



**UNIVERSITY OF LEEDS**

This is a repository copy of *Building Children's Capacity towards Sustainable Future: Making a Case for a Socio-Cultural Approach to Understanding Sustainability*.

White Rose Research Online URL for this paper:

<https://eprints.whiterose.ac.uk/207700/>

---

**Article:**

Gbadegesin, T. (2018) Building Children's Capacity towards Sustainable Future: Making a Case for a Socio-Cultural Approach to Understanding Sustainability. *Hillary Place Papers* (4).

<https://doi.org/10.48785/100/234>

---

**Reuse**

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

**Takedown**

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing [eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk) including the URL of the record and the reason for the withdrawal request.



[eprints@whiterose.ac.uk](mailto:eprints@whiterose.ac.uk)  
<https://eprints.whiterose.ac.uk/>

# **Building Children's Capacity towards Sustainable Future: Making a Case for a Socio-Cultural Approach to Understanding Sustainability**

Taiwo Frances Gbadegesin, University of Leeds

**ABSTRACT:** Children's capacity to contribute to the social and economic status of a nation is being given more recognition than ever. Global policy priority aimed at ensuring sustainable development has been concentrated on the developed nations of the world. However, many developing countries have continued to puzzle out the extent and possibilities of exploring sustainability within their socio-economic environment. This paper considers ways in which the theoretical framework of Dahlberg, Moss and Pence (1999; 2007) and Moss (2007; 2012), which embraces meaning-making, social construction of childhood experiences and democratic perspectives, can be used to understand the socio-cultural dimensions of children's capacity for building a sustainable future. This paper analyses data collected through interviews and observations from early childhood care and education (ECCE) teachers and children in Lagos, Nigeria. A distinct finding is that children's participation in building a sustainable future is a consequence of the knowledge of the workings of their social, economic and cultural contexts, often influenced by the socio-political condition and not a matter of economic wealth per se. It further argues that sustainability is situated within a complex network of local and global contexts. It thus challenges the present neo-liberal approach and advocates a democratic and innovative approach to preparing children for a sustainable society. It concludes that sustainability cannot be built on what may be seen as decontextualized responses to meeting children's learning and development.

**KEYWORDS:** Children, ECCE, Sustainable Development, Nigeria.

## **Introduction**

In this paper, I explore children's capacity for participating in a sustainable project that affects their present and future lives, and specifically the roles of children in ensuring a sustainable future. Employing a sociocultural lens (Fleer et al., 2004), I explore the social construction of sustainability and its connection within the contexts of early childhood care and education in Nigeria. The study suggests that children's capacity can be better enhanced through an eclectic approach that challenges and critiques the present attitude to children's services while also being forward-looking. This paper is centred on the tensions between cultural barriers and contemporary ideologies which limit children's capacity towards sustainable development.

This paper situates children's capacity for participating in a sustainable future as a socio-cultural project that demands a broad range of negotiated learning, informed by the interconnectedness with the wider community. The UN Decade of Education for Sustainable Development (2005-2014, DESD) established that education is germane in the creation of sustainability principles, values and practices. Such knowledge becomes much more effective if it can be inculcated at the early stage of life, as children have now been perceived as capable of sophisticated thinking (Siraj-Blatchford et al. 2010; Prout, 2005). The social project named 'sustainability' that aims to build a unified system of developmental potential for the global community is imperative in a diverse and multi-ethnic society which Nigeria presents. Its achievement, however, becomes problematic when confronted with the relevance of contextual elements in the forms of social, cultural, political and economic structures. It is imperative to emphasise that if the culture of sustaining supporting elements of life

is lacking from the cradle of life as foundational knowledge, there is the possibility of an endangered essence of life in the future.

Sustainable Development Education (SDE) can be described as the platform for posterity of social, cultural, environmental, ecological and economic values in society (UNESCO, 2007). Undoubtedly, quality education and the sustainable project do not have to be mutually exclusive. A country might want to see how achieving one might help to lay a foundation for another and vice versa. The process of training and educating a child as an agent of a sustainable future entails knowledge on how to design and preserve an environment wisely, consume wisely, interact wisely, collaborate wisely, relate with culture wisely and utilise resources wisely (World Education Forum (WEF), 2000). Invariably, quality education has been recognised as a veritable tool for sustainable development in any society (UNDP, 2015). In other words, the fundamental issue which underlies the significance of sustainability is how an organised body of knowledge that is capable of preserving the present and future lives in the 21<sup>st</sup> century can be agreed upon and passed from one generation to the other. The desire for a better future demands that the organised knowledge is unveiled from the cradle by inculcating these values into children's learning content. Every individual ought to be an agent of creation and recreation irrespective of age in the democracy of sustainable development (Davies et al., 2009).

### Contextual Background: Nigeria and Sustainable Development

Nigeria is a society characterised by diverse cultures, values, languages and socio-cultural ethics of behaviour, endowed with multiple resources and bio-diversity (UNESCO, 2004; UNDP, 2001; WUP, 2007; Stuart, Adams and Jenkins, 1990). The society portrays the social-cultural attributes in contemporary times of modernisation and globalisation. However, with the growth in industrialisation and urbanisation, increased pressure has displaced many of the natural resources and the environment, causing depletion and destruction of nature that provides basic support for livelihood. The basis of life constitutes social, environmental, economic, cultural and ecological maintenance of its elements (Stahl and Bridges, 2013). The depletion of natural resources manifests in the form of environmental pollution, flooding, desertification, deforestation, destruction of earth, biodiversity and nature (Oribhabor, 2016; Tirima et al. 2016). Siraj-Blatchford, Smith and Samuelsson (2010) suggest that rapid consumption of natural resources has the tendency to create dangerous consequences in terms of global warming, ecological imbalance, threat to bio-diversity, rising sea levels, insecurity of life, increasing poverty and health hazards due to insufficient attention to their management.

