

Chapter 3

Creating Sustainable Early Childhood Learning Environments for Emergency Situations: The Case of Sweden, Kenya and South Africa



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Abstract Early Childhood Education (ECE) is understood to take place between birth and the age of 9 including preschool as well as primary school years. It is also at this stage that the greatest damage can be inflicted on the vulnerable growing child. This chapter through literature and data from one country internationally, one on the African continent and South Africa explores challenges of teaching and learning, at early childhood environments during the pandemic. These serve as bases for mapping out how these nations continue to survive and lay foundation for the future productive citizenry in their respective contexts. Issues of race and social class are laid bare so as to come up with plausible strategies to create sustainable early childhood learning environments. These are understood to be contexts where economic development of all in an environmentally sustainable manner for the social inclusion of all are emphasized. The chapter over and above the research literature also examines strategies as well as theories of sustainable early childhood learning environments by way of making recommendations for South Africa in its search for solutions under such emergency situations.

1 Introduction and Background

This chapter explores the challenges and the corresponding responses in teaching and learning at early childhood learning environments during the pandemic. International, continental and national priorities such as the Sustainable Development

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Goals (SDGs), the Africa Agenda 2063 and the National Development Plan in South Africa are considered for guidance in response to the challenges of the pandemic especially among the ECE contexts. These priorities facilitate the creation of sustainable early childhood education both directly and indirectly. Sustainable early childhood learning environments therefore are contexts that foster optimum and quality growth and development of children from birth, at least until third Grade in a Primary school (Ardoin & Bowers, 2020). These contexts as shall be demonstrated in this chapter, include the use of *community classrooms* for effective mediation by able others, be they parents, siblings, friends and/or teachers (educators), etc. (Marcus, 2020). The above places huge premium on effective facilitation through appropriate curriculum and learning content, as well as good management through supportive structures of governance.

When the pandemic struck, almost all economies experienced a huge shock as a result of the lockdown that became necessary as a measure to respond to the spread of the virus. Factories and businesses were shut down, and so were schools, including ECE centres (Barua, 2020; Cunliffe et al., 2019). People had to observe social distance to avoid droplets falling on and being inhaled by others in their immediate environment. To date a few of the schools and centres for ECE across the world have reopened. However, most people across the globe are compelled by their respective governments to wear masks when they are in public spaces (Buheji et al., 2020).

For purposes of this chapter, this exploration is conducted in Sweden, Kenya and South Africa. The three countries represent some of the best practices in early childhood education across the globe (Al-Samarrai et al., 2020; OECD, 2020). In Sweden—with a total population of ten million inhabitants—almost all children (about 98%), between the ages of 4- and 9-years old attend creches, nursery, kindergarten and/or formal primary schools (Naumann et al., 2013; Smidt & Lehl, 2020). The levels of unemployed are around the 10.2% mark. Before the pandemic, children were cared for at these creches, kindergartens and primary schools during the working day to enable the parents to attend to the demands of their employments and/or businesses (Hort et al., 2019).

1.1 Challenges of ECE in Sweden

During the pandemic to date, one of the main challenges was to ensure that Swedish children continued to learn effectively. Caregivers and teachers of these children were still not adequately trained to mount effective teaching using remote technologies as was necessary during the lockdown (Kavaliunas et al., 2020). They required training in transferring their whole curriculum content online and to make it attractive and interactive for the young early childhood learners (Valeriani et al., 2020). Even parents did not have sufficient teaching and learning skills to support their children in these new learning contexts. They were required to know the content of the curriculum and to manipulate remote learning software in a manner that enriched their children's learning experiences (Gustavsson & Beckman, 2020). The greatest

challenge was the tender age of the children. They still required optimum parental support. Their levels of self-regulation that would enable them to learn on their own and progress successfully therein, were still at the rudimentary stage (Valeriani et al., 2020). Even in Sweden which could be considered to be relatively homogenous in terms of language groups, there were still ‘foreign and underclass’ language minorities who came from the Romani, Yiddish, Sami, Tornedalian and Finish groups (Sundberg, 2013). The Swedish education system promised equity to all in the provision of resources and opportunities, but the immigrants and some of the minority groups still experienced levels of exclusion due to their socio-economic status and language (Sundqvist, 2019).

