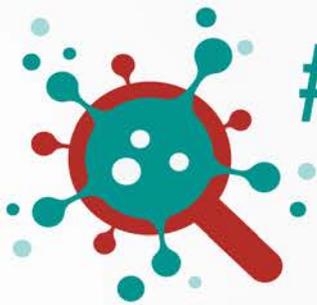


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Education Researchers Respond to The COVID-19 Pandemic

THEME 10

Lessons on How Countries Manage Schooling
During and After Disasters: A Study of Four Cases

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SERVICES

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Abstract

The study involves a review of literature on how education systems were managed during and after a disaster. Four cases were examined: natural disasters (tsunami and earthquake) in Indonesia and Haiti; civil conflicts in Rwanda, Sierra Leone and Libya and the Vuwani district in Limpopo, South Africa; a health pandemic (Ebola) in West Africa; and the COVID-19 education response globally and in South Africa. All four cases offer valuable insights and lessons for the education sector in South Africa when it comes to strategy, policy, planning and programming of responses for education continuity, preparation to exit the lockdown and for curriculum recovery.



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Acronyms

C4D	Communication for Development
CAPS	Curriculum Assessment Policy Statements
CDE	Consortium for Disaster Education
COGTA	Cooperative Governance and Traditional Affairs
DBE	Department of Basic Education
DoE	Department of Education
ECD	Early Childhood Development
EVD	Ebola Virus Disease
GFDRR	Global Facility for Disaster Reduction and Recovery
GPE	Global Partnership for Education
HEI(s)	Higher Education Institution(s)
ICT	Information and communication technology
IIEP	International Institute for Educational Planning
INEE	Inter-Agency Network for Education in Emergencies
JET	JET Education Services
MEST	Ministry of Education, Science and Technology
MoE	Minister of Education
NASCEE	National Association of Social Change Entities in Education
NATO	North Atlantic Treaty Organization
NECT	National Education Collaboration Trust
NGO	Non-Governmental Organisation
NPO(s)	Non-Profit Organisation(s)
OBE	Outcomes Based Education
PBEA	Peacebuilding Education and Advocacy
PDNA	Haiti Earthquake Post Disaster Needs Assessment
PTSD	Post-Traumatic Stress Disorder
SABC	South African Broadcasting Corporation
SAHRC	South African Human Rights Commission
SGBs	School Governing Bodies
UN	United Nations
UNESCO	The United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
UNISA	University of South Africa
WASH	Water, Sanitation and Hygiene
WHO	World Health Organisation



Introduction

The rapid spread of the Corona Virus in the form of COVID-19 has had an unprecedented impact on schooling and on education systems throughout the world. In South Africa, the impact began when social distancing started as a cultural practice throughout the country from mid-March; the impact strengthened even more when the President announced (and then extended) a national lockdown from midnight 26 March 2020 to the end of April 2020. This led many South Africans to ponder the following questions: What impact will this situation have on teaching and learning across the country? How can the education system still reach, teach and support learners now that all schools and department offices are in lockdown and teachers are no longer in classrooms? What processes should be followed in schools once the lockdown is lifted? How will we effectively “re-boot” the education system? This paper by the National Education Collaboration Trust (NECT) is one of the 12 papers commissioned by JET Education Services to answer these – and many other– questions.

In order to learn from other national and international communities, the paper considers the lessons South Africa can glean from countries who – for very different reasons – have worked through similar educational challenges. It does this in four categories of case studies, based on literature available online, covering several countries. The categories were chosen based on similarities they have with the current global situation that, among other social structures, has had a profound impact on schooling and on the education system *Firstly*, the impact national disasters have had on schooling and the steps countries took to recover from this impact are foregrounded through considering the effect of earthquakes and tsunamis in Indonesia and Haiti in the last 12 years. *Secondly*, the impact that war and conflict have had on schooling is considered through looking at how Rwanda, Sierra Leone and Libya responded and recovered from violent confrontations and war. This case study also considers the impact of social unrest on education more locally through looking at how education and schooling in the Limpopo community of Vuwani, South Africa was managed and then recovered. *Thirdly*, the impact the recent Ebola virus outbreak had on schooling and on education in Liberia and Sierra Leone is probed. And *finally*, the last case study firstly describes global, country and the South African response to the pandemic. Secondly, the pandemic is located within the social and historical context of education in South Africa. Thirdly, an analysis of the information is provided, and finally, based on the analysis, recommendations are made for system recovery in South Africa.

Each case study describes the event that caused the educational disruptions and then considers the impact it had on schooling and on the education system. The cases also mention the possibilities of education and schooling continuing, if possible, during the actual event and immediately after the event. This is to consider strategies the nations and communities developed and implemented to resume schooling and to restart their education systems.



But most importantly, the case studies provide insights which South Africa can learn from and which may be applied to the current situation, offering management approaches to coping, exit and recovery. The paper ends with a short reflection on other research directions that emerge from this work.



Case Study 1: Natural Disasters

This case study looks at the responsive and resilient education strategies used in Indonesia to resume schooling after the effects of serious earthquakes and a tsunami. It also considers the difficulties Haiti experienced in attempting to recover from the 2010 earthquake and subsequent cholera outbreak.

Natural disasters: Indonesia and Haiti

Indonesia is a country beset by natural disasters, suffering an average of “289 significant disaster events per year and an average annual death toll of approximately 8 000” (GFDRR, 2016). Earthquakes and tsunamis may make up a fraction of the natural disasters that befall Indonesia, but they are arguably the most instrumental in the disruption of the country’s education system.

On 26 December 2004, the Indonesian province of Sumatra’s coast was rocked by the world’s most powerful seismic event in 40 years, namely an earthquake that registered 9.3 on the Richter scale (Lay et al, 2005). Consequentially, the earthquake produced a devastating tsunami that affected over 14 countries rimming the Indian Ocean including Sri Lanka, with it reaching as far as Somalia (ABC News, 2014). Of an estimated death toll of 230 000, Indonesia suffered the most casualties, with 130 000 people dying. Furthermore, 30 000 people were declared missing and over 700 000 people were displaced by the disaster (International Recovery Platform, 2004). The most recent earthquake and tsunami in 2018 resulted in the displacement of over 210 000 people and damaged at least 1 200 schools (Theirworld, 2018). However, for the purposes of this case study, the 2004 Sumatra-Andaman earthquake and tsunami will be considered as more lessons can be learnt for the South African context.

Haiti, one of the poorest nations in the Western Hemisphere, is also vulnerable to natural events like earthquakes. The scale of the earthquake that struck the island-nation in 2010 resulted in the deaths of over 316 000 people, the displacement of 1.2 million people, the destruction of most of the infrastructure in the capital, Port-au-Prince, and an unprecedented shutdown of communication methods, access to clean water and electricity (International Recovery Platform, 2010).

Educational impact

Natural disasters inflict great damage on several societal aspects of life, and this is certainly true in terms of disrupting education systems. Sinclair (2007: 52) states that post-disaster, colleges and schools are often “damaged or used for temporary accommodation of people rendered homeless or displaced by war or disasters such as earthquakes, floods or hurricanes”. This rings true for both Haiti and Indonesia, as during the natural disasters experienced in these countries, schools were physically destroyed or damaged in such a way that normal education could not resume immediately. Furthermore, the psychosocial impact of the loss of lives during natural disasters cannot be overstated, as learners and teachers are greatly affected by



these events. For learners and teachers, the trauma can stem from the death or displacement of their family, community members, fellow teachers and classmates.

The effects of having schooling halted are compounded by the fact that learners are additionally exposed to the horrors of post-disaster rebuilding: they are traumatised by the recovery of dead bodies and mass grave burials; they either experience grievous bodily injuries themselves or witness them in others; they are exposed to unrestrained disease outbreaks and the lack of medical resources; there is an inability to access clean water and fresh food; they participate in the building of temporary shelters or the recovery of possessions from destroyed homes; or in extreme cases, they have to adjust to living in internally displaced people's camps.

The lack of educational materials and toys – often used as a way for learners to process their grief and displacement – as well as the security provided by schools as “safe spaces” (Theirworld, 2018: 28) also compounds the effects of having their usual routines disrupted. As such, learners often display symptoms of post-traumatic stress disorder (PTSD), which will inevitably affect their academic performance once schooling resumes (Theirworld, 2018: 18).

On 26 December 2004, the **Indonesian** province of Sumatra's coast was rocked by the world's most powerful seismic event in 40 years, namely an earthquake that registered 9.3 on the Richter scale (Lay et al, 2005). Consequentially, the earthquake produced a devastating tsunami that affected over 14 countries rimming the Indian Ocean, reaching as far as Somalia (ABC News, 2014). Of an estimated death toll of 230 000, Indonesia suffered the most casualties, with 130 000 people dying. Furthermore, 30 000 people were declared missing and over 700 000 people were displaced by the disaster (International Recovery Platform, 2004). The most recent earthquake and tsunami in 2018 resulted in the displacement of over 210 000 people and damaged at least 1 200 schools (Theirworld, 2018). However, for the purposes of this case study, the 2004 Sumatra-Andaman earthquake and tsunami will be considered in gleaning lessons for the South African context.

