaries of conflict (Brewer, 2000; Crisp and Hewstone, 2000). For example, young members of conflicting ethnic groups can be brought together

A safe, secure context will potentiate a mode of self-regulation known as 'reflective mode', which is characterized by a high level of executive functioning and strong volitional control of attention.

through special educational initiatives like youth festivals, sport events and extracurricular activities (photo-clubs, music, etc.). Another approach – supercategorization – aims at the creation of a new, broader identity that helps oppositional groups identify the shared space of their belonging. New identities can be formed by creating one group with several subgroups. In this case, members of the new group have a dual identity, one of which is connected to the new common group and the other reflecting membership in a subgroup. On the basis of a positive balance of differences and similarities, all members of the new group have positive attitudes and stereotypes towards others. If people continue to perceive themselves as members of different groups but also feel that they are members of a common large group, intergroup relations become more positive in comparison with the context of a single ingroup and single outgroup (Dovidio and Gaertner, 2004).

As the next section will illustrate, from a neuroscience perspective, a safe, secure context or a threatening, unsafe context will have different effects on stress physiology throughout the lifespan, but particularly in infancy and early childhood as the central nervous system is developing. The ability to self-regulate depends on the context in which a child is situated. A safe, secure context will potentiate a mode of self-regulation known as 'reflective mode', which is characterized by a high level of executive functioning and strong volitional control of attention. This is in contrast to the 'reactive mode' of self-regulation, which is characterized by a high level of emotional and motoric reactivity. Educational environments that promote conflict sensitivity, diversity and inclusion can enable children to develop a reflective mode and individual agency. These developmental processes are crucial in appreciating peaceful ways of dealing with differences



## 5.3

# Social and biological responses to conflict: implications for learning

Education can also be a site where learning experiences are characterized by victimization of learners, perpetration of structural and physical violence, or building a community for social transformation and peace. In the first two, conflict can have disastrous consequences for educational systems and for the process of educating students.

In the latter two, conflict can be seen as an opportunity to remake the educational process and the educational system. This section of the chapter illustrates the reciprocal relationships between biological and social processes and applies these to an analysis of within-person processes at the neural and physiological levels in conflict-affected societies.

## 5.3 .1

## BIOLOGICAL RESPONSES TO CONFLICT

Conflict, whether violent or not, is inherently stressful for all participants as well as the educational system. We argue that victimization of education can stimulate adverse reactions among learners and can be detrimental in two ways. Firstly, learners who are more emotionally reactive and less reflective as a result of their conflict experience might struggle to deal with differences in a non-adversarial manner, resulting in reproduction or exacerbation of long-term confrontational behaviours (Blair and Ursache, 2011; Blair and Cybele Raver, 2012). This is particularly the case if conflict is experienced early in life, but also during adolescence, when the central nervous system is rapidly developing and can flip the brain and the behaviour it underlies

to more emotionally reactive and less reflective responses to stimulation (Arnsten, 2009). Secondly, there are often negative effects on the normal routine of educational provisions (e.g. when educational processes are disrupted or schools are destroyed during armed conflict) and rebuilding systems after conflict is slow and challenging with sustained effects on societies. When education acts as a liberator (e.g. the experience of unleashing individual potential and providing agency to effect social change) and a peacebuilder (e.g. providing knowledge and skills to deal with the causes of intergroup tension), stress and threat can be turned into positive resources to promote resilience and capabilities to develop reflective thinking and peaceful ways of dealing with conflict (see also WG3-ch2 on brain development and stress).

The mechanism by which the brain is flipped to a more reactive and less reflective mode (and vice versa) is the physiological response to stress. When an individual is experiencing

Conflict, whether violent or not, is inherently stressful for all participants as well as the educational system.



The mechanism by which the brain is flipped to a more reactive and less reflective mode (and vice versa) is the physiological response to stress.

stress, chemicals are produced throughout the body that act as neuromodulators, meaning that they, in part, control the rate at which neurons fire in the brain. When the neuromodulators are at moderate levels, individuals are alert and prepared for the typical challenges of the day. At very high levels, however, indicating that the person is under considerable stress, the neuronal firing in brain areas associated with emotional reactivity is greatly increased. Alternatively, the rate of neuronal firing in the area of the brain that is associated with reflective responses to stimulation, that is, the prefrontal cortex (PFC), is greatly decreased. In fact, at sustained high levels of these neuromodulators the rate of neuronal firing in the PFC enters a state of what is known as synaptic long-term depression (LTD), as opposed to long-term potentiation (LTP) (de Kloet, Oitzl and Joëls, 1999; Ramos and Arnsten, 2007). This is important because as LTD is occurring in the PFC and no new neuronal connections are being formed and strengthened, LTP is occurring and new connections

are being formed and strengthened in brain areas associated with emotionally and motorically reactive responses to stimulation as opposed to reasoned and reflective responses to stimulation.