The global agenda for sustainable development as enshrined in 17 global sustainable goals (UNDP, 2015) is aimed at ending poverty, fighting inequality and injustice, and tackling climate change by 2030. The fundamental premise of these goals is to allow countries in the Global South, Nigeria inclusive, come up with strategies to help younger generations to begin to think, in an inclusive manner, about a sustainable future for people and environment. The concern about younger generations might relate to the assertion of Boyden (2015) that the relative position of young people determines, to a great extent, the political and social conditions of any society. Thus, learning about preservation of values and environment, including living and non-living things, constitutes foundational learning in accomplishing these goals. This involves a conscious effort in inculcating formal and informal learning contents into young people's activities through a sustainable, democratically accountable learning system. In this case, the assertion of Dahlberg, Moss and Pence (1999) that the educational institution is a "forum" for a democratic project is

applicable. The project in this case is the pursuit of sustainability goals through inclusive and participatory approaches. Undoubtedly, the outcome of this democratic approach can lead to a new policy direction for incorporating children into sustainable projects.

Around the globe, a growing trend in depletion has generated public and political concern, necessitating policy directives on how a society can maintain a sustainable future through advocacy and quality education (Davies et al, 2009; Mitchell and Carr, 2014) even at the pre-school levels (Clausen, 2015). The concepts of sustainable peace, citizenship, cultural values, tolerance, moral values, gender recognition, family values, health values, nature significance, environmental awareness and others are fundamental, not only for the past and present but also for the future generation. Quality education, an essential aspect of these goals, has been adduced as one of the key drivers of a sustainable agenda. Education is considered viable public goods in many developing countries and is often perceived as a tool for eradicating poverty and illiteracy in society. However, the concepts of quality and sustainability are in themselves contentious and open to academic and political debates. I do not explicitly set out an argument about these concepts in this paper, since many authors have extensively explored the concept of quality education (Dahlberg et al., 1999; Moss and Dahlberg, 2008) and sustainability (Robins and Roberts, 1998; Dernbach, 2003; Cerin, 2006; Stoddart, 2011; United Nations General Assembly (Bruntland), 1987; Odora, 2015) in the literature. I suggest that children should be considered important actors who could promote sustainability. The subject of sustainability has been found to contribute towards improving environment and livelihood for the present and the future generation (Carney, 1998).

In Sub-Saharan Africa (SSA), the principles of sustainability can be better understood and acknowledged as culturally-situated constructs, often shaped by the tension between traditional values and contemporary educational ideology as portrayed by institutional attitude. The idea of sustainability, though it varies across the globe, is aimed at achieving a similar goal. For instance, they are targeted towards eradication of inequality and poverty. I suggest it is how nations can begin to see how to ensure a smooth inter-generational transition of cherished values, resources and heritage. Thus, it is important to consider contexts and routes of ensuring knowledge transfer and creating necessary awareness. It is important to note that, though it is often claimed that the world has become a global village (Swiniarski and Breitborde, 2002), issues that relate to socio-economic, cultural and environmental approaches are country-specific. It suggests that contextual application should be understood in the first instance if the goal is to be pursued effectively. This contention is perceived to be rooted in adults' roles and agencies' attitude to the notion of childhood and what children can do. For instance, children are expected to engage in direct learning of the natural environment and moral instruction from adults. Going by the African culture, the inherited way of life can be said to be entrenched in agrarian and communal culture, and as such, children's engagement with nature and immediate environment is a natural learning ground. This entails integrating children into family businesses and agricultural activities like gardening and livestock farming.

Cultural learning thus becomes an imperative aspect of imbibing sustainable behaviour and is often passed across to children as early as possible, when they play around, they are taken to farms, gardens and poultries. As institutional education becomes an invaluable aspect of children's lives (Prout, 2005), there are influences of global ideals on local practices. A notable influence on young children is the use of technological gadgets in disseminating information. Moreover, economic ideologies bring about a piecemeal, competitive and individualistic approach to children's services.

The imperative to preserve natural resources such as nature for the purpose of a sustainable environment is well embraced by the relevant stakeholders, but decontextualized to the needs and experiences of a Nigerian child. Hence, this paper examines the socio-cultural approaches to understanding sustainability and capacity building especially in early childhood education and care (ECCE).

## **Theoretical Framework**

### **Connections between Early Childhood Care and Education and Socio-cultural Context**

The theoretical underpinning that fits into the context of the Nigerian ECCE is deeply embedded socio-cultural thought as propounded by Vygotsky (1962) and upheld by Rogoff et al. (1998). This implies that teachers, educators and other stakeholders need to understand the development of children in the context of their own immediate environment, because children adapt through the norms, belief and nature of interactions that occur in their communities. On this note, Clarke (1998), Dahlberg, Moss and Pence (1999) and Moss (2002; 1994) establish the concept of quality and learning pattern of a child within the context of a specific society. For instance, the quality of children's experiences has been described as a socially situated concept capable of generating socio-cultural meanings while also addressing the issues of efficiency, effectiveness and performance in a particular context (Moss & Dahlberg, 2008). It is also indicated that quality cannot be presumed on a pre-constructed framework or on an intended conceptualised structure. In this study and in a developing economy context, consideration for integrating children into a sustainable plan cannot be divorced from the assertion of Clarke (1998) as supported by Moss & Dahlberg (2008:5) on quality assessment as art of a process of depoliticisation that displaces "real political and policy choices into a series of managerial imperatives"—substituting managerial methods for democratic deliberation" (Moss and Dahlberg, 2008:5).

In other words, the quality of children's experiences often emerges from sociocultural meaning(s) generated from a democratic deliberation agreed upon by relevant stakeholders in a particular context (Dahlberg & Moss, 2005), especially in a multi-lingual and multi-cultural society like Nigeria. According to the authors, the "meaning making" concept entails the process of interpretation, reflection, dialogues, argumentation, judgement of values, contextualisation, evaluation through participation, democracy, collective deliberation, pedagogical documentation and negotiation (Moss & Dahlberg, 2008; Dahlberg, Moss & Pence, 2007), as against the modernist schools of thought (Toulmin, 1990) on an objective view of knowledge acquisition.