In the devastating earthquake that shook **Haiti** in 2010, many of the people displaced were children – in a country where half the population is under 18 – and for those who were moved to giant camps, they were uprooted from their homes, their families, and their schools. In their research paper, *The Haitian Diaspora and Education Reform in Haiti*, Carlson et al., (2011) report that “it is estimated that approximately 1.3 million children and youth under 18 were directly or indirectly affected. Of this population, 700,000 were primary school-age children between six and 12 years old” (Carlson et al., 2011: 17). They add that “The Haitian Ministry of Education estimates that the earthquake affected 4,992 (23 percent) of the nation's schools. Of these, 3,978 (80 percent) of the schools were either damaged or destroyed, affecting nearly 50 percent of Haiti's total school and university population, and 90 percent of students in Port-au-Prince”. (Carlson et al., 2011: 18) Among the dead and injured were “thousands of students and hundreds of professors and school administrators” (Carlson et al., 2011: 17). Most schools, whether or not structurally damaged, were closed for many months following the earthquake, and many remained closed or housed in tents and other semi-permanent structures more than a year after the quake (Carlson, 2011: 17-18).

The cost of the destruction and damage to the education system was estimated at \$478.9million (Government of Haiti, 2010, cited in Nicolai, 215). An additional effect has been an increase in the number of disabled children as a result of injuries sustained during the earthquake (UNCHR, 2010).



The impact of the earthquake on Haiti's education system is still reverberating today. The post-earthquake challenges Haitian learners encounter include continued home and school displacements, as the rebuilding has been painfully slow; lack of access to educational resources like furniture, toys and writing materials; malnutrition; frequent disease outbreaks; and a lack of funding for education despite enormous amounts of international aid.

Humanitarian response

The **Indonesian** tsunami highlighted the role of the international community in responding to disasters and raised concerns about the nature and the way aid is delivered. For example, on 27 December 2004, UN Undersecretary-General for Humanitarian Affairs, Jan Egeland, reportedly categorised the overall contributions of rich countries in the form of aid as "stingy" (Washington Times, 2004). And on 3 January 2005, UN Secretary-General Kofi Annan urged donor nations to ensure that their pledges were fully honoured, pointing to previous cases where this had not happened (UN, 2005).

In response to the earthquake that struck **Haiti**, international aid agencies and private donors set aside \$16billion for reconstruction in Haiti from 2010 to 2020. (Worldvision, Undated). But the damage caused by the earthquake was to have a definite impact on the capacity to deploy and organise relief needed.

Biquet (2013), in an article on the emergency response to the earthquake and the cholera epidemic that followed, asserts that while the initial response was "adequate", and "Once the initial days of chaos were over, the initial mobilisation of aid actors was impressive" (Biquet, 2013: 130), the international response has since suffered from a lack of coordination and an inability to deliver what it promised. This is in spite of the fact that the focus of the response shifted from an emergency response to address immediate needs after the tsunami such as the provision of food and shelter to a "Build back Better" response, entailing "improving conditions to address the needs of tomorrow, by rebuilding the country and strengthening the government through good governance and democracy" (Biquet, 2013: 130).

Responsive and resilient strategies

International organisations play a vital role in assisting the governments of disaster-affected countries to recover and rebuild. UNESCO's policy paper number 38 states that it is imperative that education systems are prioritised to resume immediately (or as soon as possible) post-disaster, because education provides a sense of structure and normalcy, gives hope for an improved future and mitigates the psychosocial effects of disaster and displacement (UNESCO, 2019).

Recognising this, the Global Partnership for Education, United Nations Children's Fund (UNICEF) and Save the Children proposed better aid for education in emergencies in their 2012 *Education Cannot Wait: A Call to Action by Global Leaders to Help Children in Crisis Countries* (Global Partnership for Education, 2012). The call proposed that "at least 4 percent of humanitarian budget allocations to go toward education, up from the current meagre 2 percent, and for education systems everywhere to incorporate emergency prevention, preparedness, response and recovery" (Greubel, Ackerman & Winthrop, 2012).

In his article for Theirworld on the release of the report *Safe Schools: getting children back into education after disaster strikes*, Briggs (2018) reports that Save the Children adopts a holistic approach to resuming



education in emergencies by employing the following principles: “Protection”, “Continuity” and “Build Back Better”. A spokesperson for Save the Children explained that these principles work as follows:

1. “Protection”: involves helping children both physically and psychologically when they are caught up in emergencies.
2. “Continuity”: to ensure that education restarts quickly, or continues, during a crisis in order to prevent learner drop out and to safeguard gains already made in education.
3. “Build Back Better”: presented as “a window of opportunity to change the situation for the better” - including, for example, marginalised communities or adopting best practices in terms of school building structure and curriculum”.

The Call to Action, along with “Protection”, “Continuity” and “Build Back Better” can be described as responsive and resilient educational strategies, because the intention behind them is not only to resume education for all learners quickly – including vulnerable and marginalised learners – but also to equip system and children with life-saving knowledge on how to be better prepared for future natural disasters. Resilience education within schools and communities can also increase awareness of the potential impacts of natural disasters and train children and communities on what to do during the event (Theirworld, 2018: 51). Anderson (2019) further states that building resilience into education systems is important because this enables children to “learn new knowledge and skills about how to prepare for and respond to disasters in order to change behaviour, manage risk and reduce vulnerability to hazards such as floods, earthquakes... thereby building adaptive capacity”.

In **Indonesia**, resilient and responsive educational strategies were implemented through the adoption of the national government’s *National Action Plan for Disaster Risk Reduction 2010 to 2012*. The Indonesian government also allocated “1% of the *Anggaran Pendapatan dan Belanja Negara/APBN* (National Budget) for disaster risk reduction programs, and 20% for education as stipulated by the national constitution” (Consortium for Disaster Education Indonesia, 2012: 5).

The Consortium for Disaster Education (CDE) Indonesia¹ (2012: 1) argues that schools are “an effective institution to build the culture of disaster preparedness in societies, particularly among students, teachers, education practitioners, other stakeholders as well as to the public” (CDE Indonesia, 2012: 1). The CDE therefore developed a concept document, *A Framework for School-Based Disaster Preparedness for the Education Sector*, in which disaster risk reduction strategies are discussed and outlined. The framework asserts that a resilient and responsive education system can be successfully maintained if “there is a supporting system, good planning process, procurement, and maintenance of the school means and infrastructure” (CDE Indonesia, 2012: 8). The CDE further argues (2012: 17-18) that “set of values needs to be adhered to for the suggested framework to have success in mitigating the impact of future natural disasters on Indonesia’s education. These values include a change of culture from one of safety to one of

¹ The CDE was established in 2006 and consists of 62 member organisations including UN agencies, government, non-governmental organisations, university, etc. CDE’s aim is to develop policies to enable the education sector in Indonesia to institutionalise “disaster risk reduction education practices” (CDE, 2012: 30).



resilience, independence, sustainability and inclusivity and that is empowerment-oriented, adopts a rights-based approach and makes use of local wisdom and partnerships.

In **Haiti**, the implementation of resilient and responsive post-disaster educational strategies is limited by the fact that not all children in Haiti have had access to learning. Franz (2010) noted that prior to the earthquake, Haiti did “not have a universal public education system that is funded by the government. Instead, it has a loose network of mostly for-profit private schools”. This meant that education governance was already very weak, and quality education was not accessible to all. The average literacy rate in Haiti at the time was about 50 percent, and only 20 percent of children eligible for secondary school were enrolled. The education system was characterised by “severe shortages in educational supplies and qualified teachers” (Franz, 2010). Further limiting the disaster response was the fact that almost half of Haiti’s teachers themselves were not adequately trained. Franz quotes Charles Tardieu, a former Haitian education minister: “of the country’s estimated 70,000 teachers working, only about 35,000 of them are properly trained”. It can be argued that inadequately trained teachers will also struggle to implement and impart knowledge on disaster-preparedness to their learners for maximum effect.

The lack of trained teachers and the inaccessibility of education to many Haitian children is also addressed in the *Haiti Earthquake Post Disaster Needs Assessment (PDNA)* (International Recovery Platform, 2010) following the 2010 disaster. The PDNA noted that “the system is very poorly regulated and the State does not fulfil its central management role satisfactorily” (International Recovery Platform, 2010: 62). In order to rectify the misadministration of Haitian education, to encourage a more resilient and responsive post-disaster system and to provide universal education to Haitian children by 2020, the PDNA (International Recovery Platform, 2010: 64) suggested the implementation of the following phased approaches:

1. Reorganising the education system by strengthening its capacity and effectiveness;
2. Protecting school buildings and rebuilding destroyed schools;
3. Incorporating risk management into the Haitian schools’ curriculum;
4. Redesigning education programme;
5. Seeking partnerships with the Haitian socio-economic sector.

Lesson learnt and recommendations for South Africa

The table below presents the lessons learnt from the natural disaster case study in terms of their applicability to the current South African situation. It also reflects on recommendations that could assist with the restart of schooling and education in South Africa.

LESSON 1: Expect the physical infrastructure of schools to be destroyed or at least damaged during natural disasters. And even though South Africa has not experienced a natural disaster, many schools have been vandalised during the COVID-19 lockdown period (Mthethwa, 2020).

The following recommendations are made:

- Additional security to be deployed to schools in areas where vandalism has occurred;



- Timeous interventions to repair schools damaged by vandalism and a swift replacement of stolen teaching and learning resources; and
- DBE to develop and implement long-term plans to equip each learner with a technological device that could be taken home in times like this.