Research on neuroimaging among children in conflict-affected societies is scarce; however, understanding of adverse circumstances to which children in such settings are exposed and the evidence from more stable contexts indicate that the impacts can be lifelong. A fundamental fact of brain function and development is ‘cells that fire together, wire together’, meaning that experience is a powerful influence on many aspects of brain development and, in turn, behavioural development (Hebb, 1949; Hensch, 2005). It is important to remember that human behaviour and the nervous, endocrine and immune systems that underlie human behaviour are highly adaptable early in development. Thus, a fundamental principle of development in all organisms is that the development of self-regulation will occur in

In unsupportive and unsecure contexts such as those characterized by conflict, children will have an increased tendency to develop physiological responses to stress that favour reactive as opposed to reflective responses to stimulation.

ways that are appropriate for the context in which development is occurring (Gottlieb, 1997). In supportive, secure and nurturing contexts, children guided by caregivers will develop a well-regulated physiological response to stress that can support reflective rather than reactive responses to stimulation. In unsupportive and unsecure contexts such as those characterized by conflict, children will have an increased tendency to develop physiological responses to stress that favour reactive as opposed to reflective responses to stimulation.

The developmental distinction between reactive versus reflective responses to stimulation is important because reflective thinking skills, known collectively as executive functions (EF) are essential for progress in formal education contexts (Bull and Scerif, 2001; Blair and Razza, 2007; Jacob and Parkinson, 2015) (see also WG3-ch3 and WG3-ch5). EF are comprised of three component processes: (1) working memory – the ability to hold information in mind and update it; 2) inhibitory control

– the ability to inhibit a highly learned response to a stimulus in favour of a less dominant response; and 3) cognitive flexibility – the ability to attend to distinct but closely related aspects of a given set of stimuli, such as the ability to group objects by colour and then by shape (Blair, Zelazo and Greenberg, 2005). Educational research on memory points out that ‘educative processes’ should be transformed into spaces of contestation and negotiation rather than reproduction of ‘memories’, formalized and imposed by authorities where educators can exercise their agency to decode underlying motivations of dominant historical narratives to provide a more balanced description of the past (Paulson et al., 2020). This, in our view, is an appropriate approach to advance the role of education in breaking away from cultural reproduction to harness possibilities for recognition and justice.

EF are engaged whenever complex and potentially confusing information is encountered. This fact illustrates the idea that EF are



reciprocally related to emotional responses to stimulation, such as stress and trauma. In other words, as anxiety rises in response to complex and potentially confusing information, levels of stress hormones rise at moderate levels, which can facilitate neural activity in areas of the brain that underlie reflective thinking. However, the rise of stress hormones at very high levels can shut that neural activity down. As described above, EF can be overridden by strong emotional, that is, stressful, responses to stimulation. However, as children develop EF, they can use these abilities to regulate emotion and the physiological response to stress. In other words, as children acquire agency and the ability to think abstractly with the development of EF, they also develop the ability to exert top-down control over their actions as opposed to responding in a ‘stimulus-driven’ manner to the context in which they are situated. As children develop and mature, they are increasingly able to anticipate contextual cues that can be used to guide behaviour.

Knowledge of relationships between stress, trauma and EF can inform efforts to introduce educational innovations that work to enhance the role of education in liberation and peacebuilding.

## 5.3 .2

### IMPLICATIONS FOR EDUCATIONAL PRACTICE FROM BIOLOGICAL RESPONSES TO CONFLICT

Knowledge of relationships between stress, trauma and EF can inform efforts to introduce educational innovations that work to enhance the role of education in liberation and peacebuilding. At the classroom level, there are relatively straightforward innovations to nurture a culture of peace that can be implemented to structure classrooms and pedagogical approaches to encourage the development of effective self-regulation such that engagement in learning is facilitated. For example, educational innovations that promote children’s individual

Evaluations of mindfulness programs have demonstrated a decrease in student aggression, problems with self-control, inattentiveness, perceptions of psychological stress, behavioural problems, conduct disorders, school suspensions and substance abuse, and increases in academic achievement, social skills and mental health.

agency by ceding some measure of control to children in decision-making about which classroom activities to engage in and which learning opportunities to prioritize, even for very young children, can increase self-regulation and EF by allowing children to take ownership and ‘liberate’ their learning. Evaluations of a number of prekindergarten and kindergarten programmes have demonstrated such an effect with sustained impact in later primary grades (Cybele Raver et al., 2011; Blair and Cybele Raver, 2014; Sasser et al., 2017).