Practices associated with learning in a diverse society cannot be easily and precisely mirrored in the context of a universal formula; rather it is somewhat contextual and democratic in nature. The concept of democratic practice in ECCE has been vastly examined in the extant literature (Moss, 2007; 2011; Mitchell and Carr, 2014; Clausen, 2015). According to Moss (2007), it is the process of negotiating with children in performing learning activities. Moss (2011) described the democratic process in the context of ECCE as a phase that involves every individual as an agent of change, including children. He stated:

Recognition, respect and valuing of diversity – of people, practices and perspectives – and of choice understood as participatory and inclusive collective decision-making (the democratic

exercise of choice) are conditions for democracy in services for young children, another essential value that should underpin all aspects of these services. (Moss, 2011:2)

Democratic practice also involves the development of children's skills in specific culturally relevant tasks that relate to arts and community design. Putting young children at the heart of policy formulation as emphasised by Dahlberg, Moss & Pence (2007) is a sustainable goal. Therefore, this paper further provides some insights into the socio-cultural context in relation to SDE in Nigerian ECCE.

## Concepts of Sustainability and Early Childhood Education

The term "sustainable development" was mentioned for the first time in 1987 by the Brundtland World Commission on Environment and Development (WCED). In this context, sustainability means "meeting the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987, p.43). Various summits have been held in respect of sustainable development education (The Brundtland World Commission on Environment and Development (WCED), 1987; The UN Earth Summit, 1992; World Education Forum (WEF), 2000). These summits have focused on the scope of education for sustainable development with the aim of establishing a capturing definition to include consumption and utilization in relation to the younger generation. This also involves developing a vision in relation to resources preservation, meeting of needs, conservation and maintenance. Subsequently, the focus has been shifted to creating a society with no or relatively low poor populace and meeting the needs of the disadvantaged. A more direct way of achieving this is the formulation of policy directives targeted at equal accessibility to educational opportunities and creating equal economic social groups (Pearce, 2007).

The concept has since begun to receive scholarly attention and gained extended scopes and approaches. Sen (2013) viewed sustainability as a serious subject which should incorporate the individual, acting as an agent of change. Sustainable development is described as '*development that promotes the capabilities of present people without compromising capabilities of future generations*' (Sen, 2013, p.5). The emphasis in this definition is on building children's capacity in such a way that a synergy between the present and the future is assured. Such synergy requires an approach to policy making that attends to the present need sufficiently without destroying the fate of tomorrow. It suggests that children are necessarily a vital aspect of sustainable projects and should be treated as such in order to ensure projects' success.

## Sustainable Development Education and Strategies

The relevance of education in the dissemination of the message of sustainability is imperative. This might relate to the fact that education has continued to feature in the national agenda. For instance, the Dakar Framework for Action (2000) and UNESCO (2004) incorporates education for sustainable development in the Education for All (EFA) goals. Siraj-Blatchford et al. (2010, p.5) emphasise visions for human and economic wellbeing, cultural traditions and respect for the environment as the three important pillars in their definition of SDE. According to the authors:

It is therefore important to recognise that sustainable developments are supported by these three pillars acting together, and that any practices and policies developed without taking each into account are likely to be weaker and may even fail (Siraj-Blatchford et al:5).

Furthermore, the authors maintain that:

Education for sustainable development has the potential to integrate and build upon a number of established areas of curriculum development including 'futures education'; 'citizenship'; 'peace education'; 'multicultural and gender education'; 'health education'; 'environmental education'; and; 'media literacy'. It also provides a platform and rationale for the further development of more recent curriculum initiatives such as those concerned with developing children's economic understanding (along with positive attitudes towards sustainable credit and saving (Siraj-Blatchford et al:6).

It is possible to inculcate sustainable culture in children, having recognised the input of international fora such as UN Convention on the Rights of a Child (1989), United Nations General Assembly (UNGA, 2009) on ensuring access, equity and quality of education for children especially in the developing countries. It implies that a plausible step is to work on policy measures that are contextually fit for the present and future expectations. Indeed, Prout and James (1997) and James and Prout (2015) suggest that children's experiences and situations in the Global South should be contextualised and managed through a dialogic approach on how best to achieve optimum results. A feasible way of doing this is to reduce the pressure of western hegemony of ideologies on many of these countries. For instance, policy that will sufficiently address childhood poverty in Nigeria may want to look at the socio-cultural approach to meeting children's needs in the society while also challenging the economic ideology of neo-liberalism, which are not properly coordinated in the best interest of children.

Siraj-Blatchford et al. (2010) highlighted eight principles on how ECCE can be constructed to ensure that children serve as agents of SDE: access for all to a process of lifelong learning, all gender inclusive, learning for change, networks, arenas and partnerships, professional development to strengthen education for sustainable development across all sectors, education for sustainable development in the early childhood curriculum and sustainable development in practice. However, there are diverse approaches identified in extant literature with the involvement of children in the design process, surveying land by encouraging use of measuring tapes, open space and participation in various stages, parent, practitioner and child discussion, gardening and training, discussion on forestry, outdoor learning, child's interests, environment (Nitecki & Chung, 2016; McClain & Vandermaas-Peeler, 2016; Fisher-Maltese, 2016; Siraj-Blatchford et al., 2010; Sylva et al., 2010; Bates and Tregenza, 2004; Hart, 1997; Odora, 20015; Little and Green, 2009).

In relation to environmental sustainability, Odora (2007) identifies agriculture, food preparation and allocation, effective water management, caring and treatment of infection and communicable diseases, farming activities such as hunting, fishing, cloth making, management of ecological relations of society and nature, adaptation to environmental/social change, reading of climate, husbandry, as components of education for children. The United Nations World Summit for Social Development (2000) emphasises social sustainability which include peace and security, tolerance, preaching against racism and skin colour. Robins and Roberts (1998) and Fien (2002) discussed lifestyle, consumption, energy utilization, natural resources and the impact on environment education.