1.2 Challenges of ECE in Kenya

Some of the challenges mentioned above, faced early childhood education (ECE) provision in Kenya as well (Ngwacho, 2020). While Kenya’s population stands at 54 million, it is five times the size of Sweden. Its Gross Domestic Product is USD 98.84 billion compared to Sweden’s USD 534.61 billion (Okyere, 2020). This explains the differentials in terms of ECE resources provisioning. In spite the limited wealth, the good performance of the Kenyan’s ECE provisioning up until the advent of COVID—19, is attributed to the support and pioneering work of the Netherlands based Bernard van Leer Foundation—BvLF which secured more funding from the World Bank and partnered with the Kenya Institute of Education—KIE (Burns et al., 2021). The latter organisation, closely linked to the Kenyan Ministry of Education, worked together with the BvLF to ensure that ECE reached many of the rural children in Kenya who would otherwise be left out due to the relatively low levels of the economic output of the country (Burns et al., 2021; Makokoro, 2021).

The pandemic seems to have reversed the gains that Kenya had made on the ECE front as many children stayed out of schools during the lockdown (Schwettmann, 2020). Catering for 13 language groups also compounded the problem. The government was extremely cautious to protect lives of learners, but the provision of ECE was dealt a huge blow as the country did not have sufficient resources to sustain remote teaching and learning (Gikandi, 2020). The provision of hand sanitizers and big-enough teaching and learning spaces for socially distanced in-person interaction were limited (Cunliffe et al., 2019). Kenyan population has 100% access to radio broadcast, and about 65% to TV programmes. This means that although ECE learners could be reached through radio programmes, the same could not be said about TV broadcasts. On the other hand, Kenya has 85% internet penetration which is a little less than in Sweden (UNICEF, 2020). This implies that many do make use thereof, however the poorer households suffered more during the lockdown due to limited access to these resources. The greatest challenge in Kenya is still the training of caregivers and teachers of ECE as advanced skills are required to design and upload relevant, effective and interactive materials for learners to access ubiquitously (Roy, 2021). Parents in Kenya left their children without sufficient support

when the lockdown eased as they had to go to work and/or give attention to the management of their businesses. In spite of the relatively small size of the Kenyan economy, the level of unemployment is very low at around 7.2% (UNICEF, 2020).

1.3 Challenges of ECE in South Africa

The South African situation seems to be in the middle between that of Sweden and Kenya. It aptly captures the challenges of ECE experienced across the globe. This also highlights the extremities of South Africa, inherited from its apartheid past. Its population of 60 million is close to that of Kenya while its GDP of USD 302.61 billion approaches that of Sweden. Its unemployment rate of 32.6% which is higher than that of both Sweden and Kenya, was exacerbated by the pandemic. The pandemic found South Africa deeply divided between, and further exacerbated the class distinction between the affluent and the poorest communities. The levels of unemployment among the mainly African and poor were very high and continue to rise as a result of the lockdown (Ebrahim et al., 2019).

The above anomalies occurred in the provision of the ECE. Inequalities on the basis of race were thus reproduced, as learners from mainly African communities lagged behind educationally, economically and otherwise. They are afflicted by poverty, malnutrition, high mortality rates and antisocial behaviours (Ebrahim et al., 2019). During the pandemic children from these communities did not learn as their homes did not have internet connectivity or electricity (Hanson, 2021). The mainly white communities with a sprinkling of African middle-class, could continue with some kind of learning offered via remote learning technologies. The Black people's homes were not conducive to any kind of learning. Learners did not have own bedrooms to study quietly in. Their entire homes are crowded and noisy and lacking any form of support (Ebrahim et al., 2019). Parents are themselves poor and not educated. Caregivers at their informal creches have no formal teacher training, qualifications or expertise (Ebrahim et al., 2019). Curriculum for ECE in these communities is still under construction, thus nothing was or could be uploaded for use by learners during the lockdown (Ebrahim et al., 2019). The challenges of violence and abuse are prevalent in these communities making remote learning almost impossible (Ebrahim et al., 2019). In the more affluent communities, the situation is more or less similar to what obtains in Sweden. ECE provisioning is well entrenched, internet connectivity and provision of remote learning is widespread.

The challenges to teaching and learning at ECE during the crisis of the pandemic in the countries described above, made this chapter urgent and necessary as we attempt to formulate responses and solutions to this huge problem that threatens whole communities across generations.