LESSON 2: Schooling resumes immediately, or as quickly as possible after an event.

The following recommendations are made:

Strategies need to be put in place to safely and effectively manage the reopening of schools once the lockdown is removed. These strategies could include:

- Effective communication between the national, provincial departments and schools;
- Effective communication between schools and parents;
- Development of comprehensive 'opening up' procedures for schools to follow;
- COVID-19 testing plans for schools;
- Protocols for effective social distancing in classrooms and in schools; and
- Develop and implement an ongoing programme that prepares teachers to be able to deliver in emergency cases such as this.

LESSON 3: Emergency initiatives structured around how to protect teachers and learners have proved sound recovery strategies to implement once schools are reopened.

The following recommendations are made:

- Recognise the unprecedented nature of the events of 2020 and treat them as such;
- Assist education officials, teachers, parents and learners to comprehend this situation;
- Control unnecessary travel by restricting school attendance to teachers and learners who live within a 5 to 10 km radius of the school;
- Provide educational training and materials for learners and teachers on the safety measures required to minimise infections;
- Provide teachers and learners with psychosocial support to address impact and trauma through school and private counselling services; and
- Train teachers on how to facilitate peer-to-peer creation sessions (much like counselling) to develop their own responses to COVID and how it has affected academic, social and personal practices and goals. This will provide opportunities for learners to process their trauma and fear in an empathic and safe environment.

LESSON 4: It is important to plan for the continuity of schooling and education during the actual event and immediately thereafter.

The following recommendations are made:

During the lockdown:



- Provide support to teachers through social media.
- Communicate about teaching and learning programmes on television and radio to parents, teachers and learners.
- Implement response measures to keep learners meaningfully occupied with learning during the national lockdown.
- Be mindful that not every learner has access to social media; as a result, some learners are marginalised and will lag behind their counterparts.
- Implement measures to reach the marginalised students who do not have access to the digital space to avoid drop-outs.

Immediately after the lockdown is removed and schooling resumes:

- Ensure that teaching and learning resumes to prevent drop out and safeguard learning gains already made.
- Cancel June and September school holidays to mitigate the fall-out of time lost to COVID 19 to support as much curriculum coverage as possible.
- Promote an earlier start to the school day.
- Hold evening and weekend classes especially for older learners.
- Focus on the central aspects of languages and mathematics as essential parts of the curriculum.

LESSON 5: View the event as an opportunity that can lead to improvements in schools and in the education system.

The following recommendations are made:

- Use the opportunity to change the situation for the better in vulnerable and marginalised communities. This could be done by:
 - Putting technology in the hands of all learners;
 - Providing free data to all registered learners;
 - Ensuring national connectivity accessed through educational log-ins.
- Equip all children with life-saving knowledge on how to be better prepared for any future events.
- Include resilience education as part of the curriculum.
- Focus on teaching adaptability and time management as necessary skills.
- Focus on how to teach about disease outbreaks and hygiene education.
- Improve on emergency preparedness at school levels.
- Equip teachers with training for emergency conditions.
- Teachers to practice independence and initiative-taking activities with learners.



Case Study 2: Conflict

Civil conflict: Rwanda, Sierra Leone, Libya and Vuwani in Limpopo, South Africa

War and socio-political unrest in many countries affect schooling systems directly or indirectly. Education systems function under severe constraints and often become dysfunctional due to lack of pre-conflict preparedness (Sommers, 2002). The study intends to shed light on how the countries under scrutiny managed their education systems during and after the conflict. The lessons learned may be used as a guide on how to rehabilitate the education system during and after the COVID-19 disaster lock down.

Bridgeland, Wulsin and McNaught (2009), in their brief description of the events leading to the April 1994 **Rwanda** conflict which caused the civil war, point to ethnic divisions which were nurtured by colonial rule as the root cause of the problem. The colonial government favoured the minority Tutsi ethnic group and made them more privileged than the Hutus who were 90% of the Rwandan population of about 10 million people. For example, despite Hutus being the majority, Tutsi enrolment in institutions of higher learning was higher than that of Hutus. This ethnic division provided fertile ground for the Hutu Militia to start the civil war which led to the infamous genocide in which 800 000 Hutu and Tutsi were killed. Ethnic tensions and genocide destabilised the education system of Rwanda as more than 2 million citizens fled into exile (Bridgeland et al., 2009).

Tilman (2018) presents the gruesome experience **Sierra Leone** suffered during the civil war between 1991 and 2002 in which 70 000 people were killed and over half of the population displaced. Tilman shows how young people who were discontent with their lack of access to education and opportunities were recruited to join the conflict. Poor living conditions also led to a military coup by a group of officers within the army under Captain Strasser who became the leader of the newly established military government in 1992.

The civil war in **Libya**, a country with a population of about 6 247 million in 2011, started as a chain of civil protest and wide-spread uprising against Colonel Gaddafi's government. Government forces loyal to Gaddafi fought with armed foreign supported groups willing to overthrow him. The North Atlantic Treaty Organization (NATO) led coalition fighters bombed government infrastructure, while on the ground rebel forces bombed schools and made some of the schools into military bases. The involvement of NATO forces and their Middle East allies such as United Arab Emirates and Qatar led to the defeat of Gaddafi's government, ending four-decade of his rule. An attempt for a cease-fire by the African Union which was accepted by Gaddafi had been rejected by NATO and its allies (Pargater, 2012). The Transitional National Council (TNC), an interim governing body, was formed to restore order and render services during the transitional period; however, this did not give rise to peace and stability as sporadic unrest persisted (Pargater, 2012). The underlying cause of conflict in Libya was defined by the Libyan academic and politician, Guma El-Gamaty (2016) as a struggle for power and wealth. Many attempts to restore order failed as rival armed groups continued to fight over the control of Libya's National Oil Corporation (NOC). The battle for



the control of Libya is complicated by its complexity ranging from religious, tribal and regional disagreements. The UN backed Government of National Accord (GNA) attempted to restore peace and order but had a difficult task (El-Gamaty, 2016). More than 217 000 people remain displaced as a result of the conflict in Libya and about 1,3 million people need humanitarian support (UNCHR, 2017).

Educational impact

The impact of conflict on the education systems of the selected countries goes beyond damage of infrastructure. It involves the deaths of the teachers, kidnaping and killing of children and parents, and the psychological pain and trauma which follows thereafter. Fear and insecurity destabilise families as they flee to refugee camps away from their homes.

The ethnic conflict in **Rwanda** led to genocide in which the education system and schools were destroyed by the Hutu Militia. The Ministry of Education in Kigali was destroyed and about 65% of the schools were damaged. About 153 lecturers from the National University of Rwanda were killed, schools were closed, and children and teachers went into hiding. School children were recruited to serve as militia fighters while girls were kidnaped and raped (Abdikadir, Mutanu, Kevin and Ramadan, 2016).

There was minimal support provided for education during the conflict. More support was provided for the refugees in neighbouring countries (\$43 million), and only \$6.4 million was allocated to education during the conflict (Bridgeland et al., 2009). The devastation of the education system in Rwanda presented difficult conditions from which the new system emerged, with courageous leadership driven by its new vision and mission for the country influencing investment in human capital through the education of the youth to build the economy.

The **Sierra Leone** civil war caused the violent massacre of teachers, the burning of schools and recruitment of school children to become armed rebels and soldiers. The schooling system was shut down for 12 years due to fear, displaced families and severe lack of teachers. The teacher shortage was exacerbated by a lack of teacher education centres. The badly destroyed educational infrastructure made it difficult to rebuild the education system during and after the war (Pai, 2016). The situation in Sierra Leone was severe due to poverty and under development of the country, and the government lacked strategies and funding to start reconstructing the education system (Sommers, 2011).

The armed conflict in **Libya** saw continued disruption and deprivation of access to teaching and learning. Parents and children were targets as homes, schools and administrative offices were heavily damaged. The conflict resulted in serious setbacks for the economy, security, housing and employment which prevented learners from going to school. Many schools, libraries, education centres and universities were destroyed, and some became recruitment centres for soldiers. Education and research support services such as libraries and laboratories experienced power outages. The destruction of computer networks, servers and TV stations and a lack of transport services and poor security halted the education system. Many students and teachers were killed, and others went into hiding. While international aid provided support to health, and food and shelter for displaced people in war torn areas, little or no support was provided for teaching and learning. The post-war period saw a break of about a year before the schools started in 2012 (Rhema & Miliszewska, 2012).



Responsive and resilient strategies

Hopkin (2015) describes responsive and resilient strategies as measure or principles put in place to increase the organisation's level of resilience in managing the risk of disaster or conflict. In order to maximise resilience, governments should identify common risks and threats and devise means to be risk responsive. The United Nations Convention on the Rights of the Child (UN, 1989) states that it is imperative that education systems are prioritised to resume as soon possible post-disaster, because education "provides a sense of structure and normality ...gives hope for an improved future and mitigates the psychosocial effects of disaster and displacement" (European Civil Protection and Humanitarian Aid Operations, 2019).

Some of the actions taken by the case study countries are described below.

The **Rwandan** government sought to create social reconciliation and build a united nation following the peace agreement in April 1994. The use of ethnic labels such as Hutu, Tutsi or Tva was banned and the government encouraged the people to identify themselves as Rwandans. The government also encouraged social cohesion, building cooperation between formerly antagonistic groups through grassroots cooperative activities. Distribution of state resources such as employment and education were used to defuse ethnic polarisation and forge reconciliation (Bridgeland et al., 2009).