As stated by Siraj-Blatchford et al. (2010), the essence of incorporating different aspects of sustainable development into the ECCE programme is to create global awareness among children's

agencies and service providers on the fundamental need for interdependence and collaboration in achieving a sustainable agenda for the younger generation. This gives rise to the question: How is the notion of sustainable development education contextualised in Nigerian ECCE settings?

## Research Method

This paper considers ways in which the theoretical framework of Dahlberg, Moss and Pence (1999; 2007) and Moss (2007; 2011), which embraces meaning-making, social construction of childhood experiences and democratic approaches, can be used to understand the socio-cultural dimensions of children's capacity for a sustainable future. In this study, I adopted a qualitative interpretive approach. Data was collected by conducting interviews and observations on teachers and pre-school children in ECCE settings. In this respect, interviews served as a useful tool to gather all the necessary information needed for the study because the study intends to explore how sustainable development education is administered to children. Also, observational studies were conducted to capture specific practices in the classroom. This entailed direct observation of children during the performance of activities and teachers' actual practices.

The interviews were conducted with a homogenous group of people, purposively sampled based on substantial years of experience in ECCE and knowledge about sustainable development goals. Creswell's (2003) suggests that the purposive method serves as a useful approach in identifying and choosing stakeholders or participants, with the aim of gaining deeper insight into a key phenomenon. The sample size is limited because the focus is much more on the point of data saturation that characterises a qualitative study (Edwards and Mauthner, 2002).

In this study, 13 interviews were conducted which included five proprietors/school-owners, four nursery/kindergarten class teachers and four children (see Table 1). The interview process was conducted with the participants until there appeared a reoccurrence or repetition of responses. The qualitative principles in this study aim to ensure that meanings are generated from participants' narratives and are formed into themes (Marsh and White, 2006). Through this approach, a clearer picture, interpretation and understanding of sustainable education and the implications were examined. Table 1 presents the profiles of the respondents.

The following sub-questions underlie the basis of the study:

- (i) How do ECCE stakeholders perceive the notion of SDE within the socio-cultural framework of educating children in Nigeria?
- (ii) What are the innovative practices that teachers and children engage in to support SDE?

Following a thematic data analysis, themes were generated from the data. Final themes that emerged indicate the bulk of the findings in the context of specific educational approaches for sustainable development in Nigeria.

## Findings

The two themes generated from the data are *Local versus contemporary practices in inculcating SDE in children in Nigeria*, and *Democratic approach to building sustainable principles in Nigerian ECCE*. They are discussed below.



**Table 1:** Profile of the Respondents

Number of interviews	Years of Experience	Pseudo-nyms	Profiles	Organisation Type
5	10-20 years	MK, PK, ZK, JK, YK	Proprietors/ head teachers who are trained in early childhood education with teaching and administration experience(5 females)	Registered & Licenced ECCE centres; Day care, kindergarten, nursery and primary classes.
4	5-16 years	MT, PT, ZT, JT	Teacher in pre-primary classes (2 males and 2 females)	Registered & Licenced ECCE centres; Day care, kindergarten, nursery and primary classes.
4	Age 4-6 years	XB, YB, XG, YG	2 girls and 2 boys	Public and private schools, Lagos State.

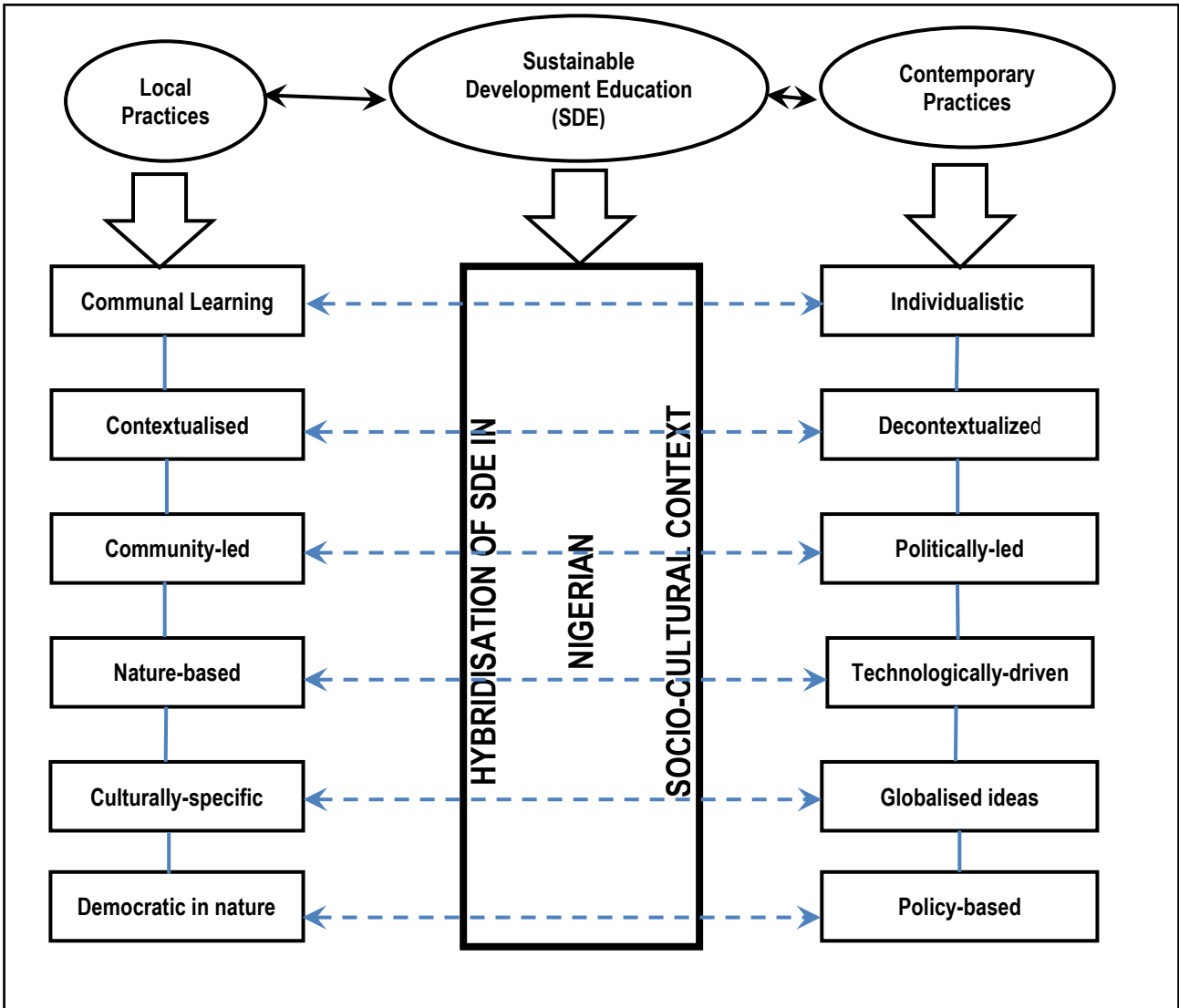
### Local and contemporary practices of SDE