2 Framing the Responses: Sustainable Development Goals, Africa Agenda 2063 and the National Development Plan

To guide the responses to the challenges highlighted above, this chapter assumes that, if early childhood learning environments are sustainable, then they can withstand and survive the deleterious effects of the pandemic (Ardoin & Bowers, 2020). This assumption is based on the 17 United Nations' Sustainable Development Goals -SDGs which the entire humanity bound itself to and agreed to operationalise (Munro & Arli, 2020). This notion focuses on fostering economic development of all individuals in all countries. It also advocates that economic development should be environmentally sustainable (Daher-Nashif & Bawadi, 2020). The SDGs also aim at ensuring social inclusion of all, irrespective of ability, gender, race, socio-economic status, religion or any marker (Craig & Ruhl, 2020). The point we are making is that sustainability in early childhood education ensures that there is unending economic development of all, in an environmentally respectful manner towards social inclusion of all (Marcus, 2020).

The notion of sustainability is important for this study because it has been cascaded into the powerful priorities of the Africa Agenda 2063 (Neuman & Okeng'o, 2019). These emphasise the crafting of a prosperous continent, with a strong education as its basis (Nhamo, 2017). The SDGs and the Africa Agenda 2063 found further expression in South Africa's National Development Plan - NDP (National Planning Commission of South Africa, 2011). Its Chap. 9 stipulates very specifically the targets and the outcomes for educational practice starting with early childhood learning environments - ECE (Batala, 2021). Furthermore, the idea of learning environments is adapted from De Corte and Barry Fraser who recognise the important influence of the learning individual's contexts in the development of academic performance (Boekaerts et al., 2002; Humphrey et al., 2020). Provision of quality early childhood education during and beyond the pandemic is thus the focus of this paper. This argument is mounted and guided by these international and national considerations to ensure adequate response during and after the pandemic.

3 Responses to the Challenges

The three countries constituting the focus of this chapter, seem to present a coherent and logical continuum of responses to the challenges discussed above, as well as the principles of the international and national ideals referred to in response. This continuum describes a multipronged approach that can be adopted and adapted accordingly for countries experiencing neglect of ECE, especially during the pandemic. For example, Kenya's approach of organising households and neighbourhoods into what is theoretically known as *community classrooms* seems to lay the basis for this multipronged strategy. Even though the leaders and communities in this country did not use this concept, the similarities between how they responded to the challenges

of teaching and learning during the lockdown and how the notion of the community classrooms is described and operationalised, are very striking. The case in point is that of BvLF in Kenya that brought together and engaged many stakeholders in neighbourhoods and communities to establish and extend the reach of the ECE (Burns et al., 2021; Makokoro, 2021; Ngwacho, 2020). These included local, traditional, municipalities, provincial and national governments, and ministries, as well as faith-based, non-governmental including community-based organisations. Individuals and collectives from these community classrooms provided safe spaces where ECE children who had challenges from their homes and could not attend school due to the lockdown could learn (Burns et al., 2021; Makokoro, 2021).

Individuals and families in the community who have internet connectivity, computing gadgets, conducive learning spaces, and other learning support resources made these available to those children who come from the households deprived of such (Makokoro, 2021; Ngwacho, 2020). Teachers, professors, parents, university students and other community members who have expertise in teaching, curriculum design and skills to use remote teaching and learning resources volunteered them to these collectives in their neighbourhoods. In this way children, especially those who come from deprived homes, continued to learn effectively (Burns et al., 2021; Makokoro, 2021; Ngwacho, 2020). Parents and other members of the communities provided support like, basic hygiene and caring, feeding, mentoring and coaching as well as looking after the general well-being of these children. Thus, closed formal classrooms of 30 or so, were replaced for a while by a number of smaller 'distributed' community classrooms of say 5 to 10 learners per each of the 5 sites, who continued to be taught and cared for remotely. This approach still requires the observance of the Covid- 19 protocols, such as masking, social distancing, sanitising, regular washing of hands as well as compliance with high standards of hygiene (Makokoro, 2021; Ngwacho, 2020). Elements of this approach while particularly relevant in poor and deprived contexts were also found practised in relevant affluent neighbourhoods of Sweden.