Mindfulness is also an effective tool for reducing stress by increasing individual agency in a way that can promote reflective thinking and reduce reactive tendencies. Mindfulness refers to ‘both a mental state and a set of practices that are characterized by two components: the self-regulation of attention, so that it is maintained on immediate experience, thereby allowing for the increased recognition of mental events in the present moment; and

the adoption of an orientation towards one’s experiences in the present moment, characterized by curiosity, openness, and acceptance’ (Suárez-García et al., 2020, p. 1). Evaluations of mindfulness programmes have demonstrated a decrease in student aggression, problems with self-control, inattentiveness, perceptions of psychological stress, behavioural problems, conduct disorders, school suspensions and substance abuse, and increases in academic achievement, social skills and mental health (Creswell et al., 2014; Pascoe et al., 2017; Pandey et al., 2018; Suárez-García et al., 2020). The benefits of mindfulness training for teachers have also been empirically demonstrated. Evaluations of the Cultivating Awareness and Resilience in Education (CARE) programme have shown positive effects on teachers’ social-emotional well-being and competence as well as classroom quality, as indicated by the emotional climate of the classroom (Jennings et al., 2013, 2017; Jennings, 2018). The CARE programme is based on the theory of the ‘prosocial classroom’ and



... ‘mindfulness’ programs are beneficial in coping with the immediate effects of conflict whilst the broader initiatives of conflict prevention and systemic change are underway.

its potential benefits for students as well as teachers (Jennings and Greenberg, 2009). Despite the potential benefits of such programmes in enabling learners to navigate and manage pressure, attention should not be deflected from the need to redress the societal structures that cause stress. The idea that education systems should promote resilience through biological or emotional interventions while societal structures remain oppressive is problematic. Nevertheless, ‘mindfulness’ programmes are beneficial in coping with the immediate effects of conflict whilst the broader initiatives of conflict prevention and systemic change are underway.

Research on mindfulness makes clear that EF are dependent on many other aspects of child development, such as the ability to regulate emotion and physiological responses to stress. Therefore, empirical demonstrations of the relation of EF to progress in school involve a host of processes related to emotion regulation, not becoming

anxious in the face of uncertainty and not acting out when bored or uninterested. In effect, self-regulation generally ensures beneficial social interactions with teachers and peers. This idea is particularly relevant in educational environments of crisis, where teachers, parents and children have lost stability in their lives, are forced to live in stressful political and social conditions with a blurred life trajectory, and struggle to maintain a meaningful educational provision for young people.

## 5.3 .3

### SOCIAL NEUROSCIENCE PERSPECTIVES ON CONFLICT

In order to understand the impact of conflict on education via effects of stress physiology, it is necessary to focus on how conflict affects the caregiver–

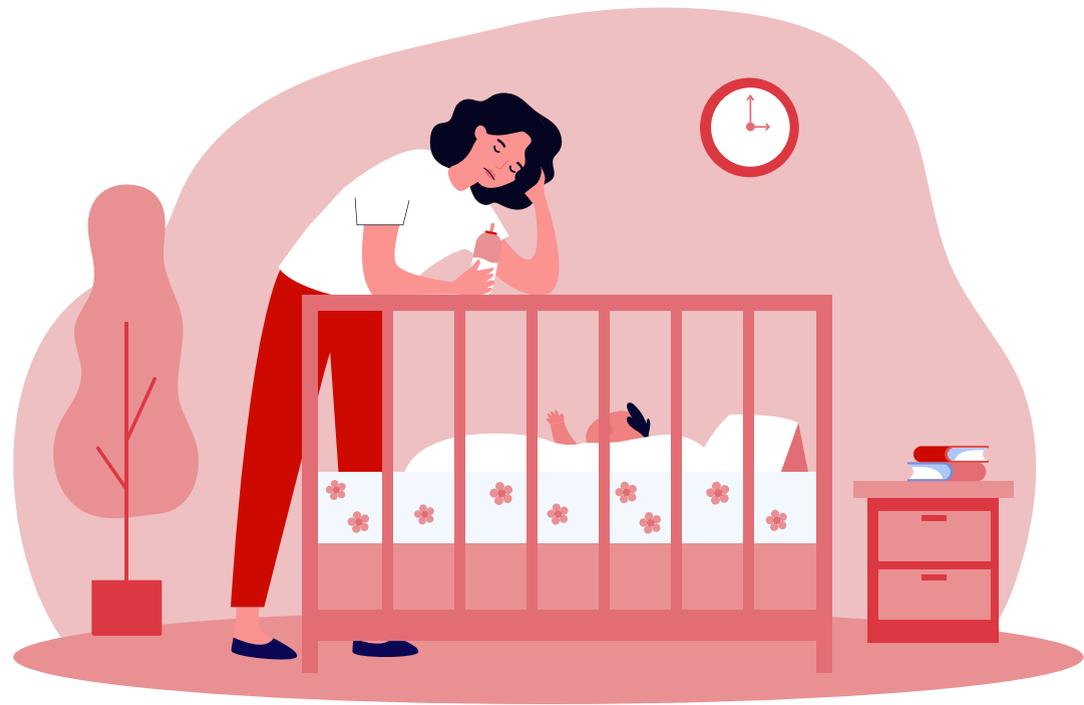
... the caregiver–child relationship in [establishes] a strong basis for learning in school. This is because the caregiver–child relationship is the foundational relationship that sets the stage for all subsequent social relationships.