The remarkable experiences of **Rwanda's** post-conflict transition demonstrate the visionary and courageous leadership in identifying ethnicity as the root cause of the conflict and defusing it by building unity and reconciliation through the provision of equal educational opportunities for all. Community involvement in rebuilding the country, the use of media in mobilising social cohesion and fair distribution of resources were some of the strategies the government used to restore justice, peace and order. The government managed to create an environment conducive to teaching and learning under difficult circumstances characterised by poverty and limited resources. It was imperative to ensure that lingering ethnic tensions faded away when implementing policies of reconstruction and development in education after the disaster. Teachers and students were assured of security and support before they were recruited back to school (Abdikadir et al., 2016).

The post war reconstruction and development of the Rwandan education system was spearheaded by the Rwandan Patriotic Front led by the Tutsi rebel leader, Paul Kagame, who began to rebuild the nation in July 1994. Paul Kagame's government worked with local community leaders, making education a priority for the country's reconstruction and development. He used the media to announce the reopening of education institutions (Bridgeland et al., 2009). Stakeholder mobilisation through consultation with and involvement of local leaders was one of the strategies the government used to rebuild the education system after the conflict. Poor funding of the education system during the conflict raises the question of why education is not prioritised by governments, NGOs and private businesses during and after conflicts (Bridgeland et al., 2009).

Pai (2016) gives a brief description of the post conflict reconstruction of education in **Sierra Leone**, where the government engaged in building security through peace-making, functioning democracy and economic reforms. The United Nation Children's Funds (UNICEF) came in to help improve the education system, building schools and training teachers. Teachers in the rural areas with a passion for teaching and learning took it upon themselves to call on local youths and used their experience to teach. The teacher training



programmes they engaged in included managing learner behaviour and safety during the times of war (Tilman, 2018).

Technical and non-formal education options were introduced to deal with drugs, alcohol and gambling amongst the youth. The government provided access to primary schooling, and security assurance and the construction of schools increased the enrolment of learners after the end of the civil war (Pai, 2016). The building of schools in both rural and urban areas helped to breach the gap between the rich and the poor. Girl children were also encouraged to go to school to solve the problem of gender inequality. The building of technical schools provided access for war veterans to be trained in technical skills as part of the disarmament, demobilisation and reintegration programme; however, more vocational centres were needed in rural areas. The Sierra Leone government was criticised for putting more emphasis on tertiary academic education at the expense of primary school education and vocational training, particularly in rural areas.

Hamady (2007) in his research paper states that according to the United Nations Human Development Index, **Libya's** literacy rate was the highest in the Arab world before the war started. Libya had also succeeded in providing free access to education for all. After the war, despite sporadic conflict disrupting schooling in Libya, the literacy rate remained high, standing at nearly 91.29 per cent of the population aged between 15 years and above in 2019. There was cooperation between government, unions and community stakeholders. Parental involvement was paramount in providing support to education for learners (Hamady (2007).

After the **Libyan** civil war, the priorities for the new Ministry of Education during the transition period included curriculum reform, clearing schools of unexploded ordnance and repairing damaged infrastructure. Although the delay in opening schools after a year drew criticism, the Education Ministry did so to make thorough preparations before the schools opened. Preparations included the following (Rhema & Miliszewska, 2012):

- 160 experts were summoned to rewrite curricula and textbooks;
- Assurance was given that education would remain free;
- Information on all historical eras was corrected objectively to eliminate propaganda in all education programmes;
- Vocational education was redrafted and tailored for the requirements of domestic, public sector and private sector jobs;
- International relations were improved to benefit education and scholarships provided for students to study overseas.

The post war rehabilitation program focused more on the psychological impact on school children rather than on the infrastructure as it was feared that children might have long-lasting trauma, resulting in future generational challenges (Rhema & Miliszewska, 2012). Government reforms encouraged the development of information and communication technology (ICT) infrastructure at all levels of the educational system. ICT and e-learning were regarded as major tools in the response to the educational challenges caused by war or natural disasters.



Rhema and Miliszewska (2012) presents a case study on how Libya planned to rebuild and redevelop its higher education system using e-learning, information technology and flexible learning. Libya regarded ICT and e-learning as the basic tool to enable all the processes of coordination and facilitation required in transforming the education systems to assist teachers and learners affected by war.

As described by Rhema and Miliszewska (2012), the modernisation of instructional methods through ICT and e-learning were regarded as valuable tools used to increase access to flexible quality learning and teaching during and after the conflict. The ICT and e-learning programmes were an alternative tool providing security solutions and protected teachers and learners from exposure to hazards, psychological and physical trauma. This also provided a solution to the shortage of teachers due to displacement or death, which resulted in multi-grade class teaching and an increase in teaching workloads.

E-learning was seen as valuable because it creates a learning platform for transferring knowledge and skills between learners and teachers through distance learning, enabling a network of students and teachers and broadening the availability of quality education materials. E-learning can thus be effectively used to restructure teaching and learning practices and the education system: Information technology systems and E-learning can be used to increase access to educational systems, “to support the ongoing professional development of teachers, and to facilitate education-related data collection and processing” (Rhema & Miliszewska , 2012).

With all attempts to ensure that teaching and learning continue, conflict in Libya continues to disrupt education. UNICEF (2020) reported that 210 schools were closed forcing 115 000 children out of school in and around Tripoli. Attacks on schools put children’s lives in danger making it difficult for parents to choose between schooling for their children’s wellbeing or their safety first.

Protests in Vuwani District, Limpopo, South Africa

The Vuwani unrest in the Vhembe District of the Limpopo Province was sparked by the decision taken by the Municipal Demarcation Board in 2015 to demarcate the eight wards of Makhado Municipality into the new Municipality. This decision was opposed by the communities affected and led to large scale protests marked by violence and the destruction of property, including schools. Moreover, the threat of violence led to the closure of schools and the disruption of teaching and learning. As reported by the South African government in May 2016, “a total of 27 schools (11 high schools and 16 primary schools) have been damaged and burned”, and “The shutdown, disrupted learning and teaching, where 52 827 learners are affected, with 2 600 being matriculants” (South African Government News Agency, 2016).

Education stakeholders, including the National Education Collaboration Trust (NECT), teacher unions and the Congress of South African Students (COSAS) provided support to the DBE to enable the reopening of the Vuwani schools.

A catch-up plan for all grades was put in place to mitigate the impact of the unrest on teaching and learning. Catch up lessons were provided along with extra classes during the Spring break and Saturday classes. Another measure taken was the placement of 2 600 Grade 12 learners into three camps where they were able to carry on with their schooling without the threat of violence. Traditional leaders, parents and community members were involved in implementing school safety measures to prevent the burning of



schools. Visible policing was also implemented and the Justice Prevention and Security Cluster (JPSC) adopted the following 4 pillar approach (SAHRC, 2017).

- Community and stakeholder engagement;
- Legal and regulatory and regulatory framework and intervention;
- Safety and security;
- Mass communication .

All government stakeholders were mobilised to find a common solution to the problem; this included the departments of Cooperative Governance and Traditional Affairs (COGTA), Human Settlements and Traditional Affairs, amongst others (SAHRC, 2017).

Once schooling resumes, all formative school-based assessment and moderation missed during the shutdown had to be conducted. A timetable for trial examinations and other formal assessment tasks for all grades were drawn up. Tentative dates for all activities scheduled had to be implemented taking into account events on the ground. Security measures were put in place to ensure that examinations were conducted without disturbance. The Provincial Joint Operational Centre (ProvJoc), consisting of the South African Police Service (SAPS) and the intelligence community was deployed to protect and monitor the 26 secondary schools and assist with the delivery of question papers from the storage centres to the examination centres and scripts after writing to safe venues (SAHRC, 2017).

In spite of the disruptions some schools managed to do well against all odds and went on to produce 100 per cent matric pass rates. The teachers and learners attributed their achievement to cooperation, discipline and commitment to teaching and learning despite all the challenges they experienced (Makungo, M. 2018).

The unrest had raised awareness of the need for a risk reduction plan to minimise the negative impact of unrest whenever it happens. In anticipation of further shutdowns of schooling, a risk reduction plan was put in place to safeguard curriculum coverage. This entailed the acceleration of curriculum coverage to ensure that learners were well prepared to continue to study on their own in case of disruption. For instance, the Grade 12 learners' curriculum was completed by June (mid-year) and the remaining time was used for revision (SAHRC, 2017).

Lessons from the Vuwani experience

Successful resumption of education was achieved through the following:

- Dedicated consultation with education stakeholders, including Teacher Unions and Inter-Ministerial Task Teams in conflict resolution backed by research to investigate the root cause of the problem resulted in finding a long lasting solution.
- Developing intrinsic motivation in both teachers and learners stimulated will-power and determination to reach higher goals despite challenges along the way.
- Motivated learners, working together in study groups and supported by teachers and parents during a crisis can perform well in examinations irrespective of challenges they face.



Lessons learnt and recommendations for South Africa

Conflict in the case study countries had a lasting, damaging impact on their education systems. These countries continue to experience sporadic disruptions. The Sierra Leone conflict was followed by the Ebola virus outbreak which worsened the economic burden of the government. There were however, some lessons gained from the conflict areas under study and based on these lessons, recommendations are made which may assist us to face the challenges posed by the COVID-19.