Respondents expressed different opinions when confronted with questions on the notion of SDE in ECCE context. Many of the responses seemed to be divided along a generational transition between local and contemporary notions of sustainable practices of integrating children into the local and wider society. Contemporary ideas that govern the wider society are sometimes not in tandem with local practices (see Figure 1).

Four of the teachers interviewed (MT, PT JT and YT) believed a sustainable mentality starts from within and should imbibe cherished heritage and culture that binds community together in children. Cultural and environmental learning was perceived as an essential aspect of ensuring a sustainable future. In a global sense, they often referred to the role of technological and knowledge transfer that can upgrade any cultural lapses and remove cultural barriers to sustainable progress in children. Emphasis on an integrated approach cuts across the social, economic, cultural and political workings of the society. The most featured phrases include “cultural learning, meeting children’s needs, embracing diversity, giving hope, re-orientation, government functional role and participatory approach”. I suggest respondents are interested in achieving a synergy between local and global practices in a way that children can benefit. For instance, while technology was perceived as a veritable tool, two of the teachers (ZT and PT) believed that the intricacies of sustainability cannot be fully understood through technology. For instance, teacher ZT stated:

Technology is very good and a useful tool for engaging children in sustainable learning activities. But as good as it is, these gadgets are throwing some things that make us Nigerians away from the children. I believe a sustainable future must incorporate cherished values like communal responsibilities, discipline, and the issue of extended family.

**Figure 1:** Principles guiding local and contemporary practices of SDE in Nigeria



*Source: Author's own construction from findings (2016/17)*

PT added:

...when a child is locked up in the house to spend most of his or her time with technology without any relations with human or nature, how can sustainable behaviour be ensured?

**Democratic approaches in the Nigerian ECCE**

Sustainability was not perceived from a need-based perspective but rather a project to be worked on democratically by all relevant stakeholders. All the teachers felt that children's agencies and services should incorporate a more democratic and participatory approach to meeting children's needs in the classrooms and the society at large. They believed children's voices should be adequately incorporated and adults' roles should be modified. The tension between adults' control and children's capacity for participation should be eased and considered.

The findings in the context of democratic approaches generate two sub-themes: Practical strategies and instructional approaches. According to the proprietors, SDE should advance proactive steps teaching children effective management and conservation of resources - both human and non-human in the environment - to get the best out of them.

Moreover, all the head teacher respondents described SDE as skills that children acquire both overtly or covertly from the society about the kind of future they hope for. While they emphasized the need to teach children and every individual on how environmental elements and resources can be utilised, they spoke extensively on the need for an inter-generational transfer of cherished values and culture. According to JK, one of the Proprietors:

As a country, we are losing the value that underlies equality and justice for everyone, there is the urgent need to educate young ones from the early stage and give them hope of a sustainable future in order to avoid crisis in the future.

The opinions of the teachers are important because they have a closer relationship with the children. While two of the teachers (PT and MT) emphasised the notion of sustainable development education as a functional and quality education, suggesting a mutual relationship, they acknowledged the inadequacy of the present educational structure to fully accomplish this. Other notions ascribed to SDE include training children on how to be disciplined and organised in the use of resources in such a way as to avoid wastage and negative consequences on others and the environment. The other two respondent teachers (ZT and JT) opined that the broad concepts of SDE are embedded in moral instruction and character building in children. In this context, this is related to social sustainability, which is highlighted in the themes generated. Probing the strategic approaches adopted, two of the teacher respondents (ZT and MT) indicated as follows; ZT stated:

...as part of our commitment to make sure that these children know better than we adults for a better future, we have a day of practical activities including how to take care of environment, how to avoid bush burning, how to wet ground around the residential areas during a very hot whether like this because of dust and contaminated air, how to grow gardens, trees around the living premises, how to take care of flowers...

The response from MT revealed how the process of gardening and children's visits to farms are useful:

...we regularly show, demonstrate and instruct these young ones the function of hoes in weeding, cutlass in trimming grasses, shear in trimming flowers...though they might be young in doing these alone, but we stand by them...and encourage their parents to give similar homework to do in that direction... we have some demonstration farms in our premises as well.

According to one of the proprietors (head teachers):

What we are doing are in line with our cultural philosophy which is subsumed in the principles of 'catch them young before it is too late...

The respondent teachers and head teachers stated that children are selected to play some roles and engage in creative activities that showcase sustainability and maintenance culture. A respondent teacher, JT, describes her personal beliefs about sustainability as entrenched in discipline. She stated:

Train up your child in the way he should, when he grows up, he will not depart...the principle of environmental preservation is very crucial. It is the responsibility of every adult to teach children in their care. For instance, Lagos and some major cities recently experienced flooding which claimed many lives and properties...the causes of all these are poor habit of waste disposal and unkempt environment...

According to PT, the principles and skills of SDE should be inculcated in children from home, as stated:

Having realised that ... charity begins at home, we often encourage parents to allow children to practice what we teach them at home. For examples, how to participate in ditches cleaning, use of water, property waste disposal... and we monitor it through the expected feedback from their parents.