child relationship from infancy. An infant is fully dependent on their caregiver for all aspects of physiological regulation, including body temperature, feeding and sleeping. Caregivers are actively entraining the developing child’s physiology in ways that will ultimately support or undermine their ability to effectively regulate physiologically (Feldman, 2015, 2017). These multiple forms of regulation include physiological responses to stress, which will ultimately decide the balance through which reactive versus reflective responses to stimulation are prioritized (Blair and Cybele Raver, 2015; Brandes-Aitken et al., 2020).

The extent to which formal education is dependent on social interaction between teachers and students, as well as between peers, further highlights the role of the caregiver–child relationship in establishing a strong basis for learning in school. This is because the caregiver–child relationship is the foundational relationship that sets the stage for all subsequent social relationships.

This is seen in the vast empirical literature demonstrating the centrality of the caregiver–child relationship in child social-emotional and cognitive development, particularly for children who experience neglect and marginalization on the basis of their race/ethnicity or income (McLoyd, 1998). It is also seen in a burgeoning literature on the neuroscience of relationships in which hormones, neuropeptides and catecholamines organize and shape connections between cortical and subcortical networks in ways that influence relations between caregivers and children (Feldman, 2017).

The caregiver–child relationship sets the stage for one of the key relationships in a child’s life – that of a child’s relationship with their teacher when they begin formal schooling. There is a substantial literature on the importance of the student–teacher relationship that in some studies has been shown to have longitudinal effects throughout children’s primary school careers (Hamre and Pianta, 2001; Mashburn and



**Pianta, 2006).** A particular area of research interest that is relevant to education in conflict-affected societies is the extent to which teachers' physiological profiles indicate high stress and reactive as opposed to reflective cognitive, emotional and behavioural profiles. This information about stress physiology could then be used to evaluate the efficacy of programmes that aim to increase individual agency through mindful practices or ceding some measure of control to children in the learning process. An important point here is that children are not 'incomplete and

incompetent ("becomings" or "citizens in the making") who need protection and cannot be granted full rights and traditional participation options' (**Toots, Worley and Skosireva, 2014, p. 54**). They equally utilize educational sites for political socialization and wider social issues; the struggles of their parents and political environments also provide powerful informal education that shapes children's interactions with conflict. Children and young people do organize, mobilize the support of their peers and comrades and act collectively, which 'at the very least confound(s) a "care and control"

model of childhood' (Wyness, 2006, p. 94). It is also possible that young people collaborate with their teachers to change educational environments for the better.

The benefits of mindfulness training for teachers as well as students could perhaps be enhanced by integrating mindfulness and social neuroscience. Social neuroscience is the study of the neural basis of collective social behaviour, such as interactions between teachers and students, and includes both positive behaviour (e.g. empathy, cooperation, altruism) and negative behaviour (e.g. prejudice, aggression, violence). Theoretical perspectives gained from neural investigation of the positive and negative aspects of social behaviour might contribute significantly to our understanding of different stages of conflict, that is, the causes and effects of conflict, mitigation of the impact of violence and peacebuilding efforts. However, any meaningful success in translating the neuroscientific evidence to real-world applications would require

successful integration of top-down political, social and cultural causes of violent conflicts with bottom-up psychological and neural bases of individual emotion and cognition (Decety, Meidenbauer and Cowell, 2018; Cybele Raver and Blair, 2020).

An especially important avenue of research from the social neuroscience perspective is that of empathy: the ability to understand and share the emotional and cognitive states of others (see also WG3-ch4). Empathy is a key social relational function that acts as a pathway to higher-order prosocial behaviour and includes bond formations, cooperation and mutually acceptable moral decision-making. The role of neuroscience in conflict-affected societies (at behavioural, neural and hormonal levels) is best seen through the lens of empathy-mediated response bias towards ingroup and outgroup members. Long-term peacebuilding requires transforming the perceptions that conflict actors have about their perceived enemy by replacing negative images of

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them with a sense of sympathetic understanding, that is, compassion for the enemy's vulnerability, hardship and suffering (Rothbart and Allen, 2019). Specifically, the neuropeptide oxytocin enables cognitive and emotional empathy and plays a substantial role in empathic flexibility towards ingroup and outgroup members (Shamay-Tsoory et al., 2013).