The table that follows provides a summary of lessons learned and recommendations for policy decision makers:

LESSON 1: Education in Disaster Risk Reduction

Sierra Leone lacked a risk reduction plan to mitigate the impact of conflict when it happened; as such it took more than 12 years for the education system to start working again (Petal, 2009).

Although conflict is unpredictable, risk can be managed to reduce vulnerability and loss of lives and property.

The following recommendation is made:

Short Term

The DBE should consider providing a Disaster Risk Reduction programme for schools to minimise the negative impact in times of disaster. The programme should include risk assessment, planning, physical environment protection as well as response capacity development with all stakeholders involved. The education stakeholders and the school community should be informed that though natural and man-made disasters are unavoidable, the accompanying risks can be reduced through human intervention.

LESSON 2: Psychological Support

Post-war rehabilitation programmes focusing on the psychological and social challenges that were implemented to support teachers and learners prepared learners to cope with their educational programmes. Several countries in the West have already established procedures for psychological crisis interventions that will help civilians to cope and deal with the traumatic experiences they are going through (Duan & Zhu, 2020).

The following recommendation is made:

Short Term

The traumatic experiences that people go through such as the death of relatives and the anxiety brought on by the prevalence of the disease (COVID19) will require that the state assists teachers and students with psychological support post the pandemic.



LESSON 3: Digital Literacy

The use of ICT and E-learning supports the education system to cope with staff shortages, lack of sufficient classrooms and sporadic disruptions (Rhema & Miliszewska, 2012).

The following recommendation is made:

Short Term

With the international community moving towards a digital-based educational system, it is an option that the Department of Basic Education should integrate it into the existing system. Digital literacy is advantageous in instances where conventional means of learning are disturbed because learners can access learning materials from anywhere at their convenience. All rural and urban schools should have digital literacy platforms set up in cases of emergency situations such as the COVID19 pandemic. This system would, however, have to be accompanied by a strategic distance learning system similar to those used in some higher learning institutions such as the University of South Africa (UNISA).

LESSON 4: Distance Learning

Distance learning for both schools and universities was introduced as a form of reaching out to students who were not able to access schools and universities. Universities in Libya, like UNISA, provide distance learning programmes through ICT and E-learning devices. (Rhema & Miliszewska, 2012).

The following recommendation is made:

Short- and long-term

The system for distance learning through ICT and e-learning ensures that the students continue with their academic work outside of the normal classroom settings. This system could serve as a backup for the education system so that it does not lose ground in learning activities in times of unrest, conflict or a pandemic such as COVID-19. There are institutions that have successfully operated using a long-distance learning system and they can be consulted to introduce the same system to the Department of Basic Education.

LESSON 5: Courageous leadership

Countries faced with challenges such as poverty, illiteracy and lack of resources emerge victorious when led by courageous leaders with strong shared vision (Bridgeland et al., 2009).

The following recommendations are made:

On-going

- Visionary and well-informed leadership supported by experts in the health sector, disaster management, social security as well as unions at all levels is required to overcome the challenges of the COVID-19 pandemic.
- Courageous leadership is required to reset the education system to accelerate the



implementations of the 4th Industrial revolution. Stakeholder mobilisation, training, involvement and information sharing must be conducted. Social media should be used to drive the achievement of the government's intended goals.

LESSON 6: Protection of School and Education Assets

Lack of sufficient laws and policies protecting schools made the educational infrastructure and equipment targets of war crimes in all the cases studied (UNESCO, 2010).

The following recommendation is made:

Long-term

Available laws and policies should be strengthened to protect educational infrastructure and assets. Social mobilisation should be increased for communities to develop a strong sense of respect for and ownership of educational institutions and schools in their communities. Crimes against school infrastructure should receive heavy penalties.



Case Study 3: Health Disasters

Liberia and Sierra Leone, the countries profiled in this section of the report, were chosen because they were affected by a health disaster caused by the Ebola virus from 2014 to 2015. This study seeks to ascertain the impact of the Ebola outbreak on the countries' education systems and what they did during post-disease recovery. The study hopes to find lessons to support the recovery processes in the South African education system post COVID-19.

Ebola outbreak in West Africa (Sierra Leone and Liberia)

The Ebola Crisis of West Africa in 2014-15 had a devastating effect on **Liberia's** citizens and infrastructure.

Emerging from the forest region of Guinea in December 2013, the Ebola epidemic accelerated and spread, particularly through the countries of Guinea, Sierra Leone and Liberia, reaching their urban areas and killing more than 3 600 people in Liberia alone. In addition to a high death rate, the outbreak caused widespread social disruption and economic decline and challenges to Liberia's peacebuilding aspirations that emerged after the resolution of the civil war in 2003. (Abramowitz et al., 2015, cited in Santos & Novelli, 2017: 9)

The Ebola virus outbreak recorded its first cases in **Sierra Leone** in early 2014. The country's health system was unprepared and thereafter overwhelmed by the toll that the virus took, in terms of both cases being admitted into hospitals as well as casualties suffered through the outbreak. Eventually, when Sierra Leone was declared free from the virus, it had recorded 14 124 cases and 3 955 fatalities (Reid, 2020).

Educational impact

The schools in **Liberia** were ordered to close in July 2014. The intention was to reduce the potential for the spread of Ebola. Schools, where students and the teaching community got together, were considered critical focal points of Ebola transmission. Schools were allowed to reopen seven months later in what was called a "condensed school year" (Santos & Novelli, 2017: 44). In their assessment, the Liberia Education department noted that, during school closure, most children interrupted their learning.

Due to outbreak of the virus in **Sierra Leone**, schools across the whole country had to close. The closure of schools meant that 1.8 million children did not attend school for as long as nine months throughout the country (Kambo, White & Affana, 2015). Contributing to the negative impact on schooling was the fact that many schools were operating as makeshift quarantine and treatment centres during the outbreak, and even after the pandemic could only be reopened after they had been thoroughly cleaned and sanitised (Reid, 2020).



As reported by Kambo, White and Affana (2015):

More than 8,600 children lost one or both parents due to the disease, leaving many children obliged to find work to support themselves and their families. The virus claimed the lives of teachers and staff among the education community. There were increased drop-out rates due to illness and stigmatization of victims and their families, and there was also a sharp spike in teenage pregnancies. (Kambo, White & Affana, 2015)

Strategies to manage and support the education system after the outbreak

Social mobilisation and community engagement - halting the transmission of the Ebola Virus in West Africa

When the WHO declared the Ebola outbreak to be a “Public Health Emergency of International Concern”, UNICEF, the WHO, and health ministries of affected countries came together to craft a response. Led by UNICEF, the foundation of the strategy was “communication and social mobilisation” or C4D as it came to be called. As Gillespie et al. (2016) explain, “For the first time in an emergency setting, C4D was formally incorporated into each country's national response, alongside more typical components such as supplies and logistics, surveillance, and clinical care” (Gillespie et al., 2016).

Gillespie et al. (2016), in their study of the C4D response to the Ebola outbreak in West Africa, describe the essential elements of the strategy:

Strategy and decentralization: *developing a comprehensive C4D strategy with communities and decentralized programming to accommodate flexibility and relevance to the local context;*

Coordination: *establishing C4D leadership with the necessary authority to coordinate between social partners and ensure use of standard operating procedures as a central coordination and quality assurance tool;*

Entering and engaging communities: *invest in key communication channels (such as radio) and reliable local community members;*

Messaging: *adapting messages and strategies continually as patterns of the epidemic change over time;*

Partnerships: *investing in strategic partnerships with community, religious leaders, journalists, radio stations, and partner organizations;*

Capacity building: *supporting a network of local and international agencies with capacity for C4D who can be available timeously;*



Data and performance monitoring: establishing clear C4D process and indicators and strive for systematically recording data on the impact of disasters on education for use in risk reduction and further planning.

(Gillespie et al., 2016)

Education, advocacy and support programme in Liberia

The **UNICEF** Peacebuilding, Education and Advocacy programme (**PBEA**) supported Liberia with advocacy and peacebuilding and implementing policies in the different sectors of the government. It assisted with the activation of the **Education Cluster** in Liberia immediately after the outbreak of Ebola. The Cluster was led by Liberia’s Department of Education and co-led at a global level by a UNICEF and the international NGO, Save the Children. The Cluster responded to the Ebola outbreak by gathering assessment data needed to provide a full picture of the needs of Liberia’s school sector. It coordinated the education sector response by developing strategy and monitoring the response of other aid agencies regarding coverage of aid, gaps in aid provided or duplication of efforts, ensuring a more effective response. The Education Cluster eventually moved from the response phase to recovery and reconstruction (PBEA, 2015).

Skovgaard (2015, cited in Santos & Novelli, 2017:10) recounts that in **Liberia**:

It took around six months for the Ebola epidemic to evolve from its first cases in the forests of Guinea to a state of emergency that required a full lock-down of Liberian schools. An Education Cluster, under the leadership of the Liberian Ministry of Education, with coordination support by UNICEF and Save the Children and collaboration of 30 education and WASH partners, sought to implement a response to the crisis in three different phases.