Emergent themes during the analysis indicate that children are trained in some ways to act short drama or sing songs that involve different roles including farming, conservation and preservation of resources, principles of saving, tolerance, love, peace and unity of purpose. According to the respondent teachers, the children wear special costumes and sing songs about the dangers of environmental degradation. Other innovative approaches adopted in ECCE are outdoor trips to some of the natural and cultural sites, such as museums, reserves, zoological gardens and universities' art galleries.

Outdoor education plays a vital role in exposing children to elements of the environment where they live, and the impact of conservation for their future is explained to them. As stated by one of the head teachers, PK

The essence of the trips is to inculcate the principles of sustainable development in children and to educate them while it is pretty good to preserve and conserve nature for future advantages and to educate the children the behaviour of nature, the danger of negligence, the significance of planning against disaster in vulnerable areas around the coast.

In addition, another emerging strategy for sustainable development education identified is the illustration of nature and environment with the use of folktales and storytelling. This is usually done by bringing the community into the school environment. As stated by a teacher:

In some cases, we bring some experts and elderly persons to narrate a story to using animals such as tortoise, monkey, goat, horses, frogs, parrots and others to explain the important of natural environment preservation...in most case it is amusing and entertaining to children and it reminds them that where they live need to be kept off dangers.

The foregoing strategy was confirmed from responses obtained from the children (4-6 years) on what they enjoy doing in their learning:

I like it when it is story time. I like it when my teacher tells me story about nature, bush and animals and how I can keep our surrounding...home, dispose waste at home...and that it is not good to play with fire, not to turn on tap at home without any reason.

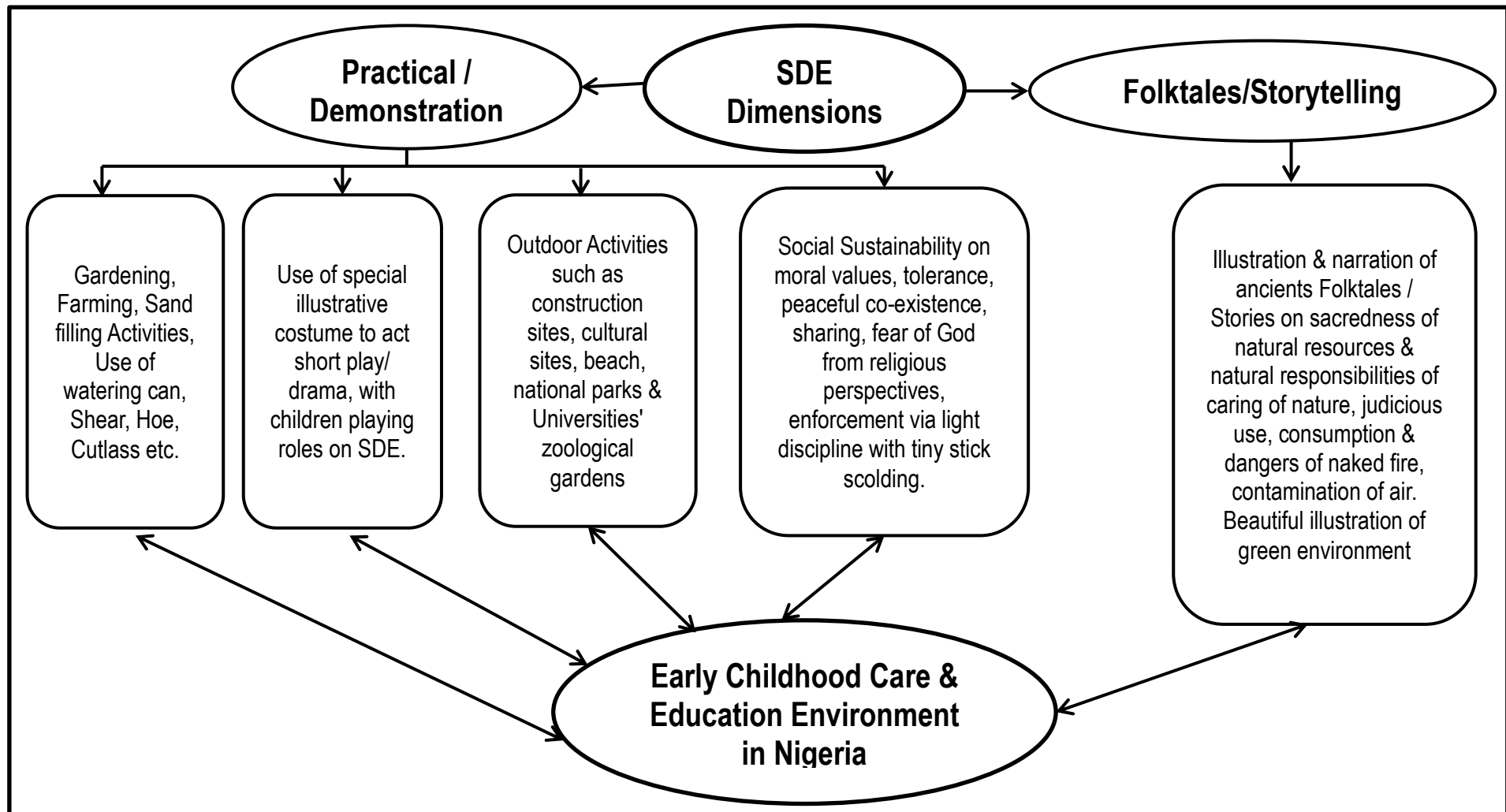
Figure 2 summarises the findings in the context of strategies adopted to inculcate SDE in Nigerian ECCE community.

## **Discussion of Findings and Conclusion**

In the study, teachers and owners of ECCE centres in Nigeria are aware of sustainable development education (SDE) and its interconnectedness with global happenings. Two themes emerged as discussed in the previous section; local versus contemporary practices of SDE and democratic approach in the context of SDE. These findings are explained within the theoretical underpinning raised in this paper. For instance, the issue of ECCE practice and quality in relation to SDE is in line with the opinions of Dahlberg, Moss and Pence (1999; 2007) that ECCE quality and practice is in country context, not on the basis of developed metrics often used in the Anglo-American context and neo-liberal system. The implication is that children's capacity for a sustainable future can be built on a proper cohesion of local and contemporary ideologies about childhood, their capacities and potentials.