Oxytocin is also implicated in trust and bond formation, parent-child attachment and cooperative behaviour (Kosfeld et al., 2005; Zak, Stanton and Ahmadi, 2007; Israel et al., 2009). There is methodological controversy regarding the findings from intranasal oxytocin studies on human social behaviour but recent studies have been working to address these methodological drawbacks (Mierop et al., 2020; Winterton et al., 2021).

The evidence in support of ingroup and outgroup bias in the human brain indicates bias emerges through complex interactions between large numbers of brain networks performing multilevel cognitive processing (Victoroff et al., 2011;

Zhong et al., 2017). These neural networks act as a substrate for social, cultural, economic and political influences in the surrounding environment. Identifying clusters of recurring neural, sociocultural and political factors linked to increased susceptibility to engaging in behaviour directed at other groups, whether those behaviours foster inclusion or exclusion, can inform tailoring of rehabilitation strategies to help modify aggressive behaviour.

A study investigating intergroup contact intervention for peacebuilding used 'The Tools of Dialogue Intervention' as a group-level intervention with Israeli-Jewish and Arab-Palestinian adolescents (sixteen to eighteen years) for a period of eight weeks (Influs et al., 2019). The study design involved video-recorded one-on-one interactions with outgroup members and measured self-reported attitudes towards the outgroup before and after the intervention. Considering its role in prosocial behaviour, oxytocin levels were

Neuroscientific evidence can only suggest potential educational intervention strategies and provide evidence at the biological level of the efficacy of these strategies.

also assayed before and after the intervention. The study found a concurrent increase in perspective-taking responses and oxytocin levels in the group receiving the intervention, indicating that oxytocin might play an important role in mediating an increase in behavioural empathy towards outgroup members following dialogue intervention. This understanding has wider implications for pedagogical processes in educational settings where learning takes place through collaborative and dialogic activities rather than via didactic transmission of knowledge or information. This finding illustrates a major theme of the neuroscience sections of this chapter, namely that biology is determined by context and experience as much or more than it determines a specific context or experience. In line with the central theme of this chapter, the findings of the study also illustrate that education in the form of meaningful intervention can build empathy among intergroup members and act as a liberator and a peacebuilder to override

the antagonistic worldviews in youths of intergroup conflicts that are built through years of formal and informal contexts (including education acting as a victim and a perpetrator).

It is important to note here the distance that still remains in bridging neuroscientific findings and educational policies and practices. Understanding how conflict affects the physiology and psychology of victims is not sufficient to build successful educational practices. Neuroscientific evidence can only suggest potential educational intervention strategies and provide evidence at the biological level of the efficacy of these strategies. It is one of the many nodes of the entire decision-making tree that needs to be integrated with the sociodemographic, political and cultural nodes to arrive at a meaningful impact. Translation of neuroscientific evidence from laboratory environments to real-world conflict areas is emerging but the opportunity cost and relevance should be thoroughly examined by all stakeholders.



# 5.4

## Towards a multidisciplinary analytical framework for education in conflict settings

Social, political, economic and cultural environments influence the neural and physiological

mechanisms of educators and learners in educational settings. Educational interventions that

**Education can help build resilience, an adaptive response to adversity among learners.**

are designed to promote reflective mode in human minds can strengthen positive emotional and neural mechanisms and can help learners to cope better with the effects of violence. But these are transitory approaches and the root causes of stress are located in wider societal environments that may be oppressive, exploitative and unjust to those who are outside the system of privilege.

Violent conflicts are disruptive to educational processes and cause stress and adversity for learners, meaningful learning and brain development. Whilst it is crucial to mitigate societal conditions that generate causes of conflict, conflict-sensitive learning can potentially reduce the impact of violence on human brains. Education can help build resilience, an adaptive response to adversity among learners.

Education is a contested domain that shapes, and is shaped by, a broad range of social, political, economic and cultural dynamics in conflict-affected societies. The idea that education is

inherently good for conflict mitigation and peace is unhelpful particularly because the way educational decisions are made, and how resources are allocated in education across societies, determine the relationships between individuals, social groups, the state, markets and political institutions. Educational decision-making is often monopolized by the political elite who undermine redistributive policies and representation of diverse communities in educational processes (e.g. policy-making, resource allocation, equity, diversity and curricula). Hence, education becomes an indirect cause of conflict, fuelling grievances. This seems to be the fundamental problem of the centralized education system from a conflict perspective. It is therefore essential to find new avenues of learning through which education can become a universally available good that provides a liberating experience for all. An educational focus on diversity with equity, starting prior to formal schooling and continuing through the





... how resources are allocated in education across societies, determine the relationships between individuals, social groups, the state, markets and political institutions.

early primary grades, can lay foundations for a system of learning that promotes peace and social justice.