Based on Skovgaard’s analysis, Santos and Novelli provide a summary of the response in the following table:

Phase (Timing)	Main Focus	Main Activities	Coordination
Immediate Phase (August to December 2014)	Learning by Radio and social mobilization on Ebola prevention and awareness.	Schools were closed with no timeline for when they would reopen.	Minister of Education (MoE), with support from partners, including the Inter-Agency Network for Education in Emergencies (INEE).
Second Phase (January to February 2015)	Ensure a safe school opening.	Announcement of the reopening of schools. Safety protocols were developed and key school reopening activities were identified and put in place	MoE and Education Cluster



Phase (Timing)	Main Focus	Main Activities	Coordination
Third Phase (February - April 2015)	Monitoring compliance with the Protocols and ensuring that children returned to school.	Monitoring	MoE and Education Cluster

Source: Santos & Novelli, 2017: 46.

As part of the PBEA strategies to prepare for the reopening of schools, various activities were put in place that included “maintenance and repairs, followed by Ebola prevention and awareness, including radio education programming and the development of regional guidance, as well as national protocols on Ebola” (Santos and Novelli, 2017: 10).

When schools reopened, the following strategies were adopted, mainly focusing on practices such as regular hand washing and the provision of information on symptoms to allow detection and avoid the disease spreading on school premises. These steps were prioritised:

- Temperature checks in the morning before the start of schools;
- Hand-washing facilities available at schools.

Interestingly, it was found that “radio and community mobilizers” were considered by students and parents to be the most effect sources of information (Santos & Novelli, 2017: 45).

The following was also undertaken by the PBEA as part of its peacebuilding (Santos & Novelli, 2017: 56).

- **Case Referral and Tracing:** *This intervention entailed finding and referring potential Ebola cases and the tracing of contacts to the district health services and this was crucial to the spread and control of EVD contagion.*
- **Ebola Protocols:** *The Ebola protocols that were put in place in schools were also proposed to families through social mobilization initiatives, **such as the offer of clean water supplies (buckets and chlorine tablets) for handwashing.** These sanitation practices, **particularly handwashing,** were, in general, identified as the most effective in fighting Ebola.*
- **Psychosocial support:** *This was provided to Ebola survivors and orphans in the post-Ebola stage and assist with regaining a sense of normality and healing from trauma*
- *Considering the fear of contracting Ebola at school, ensure a **high-quality monitoring system** for the implementation of the Protocols involving communities as well.*

Response in Sierra Leone

The **Sierra Leone** government ensured that schooling would take place for its learners through putting in place distance learning measures. The government, through the national Ministry of Education, Science and



Technology (MEST) set up various committees such as the School Reopening Working Committee in order to devise approaches and strategies for the continuity of schooling during the nation's national shutdown.

The Ministry worked alongside various international aid agencies and donor partners to develop a highly interactive radio programme. The programme was targeted at both primary and secondary schooling, and broadcasted daily lessons for core subjects such as maths, science and languages in accordance with national curricula (Reid, 2020).

One of the key challenges reported during the rollout of the radio programme was a lack of resources, in that many poorer households could not afford radios or batteries. Subsequently, aid agencies such as UNICEF intervened by donating radios to households, alleviating this resource challenge (Powers & Azzi-Huck, 2016).

The Sierra Leone government developed a National Ebola Recovery Strategy (Government of Sierra Leone, 2015). The strategy for the education sector included three main elements:

- An response to the immediate emergency;
- Supporting recovery post crisis to enable education to return to normal;
- Preparing the education system to reduce its vulnerability to future outbreaks.

Steps that were identified for getting students back to school included:

- Decontaminating schools that had been used as treatment centres;
- Promoting better health habits;
- Providing better access to water and sanitation;
- Educating teachers about Ebola and psychosocial therapies;
- Providing early detection services and isolation facilities;
- Extending school feeding schemes;
- Educating communities in childcare;
- Providing incentives for children to return to school. (Government of Sierra Leone, 2015)

The strategy included a focus on the most vulnerable.

The World Bank conducted a post-Ebola needs assessment in Sierra Leone to extract lessons for education from the Ebola crisis. Interim findings included that:

- Radio programming was effective in “maintaining a link to learning”, although it was not a substitute for schooling it was hindered by poor radio coverage and a lack of batteries in poor households.
- To ensure that children went back to school, it was necessary for communities to trust that appropriate health and safety measures were in place in schools.
- Reopening schools provided an opportunity to get back to basics. This was done by implementing “two shortened academic years with an accelerated syllabus focused on core subjects”.
- Psychosocial support and catering for the special needs of vulnerable groups is essential for a full system recovery. ((Powers & Azzi-Huck, 2016).



Lessons learnt and recommendations for South Africa

The health systems of Liberia and Sierra Leone were unprepared to address the challenges brought about by the Ebola outbreak. Similarly, their education systems, “which could have acted as a national preventative factor in combatting the outbreak, became instead a risk factor, with poor hygiene and sanitation and lack of preparedness evident in the delayed response by the sector to the challenges that Ebola brought” (Santos & Novelli, 2017: 16) The poor state of their systems reflected broader systemic governance issues. The crisis also revealed the value of coordinated action between different government bodies and peace building bodies like WHO and UNESCO.

The impact of disasters on schooling and on the education sector is not yet being documented sufficiently in our country, and disaster preparedness measures had not been in place prior to CIVD-19. A lesson to be learned when examining past disasters and how the effects were dealt with highlights that an increased focus on preparedness and monitoring and evaluation of these measures in place is needed to ensure children are able to continue their education, even when disaster strikes (Ireland, 2016).

In view of the initiatives described above that have been undertaken to support a country’s education system in the midst of a health disaster, there are some lessons to be learnt for South Africa. These are summarised below:

LESSON 1: It should be remembered that education can play a crucial role in mitigating the effects of disasters.

As Ireland (2016:iii) pointed out:

If education is supported before, during and after a disaster it can save lives, protect children and benefit whole communities and countries. Schools can have a catalytic effect on strengthening humanitarian effectiveness, reducing vulnerabilities and supporting risk mitigation for future hazards” (Ireland, 2016:iii).

The following recommendation is made:

In order to have the capacity to do play a role in mitigating the effects of disasters, the education system needs to be well supported and prepared at all times. This entails having a strong, accountable, well-funded education system in place with regular monitoring and evaluation of educational outcomes and needs occurring.

LESSON 2: The need for psychological support

The following recommendation is made:

Related to Lesson 1 is that the education system also needs to have the capacity to provide psychological support to children to assist with regaining a sense of normality and healing from trauma that may be caused by a disaster. As Ireland points out, “The classroom provides an ideal



setting for training and awareness programmes around health, nutrition and safety, as well as safe behaviours during and after disasters” (Ireland, 2016:2).

LESSON 3: Education system at risk:

Education systems are often ill-prepared to act as a preventative factor in reducing and containing the effect of disasters such as pandemics. This has implications for:

- Policy and legal frameworks for risk reduction and resilience;
- Funding;
- Education sector review and reform.

The following recommendations are made:

A DRR plan for the education sector should be in place and take the following into consideration:

- Having legal and policy frameworks in place to allow for effective speedy responses;
- Sound organisational plans for leadership and coordination of risk reduction at all levels of the system, from administration to the school and community level;
- Identifying and managing risks in order to mitigate them:
- Using Education Management Information Systems (EMIS) to record data on the impact of disasters on education for use in risk reduction and response planning and document the effects, both short- and long-term of a disaster on education so that lessons can be learned (Ireland, 2016: iv-v).

LESSON 4: Response in phases:

A phased approach can be effective for managing schools in a crisis:

- Phase 1: managing schooling during school closures;
- Phase 2: coordinating efforts to re-open schools after the pandemic;
- Phase 3: monitoring of compliance to protocols and the return of pupils back into the schooling system.

The following recommendation is made:

To assist implementation of a phased approach, management at all levels of the education sector, from national to provincial, district and school level, should receive capacity building in disaster management and ensuring access to education during disasters. This should take place prior to a disaster occurring.

LESSON 5: Digital/virtual learning and revised teaching and learning methodologies need to be ready to be adopted.

The following recommendation is made:

Although learning is disrupted, our education system needs to review current teaching methods, which are already not fast-tracking learning in schools as desired. An approach that needs to be considered should be more accessible, practical, and effective and there is a need to make better



use of on line learning and finding ways of making the curriculum more interactive. It is also important to look at ways of preventing students from feeling disconnected. Being able to interact with class mates virtually could help to reduce psychological stress and also assist reintegration into the classroom post pandemic.

LESSON 6: Education advocacy and support programme:

The education sector should advocate for the following critical areas to be supported

The following recommendations are made:

- An Education Sector Response, including a DRR strategy should be developed and documented;
- The recording, managing and dissemination of data should be strengthened in order to inform the strategy;
- Capacity building and support of those in charge of implementing the response should take place.

LESSON 7: Social mobilisation and community engagement

Strategic partnerships with community, religious leaders, journalists, radio stations, and partner organisations should be formed for communicating the strategies being put in place.

The following recommendation is made:

We should recognise that achieving the recommended steps outlined above cannot be done in isolation or without the support of civil society, humanitarian and development agencies and donors. We need to enter into social compacts to build an effective education sector response.

In reviewing how countries managed to re-establish the functioning of their education systems immediately after a pandemic, with particular reference to Ebola, South Africa needs to acknowledge the lessons learned and consider the recommendations to ensure that the national education system is less vulnerable and better prepared. This would enable districts and schools to be resilient enough to bounce back from a disaster such as COVID-19 and resume with teaching and learning as soon as possible.