For this approach to succeed, a well organised structure has to be in place to initiate, maintain, organise, lead and evaluate. The Bernard van Leer Foundation in Kenya served as such a structure until the local community leaders in conjunction with the Ministry of Education took over the responsibility (Burns et al., 2021; Makokoro, 2021). Such a structure needs to be guided by democratic principles so as to ensure inclusion of all and protection of each and every child's right to learn, including remotely. Advocacy to the national leaders to ensure that principles of equity, social justice, freedom, peace and hope are enshrined in the policies and legislative directives are thus made and assured through such structures. Furthermore, such a structure requires funding in order to support the community classrooms in the form of Covid- 19 protocol compliant supplies (e.g., sanitisers, masks, etc.), remote teaching and learning resources, continuing professional development of care givers and teachers, consumables, and personnel recruitment and payment costs, to mention a few (Burns et al., 2021; Makokoro, 2021; Ngwacho, 2020). This therefore means that the government through its relevant ministries, business and

any other funding agencies have to be involved in order to ensure the sustainability of these *community classrooms* as learning environments.

Through such structures professional development initiatives took place in Sweden, Kenya and South Africa (Croese et al., 2020). What differed among these initiatives were the levels of sophistication dependent on the levels at which ECE care givers and teachers entered the projects. South Africa provided a good example of response at this stage where universities came together to provide their expertise in terms of mounting professional development programmes for the teachers so that they could be able to design curriculum relevant to remote teaching and learning contexts (Ebrahim et al., 2019). South African universities provided excellent examples of how care givers and nurses are trained in designing curriculum and teaching and learning materials.

In Sweden it has been demonstrated that for teachers and care givers to be competent and to function effectively in remote teaching and learning contexts they need to be empowered in, and be able to cultivate particular skills for themselves, as well as among their learners (Pellegrino & Hilton, 2012, pp.731–734). These are skills that will sustain them when their ‘more able others’ are not with them to provide in-person support in their remote teaching and learning contexts. These include critical thinking skills “for processing and cognitive strategies” such as those for “problem solving, analysis, logical reasoning, interpretation, decision making, executive functioning” (Pellegrino & Hilton, 2012, p. 731). Interactions between ECE facilitators like caregivers and teachers on the one hand, and their charges on the other require these skills for them to be effective. Remote contexts according to the Swedish ECE researchers and practitioners put a lot of emphasis on care givers and teachers as well as learners to lay bases for the cultivation of these skills as early as possible. Content and facilitation strategies have these as the targeted outcomes. Learners through remote teaching technologies are taught the content as exemplified from South Africa. This is coupled with training in skills to facilitate remote teaching as well as the mentioned critical thinking skills. Collaborative group skills that promote communication are also included in the curriculum for teacher development programmes as well as for the ECE learners (Pellegrino & Hilton, 2012, p. 734). Both teachers/caregivers and learner are taught ways of collaboration among themselves and with other stakeholders in their respective community classrooms. Teamwork and cooperation through internet coordination as well as skills to show “empathy, perspective taking, cultivation of trust, service orientation, conflict resolution and negotiation” (Pellegrino & Hilton, 2012, p. 732) constitute another set of skills being emphasised in remote teaching and learning contexts as argued and demonstrated through research. Intellectual openness that includes the following is at the centre of remote teaching and learning, namely,

flexibility, adaptability, artistic and cultural appreciation, personal and social responsibility, intercultural competency, appreciation for diversity, capacity for lifelong learning and Intellectual interest and curiosity (Pellegrino & Hilton, 2012, pp. 731–734).

Electronic and freely accessible materials that facilitators of teacher development programmes as well as teachers and caregivers can use are placed on the websites.

Even ways of accessing these are disseminated in the distributed community classrooms for use by all during the crisis situations and beyond, for the creation of sustainable ECE learning environments.

4 Conclusion

The chapter has demonstrated that there are lessons to be learned from countries that practice good ECE strategies during the pandemic. However, if their strategies are integrated logically to cater for all contexts, even better results can be achieved. These can then lead to the creation of sustainable early childhood learning environments through remote platforms. Central to the argument being pursued is the value and importance of community classrooms that engenders networking across contexts to include even non-conventional partners. The chapter proposes that community classrooms could be the centre piece of ensuring learning continues during crisis situations, in all contexts. Universities, or any duly responsible agency can take the responsibility of putting together such a structure that depends mainly of volunteers to initiate but is fostered by circumstances on the ground. University seems to be best placed to initiate due its community engagement offices.

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