The theoretical framework and its four strands of multidirectional interactions between education and conflict employed in our analysis should be viewed as a dynamic and heuristic tool to unpack tensions inherent in education. These relationships often intersect and are blurred, making it difficult to specify any one direction of analysis in any

particular context. Therefore, this framework should be applied as an entry point of educational analysis rather than a mechanical or rigid approach to solving educational problems. This would, we hope, enable researchers and policy-makers to engage in cross-cutting debates about how education presents itself as a complex process in both stable and conflict-affected societies, and the possibilities to transform education from victim and perpetrator to liberator and peacebuilder.

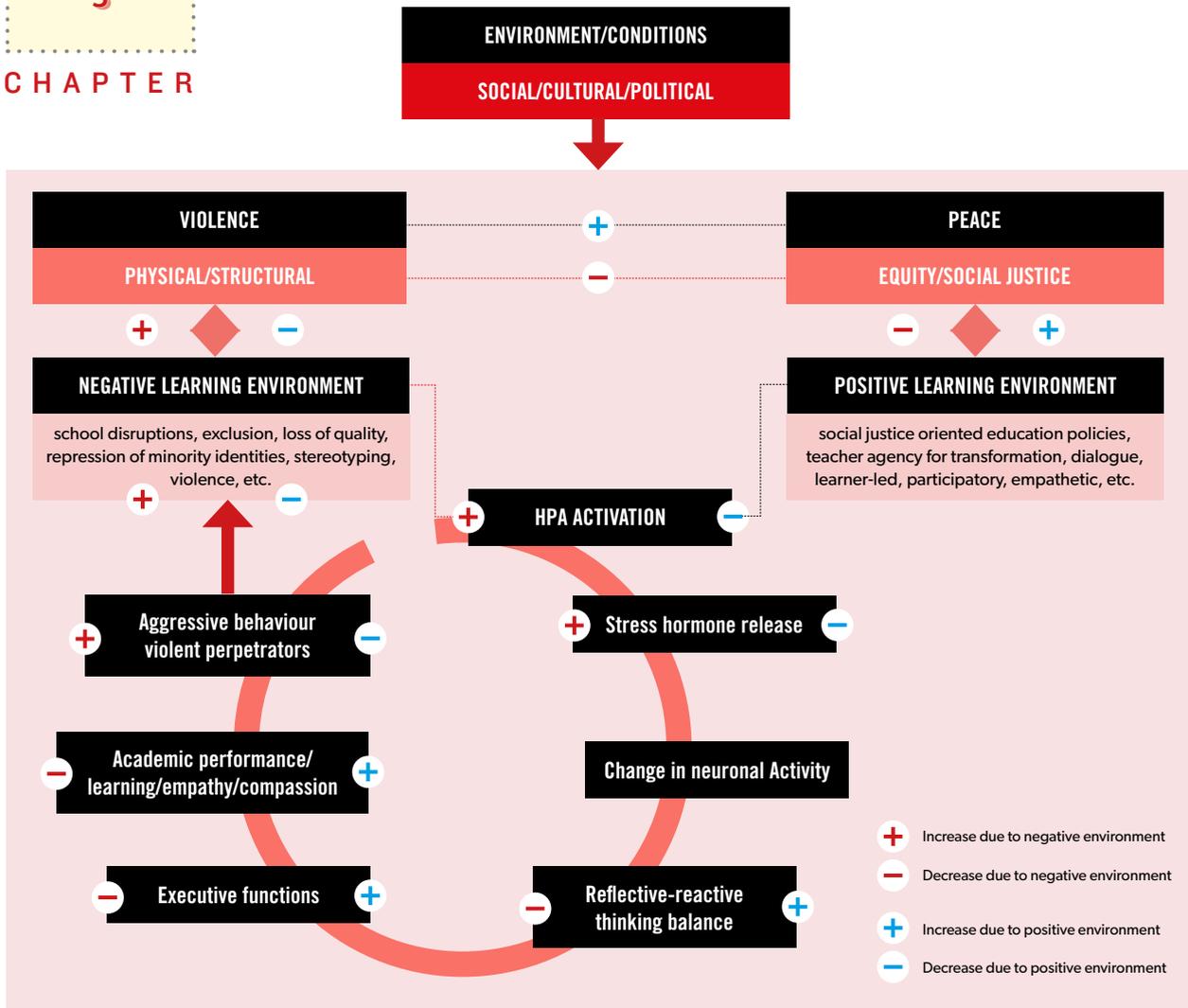


Figure 1. The relationship between contextual educational factors, and the biological pathways by which individuals react to conflict-induced stress