Case Study 4: The COVID-19 Pandemic

This section firstly describes global, country and the South African response to the pandemic. Secondly, the pandemic is located within the social and historical context of education in South Africa. Thirdly, an analysis of the information is provided, and finally, based on the analysis, recommendations are made for system recovery in South Africa.

Global and national responses to the COVID-19 pandemic

Many governments have temporarily closed education institutions in an attempt to contain the spread of COVID-19, and estimates are that around 95% of learners around the world are currently not in school during the COVID-19 pandemic.

There are numerous distance learning solutions to facilitate learning during school closures, many of them freely accessible through global organisation and companies. These provide content through online portals or platforms for e-learning. However, these distance learning solutions and the devices and connectivity they require are not universally accessible, and many learners in developing countries are disadvantaged. Resources that can be accessed online curriculum materials as well as guidelines for psychosocial support to learners, teachers and parents. The UNICEF website (2020) also provides guidelines on how teachers, parents and caregivers should talk to children about COVID-19. While these guidelines are helpful and educational, their impact could be hindered by a lack of access to devices and data, which serves to broaden the inequality gaps in society.

In their effort to mitigate the impact of school closures in vulnerable and disadvantaged communities, The UNESCO International Institute for Educational Planning (IIEP) (2020) suggests some distance learning solutions to facilitate learning during the COVID-19 pandemic. These include digital learning management systems such as Google Classroom which helps classes connect remotely, communicate and stay organised. Paper Planes is another initiative that matches individuals with personal tutors for 12-16-week sessions conducted through video conferencing platforms (IIEP, 2020). An interesting initiative is the Rumie platform whose mission is to remove unfair barriers to learning using technology to freely share expert knowledge with those who have most to gain by it (Rumie.org, Undated). Rumie provides tools and content to enable lifelong learning for under-served communities. Such initiatives give hope that although the era of technology exposes the great inequalities in societies, there are ways to bridge the inequality gaps. Technological solutions with offline functionality can give access to those from disadvantaged backgrounds.

A collaboration of more than 50 humanitarian organisations, including UNICEF and the WHO, have launched a digital story book which helps children understand and come to terms with Covid-19 (Lawal, 2020).



Country responses

Gustafsson (2020) identifies some strategies which have been developed to prevent the spread of COVID-19 at schools, drawn from the United States, Singapore, Vietnam and the United Kingdom. These include:

- Systematic testing of body temperatures of learners;
- Postponing all social activities and suspension of extra-curricular activities;
- Increasing space between learners;
- Rearranging desks to increase space and dividing classes into smaller groups;
- Keeping class sizes smaller;
- Shorter school week and school days;
- Learners coming to schools on alternating days;
- Suspension of use of common areas and learners having lunch in class (no recess);
- Staggering of lunch time to limit movement of pupils around school;
- Learners remaining in class while teachers rotate;
- Social distancing for teachers and other staff;
- Only Grade 12 learners attending school in preparation for examinations;
- Online schooling; and
- Collection of food through school nutrition programmes.

The prolonged closure of schools also has implications for teachers' continuous professional development as well as initial teacher education. Teacher professionalisation programmes adhere to teaching professional standards which guide the teaching profession, for example, The Draft Professional Teaching Standards (PTSs) developed by the South African Council for Educators (SACE) (2019), and both Japan and China have devised online teacher training courses to ensure the continuation of teacher development programmes. Teacher qualification examinations have been postponed, while administrative and teaching staff in the United Arab Emirates have started receiving continuous specialised training using new technological systems (Gustafsson, 2020). Chile has adopted similar initiatives by sharing good practice of teaching through webinars and providing online training to those who require digital skills. Spain and Guatemala have introduced platforms through which teachers, parents and caregivers share and co-build learning processes and guidelines to ensure the continuation of learning offline (Gustafsson, 2020).

Some responses to the inequality of access to ICT-based learning in areas where there is no electricity and poor or no internet connectivity include, in China, the provision of computers to students from low-income families as well as data subsidies. In France, there are efforts to lend devices and provide printed assignments to 50% of learners who do not have access to the internet or computers. The United Arab Emirates created a hotline for teachers and students to seek technical support. In the USA, schools are not encouraged to provide online learning services unless equitable access is assured. To mitigate the fact that not all students may have access to the internet at home, the government in Portugal suggested a partnership with the post office service to deliver work sheets to be completed by learners at home while schools are closed.



Many children and youth from disadvantaged backgrounds rely on feeding schemes or discounted school meals. Argentina and the USA have taken measures to continue school meal programmes despite the school closures by providing meals on a “pick up and go” basis. Some districts have allowed families to collect meals in bulk so that they do not have to return for meals daily (Chang & Yano, 2020).

Education International, representing over 20 million teachers world-wide, noted that school closures continue to reinforce inequalities, and that the use of digital means highlighted the digital divide.

The South African response

The Department of Basic Education (DBE) has prepared a COVID-19 Education Support Intervention Plan in response to the National State of Disaster. The primary response has been to make online resources available to guide learners, teachers, parents and education officials. The South African Broadcasting Corporation (SABC) and DBE have launched a multi-media learner support initiative aimed at limiting the impact of the pandemic on teaching and learning. The DBE website provides links to online content and resources for parents and caregivers to support learning at home (DBE, 2020).

A sample of these resources include those from the Bhelela partnership, which provides online access to free resources such as e-textbooks, teacher guides and study guides. Mobile learning platform 2Enable provides support through Curriculum and Assessment Policy Statement (CAPS)-aligned, text-based and video content with assessment questions. MTN Foundation and Siyavula Foundation provide online high school Maths and Science practice. There are also a few online initiatives such as Siyavula and Africa Teen Geeks. Siyavula is a self-directed, technology-powered learning platform providing Mathematics and Physical Science education which is aligned with the South African curriculum. Africa Teen Geeks is a non-profit organisation whose mission is to eliminate barriers faced by disadvantaged communities in pursuing Technology, Engineering and Mathematics. One of the most recent and current initiatives by Africa Teen Geeks during the national lockdown is online classes and reading sessions where well known celebrities read to primary school learners in their home languages as well as teach English and Life Sciences to high school learners. According to Mpumalanga News (2020), this initiative has been critiqued by the public on social media platforms as there are concerns over the use of celebrities as opposed to qualified teachers.

Private sector organisations also offer online portals and e-learning platforms. Some of these include subscription based companies providing learners with their educational content and resources. Examples of the e-learning platforms are Vodacom e-school, Telkom e-education, Mindset Learn and Khan Academy. Digital Classrooms, African Story Book and Xander Apps are some digital platforms that facilitate learning from home.

Lessons will be broadcast on television through OpenView HD, and the Western Cape Education Department and the University of Stellenbosch will broadcast to high school learners in underprivileged communities. Lessons will also be broadcast on radio in various provinces in home languages.

The multiplicity of digital platforms and portals raises questions about the suitability and relevance of these, especially those operating for profit. A comprehensive survey of these is proposed under further research, with a critical analysis undertaken of each in terms of quality and relevance.



The suspension of school feeding has had a serious impact on many children, and the Departments of Social Development and Health are leading efforts to remedy this. Funding has been allocated to support learners who benefit from school feeding schemes, and food parcels will be distributed to households during the lockdown. Various foundations also assist in the distribution of food packs across the country (Seleka, 2020), and NGOs like the Lunchbox Fund are also providing meals to learners in distress.

According to the DBE COVID-19 Education Support Intervention Plan (2020), there will be health and sanitisation support provided to schools: basic essential sanitisation and hygiene packages will be distributed to each school and will include hand washing soap, hand sanitiser and masks.

Weekly curriculum content and messages developed by the NECT will go out to subject advisors, teachers, district steering committees, provincial subject specialists, circuit managers and parents to keep professionals and community leaders continually engaged in learning. This will be through links to online materials and other resources. The NECT and DBE are providing broadcast tutorials as a systematic approach to mitigating the loss of teaching time due to COVID-19, and a schedule of these is available on the NECT website².

Teacher Union response

All major teacher unions participated in the release of a joint statement in response to the DBE's recovery plan. While supportive in general, the unions caution the DBE about the lack of adequate resources to implement many aspects of their response. The statement also stresses the need to ensure positive relations with teachers at this time (SADTU et al, 2020).

Research Initiatives

JET Education Services (JET) has been leading a "Researchers' Bootcamp" (see www.jet.org.za). An interim midline report was released on 14 April and captures the following insights (JET, 2020):

- *Parents can engage positively with their children, listen to them, direct and support their educational activities, encourage reading and creative activity, and support them to manage anxiety.*
- *NPOs working in education are better able to support the government during the COVID-19 pandemic if self-organised through an accountability structure, such as NASCEE.*
- *There is a dire need for a more coordinated and sophisticated approach to managing and geo-mapping data in the education sector in South Africa, in the short term this should focus on COVID-19 related activities and funding allocations specifically for this purpose.*

² <https://nect.org.za/materials/curriculum-messages>



- *Culture matters in the education sector's response to COVID-19.*
- *The ability of a country to test, trace and quarantine (TTQ) is critically important. South Africa has experience and resources that will advance the efficiency and effectiveness of TTQ. There are however institutional resources that if harnessed may contribute to higher levels of success such as schools, colleges, HEIs and ECD centres which are integrated into a large part of the society.*
- *Effective communication will help eliminate fake news and the unnecessary distribution of the information that might be causing anxiety, particularly to learners.*
- *There is a risk that the data privacy of learners, teachers, lecturers and parents could be abused by the government in the name of managing the pandemic.*
- *The nature of exit level assessments for the 2020 academic year need to be rethought.*
- *Teaching and learning is more than providing content: a plethora of free online resources are available, but the ability of learners (also teachers, and parents) to engage with these resources need to be supported, also using non-technological approaches.*

Gustafsson (2020) has also provided useful insights into schooling and associated issues, including transport and social mixing. He notes that for the young, schools account for over half of the infections, and that if transportation to and from school is added, the potential spread increases. This is higher at the secondary school level than at the primary school level due to subject choices and movement between classes.