In Figure 1, the respondent stakeholders were of the opinion that SDE is a culturally sensitive learning that involves a communal effort. According to the stakeholders, the communal effort should take advantage of contemporary practices like individual children's capacity and technologically-driven innovation in contributing to SDE. Another striking point is that SDE practices at the local level are based on informal practices which can be upgraded through the hybridization with the contemporary ideas that are based on political willingness and appropriate policy. Also, findings in this study indicate that SDE is character – based learning system which should incorporate moral instruction and character training in children. SDE also should be child friendly by incorporating children voices into decision making system at the school and policy-making levels. This implies a balance between adult control and children capacity for participating in SDE. A feasible way is to come up with an innovative policy that will synergise local and global contexts of SDE in the best interest of building children's capacity. It is important to state that this study was conducted with teachers, head teachers/proprietors and children in selected schools that operate pre-primary education in Lagos, Nigeria.

The foregoing discussion supports the work of UNESCO (2005) and Trima et al. (2016), which suggests that educational institutions are vehicles in the transfer of knowledge structures that guide a sustainable future. These authors and the findings in this study associate basic principles and concepts of SDE with contextual elements they could relate with. In addition, the descriptions of SDE provided by the respondents were coherent with the literature supporting the views of Siraj-Blatchford et al. (2010), that SDE constitutes three pillars; human and economic wellbeing, cultural traditions and respect for the environment, in which children can participate. The data which suggest that children are social actors in sustainable projects have some features identified in literature (Odora 2007; Robins and Roberts, 1998; Fien, 2002, Nitecki & Chung, 2016; McClain & Vandermaas-Peeler, 2016 and Fisher-Maltese, 2016).

**Figure 2:** Socio-cultural Dimensions to SDE in Nigerian ECCE

Source: Author's own construction of findings (2016/2017)

This study focuses on how children's capacity towards a sustainable future can be developed and enhanced in a developing country like Nigeria. Sustainable development education is viewed as necessary in the light of its local and global relevance. The aims are similar to ensuring a sustainable environment in the context of resource utilization and consumption, whilst also ensuring that contextual factors that influence its effectiveness are considered. SDE practices are situated within two categories; demonstration and instructional aspects. Practical aspects include gardening and farming activities, drama (playlet), visits to construction sites, zoos, parks and other environment-related activities. Instructional aspects include storytelling and teaching as shown in Figure 2

This paper also argues that an understanding of children's capacity for sustainability is situated within both local and global contexts. This can be explored through an active involvement of children's agencies in dialogues. This will involve a democratic approach that incorporates teachers, children parents and other relevant stakeholders in a contextually and globally. A distinct finding is that children's participation in building a sustainable future is a consequence of the knowledge of the workings of their social and cultural and not a matter of economic wealth per se. In other words, children are positioned to participate in sustainable activities. It concludes that sustainability cannot only be built on what may be seen as decontextualized responses by the relevant stakeholders to the needs and experiences of the "whole child".

## Author's biography

Taiwo Frances Gbadegesin is a PhD student at the School of Education, University of Leeds between October 2014-2018. Her area of specialisation is in Childhood and Youth Studies.

Email: edtfhg@leeds.ac.uk; taiwogbadegesin@yahoo.com

## References

Bates, S. and Tregenza, N. 2007. Education for sustainability in the early years: A case study from Hallett cove preschool. *Australian Sustainable Schools Initiative: South Australia*.

Boyden, J. 2015. Childhood and the Policy Maker. In: James, A. and Prout, A. (eds.) *Constructing and reconstructing Childhood: Contemporary Issues in the Sociological Study of Childhood*. London: Falmer Press.

Brogaard Clausen, S. 2015. Schoolification or early years democracy? A cross-curricular perspective from Denmark and England. *Contemporary Issues in Early Childhood*. **16**(4), pp.355-373.

Bruntland, G. 1987. World Commission on Environment and Development (WCED, 1987): Our common future. Oxford: Oxford University Press.

Cagliari, P., Barozzi, A. and Giudici, C. 2004. Thoughts, theories and experiences for an educational project with participation. *Children in Europe*. **6**, pp.28-30.

Carney, D. 1998. Implementing the sustainable rural livelihoods approach. *Sustainable rural livelihoods: What contribution can we make*. **3**(27), pp.27.

Cerin, P. 2006. Bringing economic opportunity into line with environmental influence: A discussion on the Coase theorem and the Porter and van der Linde hypothesis. *Ecological Economics*. **56**(2), pp.209-225.

Clarke, J. 1998. Thriving on chaos? *Postmodernity and the Fragmentation of Welfare*. p.171.

Creswell, J. W. 2003. *Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks California: Sage.

Dahlberg, G. and Moss, P. 2005. *Ethics and politics in early childhood education*. London: Routledge Falmer.

Dahlberg, G., Moss, P. and Pence, A. 1999. *Beyond Quality in Early Childhood Education and Care: Postmodern Perspective*. London: Falmer Press.

Dahlberg, G., Moss, P. and Pence, A. R. 2007. *Beyond quality in early childhood education and care : languages of evaluation*. London: Routledge.

Davies, B. and Bansel, P. 2007. Neoliberalism and education. *International Journal of Qualitative Studies in Education*. **20**(3), pp.247-259.

Dernbach, J. C. 2003. Citizen suits and sustainability. *Widener L. Rev.*, pp.503-507.

Edwards, R. and Mauthner, M. 2002. Ethics and feminist research: Theory and practice. In: M. Mauthner, M. Birch, J. Jessop and T. Miller eds. *Ethics in qualitative research*. London: Sage, pp.14-31.