An important means to unpacking the social tensions in education is to bring together research and researchers across the aisles of natural and social sciences as well as to appreciate the peculiarities of diverse educational contexts. On the one hand, positive change in the educational environment

can lead to enhanced cognitive abilities of learners contributing to more peaceful ways of dealing with differences. On the other hand, the effects of violence on the learning environment can cause stress for learners with a long-term detrimental impact on their cognitive abilities and social



behaviour. Interesting avenues for further research include exploring how the neural state of individuals can be shaped by their experiences in the social/educational environment, which can then determine their response to the social, political and cultural conditions that relate to the outbreak and perpetuation of conflict. In line with this conclusion, we present our edu-neuro conceptual framework in **Figure 5**.

The red plus and minus signs indicate an increase or decrease of a factor due to a negative environment, while the blue plus and minus signs indicate an increase or decrease of a factor due to a positive environment. The figure starts with a particular context leading either to a negative learning environment of physical or structural violence, or to a positive learning environment of social justice, equity and peace. Both of these consequences result in a biological response of hypothalamic-pituitary-adrenal (HPA) activation, and stress hormones being released, resulting

in a change in neuronal activity. These changes result in a cascade of downstream effects in reflective/reactive thinking balance, and EF, which affects a learner's academic performance, empathy and compassion. Depending on the positive and/or negative contextual factors taking place at each stage, behaviour manifests itself as aggression (the perpetrator), disempowerment (the victim), increased critical thinking (the liberator) or increased empathy/compassion (the peacebuilder). This is a continuous feedback cycle, where there are possibilities for educational interventions to positively transform neuronal activity leading to improved cognitive and behavioural attributes.

As outlined in **W62-ch4**, there are multiple types of diversity: religious, ethnic/racial, linguistic and socio-economic, as well as diversity associated with variations in neural structure and function, political views and gender. It is crucial to cede educational decision-making to diverse groups, particularly marginalized

The red plus and minus signs indicate an increase or decrease of a factor due to a negative environment, while the blue plus and minus signs indicate an increase or decrease of a factor due to a positive environment.

A neuroscience perspective on conflict highlights the importance of agency, of individuals as well as groups.

groups, including indigenous communities, to nurture a positive learning environment (Figure 5), ensuring that those groups have the tools, support and guidance they require to make decisions about education at all levels, from early childhood through to higher education.

A neuroscience perspective on conflict highlights the importance of agency, of individuals as well as groups. It also emphasizes that when education acts as a liberator and a peacebuilder it enhances the potential for education to function as a 'great equalizer', as one manifestation of a truly meritocratic society whereby access to opportunity for resource generation is equitably distributed throughout the population.

A focus on diversity with equity and inclusion of marginalized groups and neurodiverse learners has explicit advantages for education. Teacher agency is also key in that educators are not mere implementers of the state-prescribed curriculum but are creative thinkers who are able to

combine the lived experiences of their communities with the curricular framework. From a conflict perspective, teachers who have the potential to engage in transformative pedagogies are provided with pedagogical freedom to deal with contentious social and political issues in the safe spaces of learning institutions. Where the culture of learning is defined not just by prescriptive employability skills but also by the objective of unleashing learners' creativity and innovative power, education can effect societal transformation. In this process, educational practices are adapted to new environments created by the impact of conflict and violence, and are geared towards peace and social cohesion. Within the controlling national political contexts, teachers can exercise some degree of autonomy and engage in critical history teaching. They can create positive dialogic spaces where students are able to appreciate that historical narratives do not represent truth but have a hidden/explicit political agenda, and therefore need to be critically understood.



# 5.5

## Conclusion and Key Messages

Educational policies and practices in conflict-affected contexts should approach education from multiple perspectives and draw upon multidisciplinary research, including sociology, conflict and

peace studies, political science, and neuro and cognitive sciences in order to avoid excessive 'educationism'. Some of the critical points we suggest include:



## CHAPTER

... promoting  
peacebuilding  
through structural  
reforms in education  
and implementing  
educational  
programmes at  
schools and  
communities to deal  
with legacies of  
conflict

- *establishing learning and teaching processes that promote resilience to reduce victimisation,*

understanding psycho/neural/physiological dimensions, and introducing programmatic interventions;

- *promoting social justice in education to reduce its negative role.*

Policy-makers, international development partners and educational practitioners should concentrate on equity in resource distribution so that disadvantaged communities have increased access to and outcomes in education;

- *reconfiguring processes of educational decision-making*

in which there is diversity of representation from different social groups who have collective ownership for policies and practices;

- *designing educational curricula to recognize cultural diversity.*

There are immediate programmes that mitigate grievances of historically marginalized communities and a broader

programme of structural reform is set in motion;

- *promoting critical consciousness* to inculcate egalitarian values and provide tools to redress injustice; and

- *promoting peacebuilding through structural reforms in education* and implementing educational programmes at schools and communities to deal with legacies of conflict.