Social mixing surveys conducted in Cape Town assessed the extent to which schools spread the virus. It was found that the use of public transportation is riskier than actual schooling, and with public transport, learners are likely to infect older people who are at an increased risk.

Short term recommendations by Gustafsson (2020) include the option of Grade 12 learners attending school in preparation for their examination on alternate days, with all social distancing and hygiene protocols being observed. Class sizes would be kept smaller and only teachers should rotate. Systematic testing of body temperatures of the learners should be done constantly.

In conducting this research, it became evident that many people, at different levels, are thinking about the problem and possible solutions, which should form a valuable repository of information around learning alternatives.

The context of the pandemic in South Africa

The pandemic has exposed the inequality gap in education. To the privileged, the academic interruption has had minimal effect as they access online learning platforms where they can continue learning. Digital classrooms connect them to their teachers, and they have access to educational materials that can be used at home. At the other end of the spectrum, for the poor, school closure means that there is no form of education (Davids, 2020). Even if schools in townships and rural areas were to be equipped to provide



digital teaching, learners and parents do not have access to laptops or tablets (or data) to access educational materials. Resource constraints prevent us from providing universal access now or in the near future.

The above may suggest that we are in a negative space, with persistent inequalities being highlighted and the wide scale destruction of schools during the lockdown. However, there are examples from our recent past that may help in drawing out some more positive conclusions and even lessons for how we manage and recover from the current disaster.

The first example comes from our transition to democracy in 1994. Education was a highly contested issue in the political transition, and the bureaucratic authority of the apartheid state had been eroded. Schools were damaged and teachers divided along “professional or union” lines. It was reasonable to expect major fracturing in the process of building a national, non-racial system, with a significant disruption of teaching and learning.

And yet, despite this, we witnessed high degrees of continuity in the system, as schools and societies returned to normality – often much sooner than other civic services. We could have experienced a significant break in the education of our children at that stage, but social pressures, driven by strong political leadership, saw a return to school, in whatever form, directly after the democratic elections. The possibility of major disruption existed, but was averted.

This had its origins in the shaping of the new constitutional dispensation in the Constitution of 1996. The confidence that had been established in the ability of our society to manage itself manifested in education laws and policies which were “liberal” in most senses. Decentralised power through provinces, a huge range of critical functions allocated to school governing bodies, shared power through labour agreements, and an initial outcomes-based education paradigm (which meant devolving even the power of the curriculum), were all features of the new system.

A second potential disruptor was the 2008 national teachers’ strike, which lasted for over three weeks late in the school year. Labour relations were at their lowest, and schools became battlegrounds between teachers who were working and those on strike. The authorities were helpless, as without the compliance of principals in keeping registers, even basic tenets like “no work no pay” could not be applied, and the system faced collapse.

The (then) Department of Education initiated an emergency response aimed at the Grade 12 cohort, which stood to be most affected. Prior to the availability of online content, and with the concurrence of Treasury, the Department procured every available “self-study” resource available, and distributed these through schools, post offices and other public facilities. Social concern for students developed, and various support strategies were put in place by communities and by parents. The end result is not often spoken of: the matric pass rate improved that year.

A crisis had been averted, but even more importantly, a dramatic change in thinking and strategy came about in terms of the use of teacher support materials. From that time on, a constructivist approach was gradually but systematically replaced with an instrumentalist model. Teachers no longer designed their teaching programmes (as they did under Outcomes Based Education) or prepared their own materials, and



curriculum trackers, teacher guides and even lesson plans became the instruments for improvement. An assessment of this change is not relevant here; the motives for change are the key.

Findings

As a general context, we find that this is not a post-conflict situation, with a society divided. If anything, we are probably as united against the pandemic as we were against apartheid in 1994. Social constraints and norms are prominent – we wear a mask because it is the right thing to do. For many, the regulations have been abstract – individual and social discipline has kept us at a social distance. This is an extraordinary phenomenon, given our often ill-disciplined society.

Our history teaches us two lessons: Firstly, **disruptors often are not as disruptive to education as we expect**. The resilience of education institutions and systems is remarkable. Education is a conserving force, which tends towards inertia and stability, and there are strong social expectations for it to function.

Secondly, **disruptors do shape matters, but often in unintended or unexpected ways**. Changes will happen; the question is to what extent we can drive and manage those changes in ways which are beneficial to education.

We acknowledge the severe impact that the pandemic will have on our economy, affecting government and business, especially small business, the informal sector and individuals. Psycho-social services of all sorts will be under huge pressure, and government will need to divert resources to recovery operations. We also note that the public service salary dispute may exacerbate the situation; poor relations could mean that anything “extra” which may be asked of teachers will find little support from unions.

The current context is therefore a contradictory one. There are elements from the past which suggest education will get through this and return to what prevailed prior to the pandemic. There are also negative factors which suggest that the recovery may be longer and more difficult than anticipated. But most of all, the pandemic has given us a new perspective on what is happening to our children, with social expectations for something better, and the response provides us with an opportunity to meet some of these.

Recommendations

Despite 25 years of well-intentioned legislation, policy and programmes, our education system delivers poor outcomes in relation to the amount invested and does so on a highly inequitable basis. Flight to the private education sector is apparent, taking with it both influence and resources. The pervasive inequalities in the system have been tragically exposed during the pandemic, and it is clear there are design flaws that need to be corrected if we are to make serious inroads into improving both quality and equity. Programmes and interventions can alleviate the problem, but policy and legislation is also needed to drive the fundamental changes required. In the process, school governing bodies (SGBs) and unions may need to concede power and privileges in favour of a more efficient developmental state.

Fortunately, the country has effectively entered into a social compact in the way it is managing the COVID-19 pandemic, which will hopefully be sustained as we emerge. Education will require a similar compact to



recover from the current disaster, but also to ensure that the state of recovery does not become a mere normalisation of the current system. The disrupted context allows us a window of opportunity to make some radical systemic and institutional changes which will assist with the recovery process as well as create a platform for an improved education system in terms of both quality and equity, under severe resource constraints.

Such changes should include at least the following:

- The introduction of an integrated school day (from 8:00 to 16:00), with a focus on core subjects in the morning and on remedial and psycho-social services in the afternoon. This would have the dual benefit of providing additional teaching time for core learning areas, while also allowing for the necessary care and support programmes to be implemented.
- Provision for a much more responsive and directed process for the appointment and deployment of teachers and officials.



Conclusion

Areas for further research

Having looked at how countries manage schooling during and after disasters (four case studies), it was evident that this paper could not extensively cover all aspects relating to recovering of the schooling system in times of disaster. As a reflection, the following are topics that could be explored through further research:

- Investment in strategic partnerships to ascertain the nature and level of support that can be provided during crisis;
- Investigate how support to disadvantaged communities could be strengthened in times of crisis;
- Investigate the extent to which a centralised, accessible and quality assured data base of all online and other learning support materials could support recovery;
- Investigate a social compact in education;
- Investigate reasons why schools are vandalised and burnt down during crisis situations such as the COVID-19 pandemic;
- Investigate the impact of education as a response to global crises; and
- A look at how to prepare for the reopening of schools: an exit strategy from pandemic to recovery.

Concluding comments

Many rich, interesting lessons and recommendations were teased out of the four case studies (natural disasters; health; conflict; COVID-19). And while there were instances where the lessons and recommendations were unique to a particular event, there is an overwhelming sense of overlap, of commonality, a sense that we can indeed learn from each other, no matter the nature of the disruptive event.

For example, the necessity of protecting and repairing damaged infrastructure was raised more than once as a preparatory measure to ensure the smooth rebooting of teaching and learning. The need for courageous leadership supported by administrative stability and agility emerged as important prerequisites for a timeous return to schooling. Additional curriculum offerings were also suggested more than once as a common strategic way of managing disasters and other disruptive events. Communication and openness about the situation were recommended, as were the health requirements necessary to be in place in schools and education offices at the start of the new schooling process. All case studies stressed the need



for psychosocial support for both teachers and learners as they come to terms with the event and its impact on their lives.

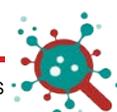
But the nature of inequality and the needs of marginalised communities came out very strongly across all case studies as determinants of the extent to which education and schooling can recover. This is especially relevant in a country like ours, where the social and economic divides across communities are extreme. We need to come up with solutions that are not just technological in nature, and we need a regulatory framework that protects and provides for the most vulnerable in our society.

The resilience of the human spirit in times of great hardship can be an opportunity to improve and to shape a more meaningful way forward.



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