Fien, J. 2004. 11 Education for sustainability. In: Gilbert, R. ed. *Studying society and environment: A guide for teachers*. Melbourne: Social Science Press, p.184.



- Fisher-Maltese, C. 2016. "We Won't Hurt You Butterfly!" Second-graders become environmental stewards from experiences in a school garden. *International Journal of Early Childhood Environmental Education*. **4**(1), pp.54-69.
- Fleer, M., Anning, A. and Cullen, J. 2004. A framework for conceptualising early childhood education. In: A. Anning, J. Cullen and M. Fleer. eds. *Early childhood education: Society and culture*. pp.175-189.
- Hart, R. A. 1997. *Children's participation: The theory and practice of involving young citizens in community development and environmental care*. London: Earthscan Publ.
- James, A. and Prout, A. 2015. *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood*, Routledge.
- Little, A. W. and Green, A. 2009. Successful globalisation, education and sustainable development. *International Journal of Educational Development*. **29**(2), pp.166-174.
- McClain, C. and Vandermaas-Peeler, M. 2016. Outdoor explorations with preschoolers: An observational study of young children's developing relationship with the natural world. *International Journal of Early Childhood*. **4**(1), pp. 38.
- Mitchell, L. and Carr, M. 2014. Democratic and learning-oriented assessment practices in early childhood care and education in New Zealand. Paris, France: United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Moss, P. (ed.) 1994. *Defining Quality; Values, Stakeholders and Processes*, London: Sage
- Moss, P. 2002. Defining quality: Values, stakeholders and processes. In: Ferguson, I., Lavalette, M. and Moneey, G. *Rethinking welfare: A critical perspective*, pp.1-9.
- Moss, P. 2007. Bringing politics into the nursery: Early childhood education as a democratic practice. *European Early Childhood Education Research Journal*. **15**(1), pp.5-20.
- Moss, P. 2011. Democracy as first practice in early childhood education and care: Child care- Early childhood education and care. *Encyclopaedia on Early Childhood Development*. United Kingdom: University of London.
- Moss, P. and Dahlberg, G. 2008. Beyond quality in early childhood education and care—Languages of evaluation. *New Zealand Journal of Teachers' Work*. **5**(1), pp.3-12.
- Nitecki, E. and Chung, M.-H. 2016. Play as place: A safe space for young children to learn about the world. *International Journal of Early Childhood Environmental Education*. **4**(1), pp.25-31.
- Odora Hoppers, C. A. 2015. THINK PIECE: Cognitive justice and integration without duress-The future of development education—perspectives from the South. *International Journal of Development Education and Global Learning*. **7** (2), pp.89-106.
- Oribhabor, B. J. 2016. Impact of human activities on biodiversity in Nigerian aquatic ecosystems. *Science International*. **4**(1), pp.12-20.
- Prout, A. 2005. *The future of childhood: Towards the interdisciplinary study of children*. London: Routledge Falmer.
- Prout, A. and James, A. 1997. A new paradigm for the sociology of childhood? Provenance, promise and problems. In: Prout, A. and James, A. eds. *Constructing and reconstructing childhood: Contemporary issues in the sociological study of childhood*, pp. 23.

- Robins, N. and Roberts, S. 1998. Consumption in a sustainable world. Workbook prepared for the OECD Workshop. Norway: Kabelvaag. pp.2-4.
- Rogoff, B., Mosier, C., Mistry, J. and Goncu, A. 1993. Toddlers' guided participation with their caregivers in cultural activity. In: Forman, E. A, Minick, N. and Stone C. A. *Contexts for learning: Sociocultural dynamics in children's development*, pp.230-253.
- Sen, A. 2013. The ends and means of sustainability. *Journal of Human Development and Capabilities*. **14**(1), pp.6-20.
- Siraj-Blatchford, J., Smith, K. C. and Samuelsson, I. P. 2010. *Education for sustainable development in the early years*. World Organization for Early Childhood Education: Gothenburg.
- Stahl, C. and Bridges, T. S. 2013. "Fully baked" sustainability using decision analytic principles and ecosystem services. *Integrated environmental assessment and management*. **9**(4), pp.551-553.
- Stoddart, H., Schneeberger, K., Dodds, F., Shaw, A., Bottero, M., Cornforth, J. and White, R. A. 2011. *Pocket guide to sustainable development governance*. [London United Kingdom] Stakeholder Forum 2011.
- Stuart, S. N., Adams, R. J. and Jenkins, M. 1990. *Biodiversity in sub-Saharan Africa and its islands: conservation, management, and sustainable use*, International Union for Conservation of Nature.
- Sylva, K., Siraj-Blatchford, I., Taggart, B., Sammons, P., Melhuish, E., Elliot, K. and Totsika, V. 2006. Capturing quality in early childhood through environmental rating scales. *Early Childhood Research Quarterly*. **21**(1), pp.76-92.
- Tirima, S., Bartrem, C., Von Lindern, I., Von Braun, M., Lind, D., Anka, S. M. and Abdullahi, A. 2016. Environmental remediation to address childhood lead poisoning epidemic due to artisanal gold mining in Zamfara, Nigeria. *Environmental health perspectives*. **124**(9), 1471.
- Toulmin, S. E. and Toulmin, S. 1992. *Cosmopolis: The hidden agenda of modernity*, University of Chicago Press.
- UNDP, U. 2001. World Bank, and WRI (2000). *World Resources*, pp.87-102.
- UNESCO. 2004. United Nations Decade of Education for Sustainable Development: Draft International Implementation Scheme (IIS). United Nations Educational, Scientific and Cultural Organization Paris.
- UNICEF. 2011. The Convention of the Rights of the Child.
- Vygotsky, L. S. 1962. Language and thought. *Massachusetts Institute of Technology Press, Ontario, Canada*.
- White, M. D. & Marsh, E. E. 2006. Content analysis: A flexible methodology. *Library Trends*. **55**(1), pp.22-45.
- WUP. 2007. World Urbanisation Prospects: The 2007 Revision Highlights New York: Department of Economic and Social Affairs, Population Division, United Nations.