Based on the discussion in this chapter, we highlight the following implications for various educational stakeholders in conflict-affected contexts.

### 5.5 .1

## GENERAL IMPLICATIONS

1. While government institutions must continue to be a part of the solution in improving education,



Local educational institutions could become 'centres of community', facilitating sustainable development, engaging with the causes of conflict and developing innovative experiential learning models that bring the reconciliation know-how of a community into the classroom and take that knowledge into communities and society at large.

the emphasis should be on grass-roots activities, including cross-national common history initiatives.

2. Local educational institutions could become 'centres of community', facilitating sustainable development, engaging with the causes of conflict and developing innovative experiential learning models that bring the reconciliation know-how of a community into the classroom and take that knowledge into communities and society at large. In this regard, school–community partnerships are crucial so that learning and teaching in schools and community-based experiences are connected.

3. There must be recognition of the fact that in societies affected by identity-based conflicts, education faces an enormous task of redressing injustices, unequal distribution of power and resources, and misrecognition of diversity.

4. Reconciliation programmes within education can avoid

curriculum content that reproduces prejudice and incites violence and hatred, and instead promote tolerance, mutual understanding and justice.

5. In conflict-affected contexts, education is particularly significant in the development of psychosocial dimensions of resilience such as patriotism, optimism, social integration and trust in leadership (Canetti et al., 2014) as well as in enhancing the capacity of a national community to heal from trauma, promoting justice for victims of violence, and positively transforming intergroup relations among communities.

## 5.5 .2

### IMPLICATIONS FOR PARENTS AND CAREGIVERS

1. Research indicates that secure and stable parent–child relationships are characterized

by frequent parent–child conversations and the asking of open-ended questions. A child’s ability to think abstractly and to reason must be respected. Children should be encouraged to reflect on their behaviour and engage in conversations about reasons, motivations and positions that have led to a particular type of behaviour. The power differential between parent and child must be used sparingly.

2. Parents could focus on conversations of hope and new possibilities amid times of conflict and protracted crises. Whilst it is often challenging to conceal emotions, grief and helplessness in situations of crisis, families should concentrate on co-creating a positive future that enables trauma to heal and a culture of imagination to thrive.

3. Parental involvement in children’s learning has a positive impact on educational outcomes. So, parents should regularly interact with their children’s teachers and identify domains (e.g. academic, psychosocial and

emotional) in which children might be struggling. Proactive partnerships and collaborations between teachers, parents and learners can lead to positive outcomes in education.

## 5.5 .3

### IMPLICATIONS FOR EDUCATORS

1. Teachers are not simply facilitators of the prescribed curriculum; their roles go beyond curriculum delivery in conflict-affected settings. They could educate learners to critically engage with social, political and economic conditions of the society in which they live; provide the knowledge and skills to analyse conflict; learn skills about how to be safe; and play a positive role in peacebuilding.

2. In addition to inculcating positive values such as love, compassion, tolerance and respect for diversity, teachers should

Teachers are not simply facilitators of the prescribed curriculum; their roles go beyond curriculum delivery in conflict-affected settings.



Teachers could utilize knowledge about peace education/genocide education/Holocaust education to educate children about the consequences of prejudice, hatred and ethnic supremacy and promote mutual understanding and the importance of cultural diversity and coexistence.

promote diverse perspectives, critical thinking and a culture of dialogue in the class.

3. Research indicates that the substantial knowledge base on self-regulation and EF could be emphasized. These topics are highly relevant to education at all grade levels, particularly early childhood education and early primary grades. Educators could draw on this body of knowledge to inform their pedagogical practices.

4. Teachers could utilize knowledge about peace education/genocide education/Holocaust education to educate children about the consequences of prejudice, hatred and ethnic supremacy and promote mutual understanding and the importance of cultural diversity and coexistence.

## 5.5 .4

### IMPLICATIONS FOR POLICY-MAKERS

1. Transitional justice and resilience in education should be promoted to reduce feelings of victimization. Schools could be provided with resources and toolkits to introduce programmatic interventions that promote an understanding of psycho/neural/physiological dimensions.
2. Education policy-making bodies could be representative of diverse social, regional, cultural, racial and religious communities.
3. There are important implications for national ministries of education that manage teacher education programmes. Initial teacher education and continuing professional development programmes could be revised to incorporate new discourses and approaches that will help teachers

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