



Research Article

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## Children Education in ICT Age in Nigeria: A Tripartite Socio-Cultural Phenomena

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### Abstract

*Studies have established that the use of technology in early childhood care and education (ECCE) settings positively contributes to children's development. However, this position has generated conflicting views as individual circumstances largely depend on where a child is born and raised. In this study, adoption of Information and Communication Technology (ICT) in ECCE in the Nigerian context is examined, with a view to deciphering practical implications of ICT as social innovation in learning and its influence on socio-cultural values in childhood education. To achieve this aim, the following research question was generated: What and how can we describe the impact and practical implications of ICT on Nigerian children's ways of life, and what values does ICT contribute towards socio-cultural aspect of ECCE education in Nigeria? The paper utilised data collected through an interpretive qualitative study, underpinned by social practice and innovation diffusion theories. Data were generated through interviews and classroom observations. The findings suggest tensions between social innovations and socio-cultural implications of ICT usage. It was observed that ICT usage in Nigerian childhood education is situated within tripartite classification; One, as a veritable tool for achieving innovative and creative thinking in children. Two, as an effective instrument of disseminating globalised ideas and three, as distortions to socio-cultural values that are embedded in culturally-sensitive children learning and development. In conclusion, it was suggested that while the use of ICT should remain a veritable instrument for learning in children's formative periods, its usage should be monitored for values' security in Nigeria.*

**Keywords:** ICT, Childhood, Education, Socio-Cultural, Nigeria

### 1. Introduction

Nigeria is the largest country in Africa with a population now far above 160 million, with children and youths constituting more than 50% of the population. In recent time, educating children through technology has been viewed as bedrock of societal development (Thierer, 2000). While the use of Information Communication and Technology (ICT) processes in children's care and education in Nigeria has been widely embraced, it is often accompanied by painful compromises which are due to cultural anxieties and dilemma between the benefits derivable and the distorted socio-cultural consequences observed on children. This necessitates an exploration of these implications and resultant tensions with a view to constructing a learning project and culture that accommodates appropriate use of ICT in schools. This project will be an outcome of a co-constructed knowledge

from early childhood practitioners.

Studies have established that the use of technology in early childhood settings involves the application of tools and materials to enhance children's learning and development, interactions, communication and collaboration (Bowcutt, 2013). Gentry (2012) in Bowcutt (2013) states:

*As technology increasingly finds its way into mainstream culture, the types and uses of technology in early childhood programs have also expanded dramatically to include computers, tablets, e-books, mobile devices, handheld gaming devices, digital cameras and video camcorders, electronic toys, multimedia players for music and videos, digital audio recorders, interactive whiteboards, software applications, the Internet, streaming media, and more (Gentry, 2012: 1).*

As a result of an increase in knowledge and awareness of ICT, there has been a corresponding proliferation of technological gadgets for children's use at home and school. It is important to note that global ideals on child rearing are usually transmitted through these gadgets. Moreover, the dominant discourse on the use of computers, I-pad, screens, projectors and web services in the Nigerian ECCE provision is centered on the need to improve quality standards and achieve international comparative advantage. Thus, stakeholders in Nigerian ECCE seem to perceive the adoption of ICT in nursery classes as instructional materials that ensure that educational programme for children is at par with global trend. Extant literature in Africa in this context sheds light on the state of art on education and use of ICT (Aduwa-Ogiegbaen and Iyamu, 2005; Okebukola, 1997; Agyeman, 2007; Pudaruth and Bahadoor, 2011). However, study conducted by Aduwa-Ogiegbaen and Iyamu (2005) on the influence of ICT on education in Nigeria, recommends that though there is no doubt that modern life is dominated by technology, what is wrong with education cannot be fixed with technology. A number of challenges militating against the use of ICT were identified, which include: lack of fund to procure necessary infrastructure, high cost of computer hardware and software, lack of human skills and knowledge in ICT, and lack of relevant software appropriate and culturally suitable to Nigeria.

It is important to reflect on Okebukola's (1997) position that ICT policy proposition in 1998 in secondary and primary schools was alien to Nigerian educational system and that maintaining the traditional system of chalk and blackboard was imperative for maintaining a good standard of quality education as at then. It was reasoned that the incorporation of technological infrastructure in classroom learning could be appropriated and introduced gradually through a piecemeal approach. In the 90s, the era of the then proposed policy on ICT, some number of schools were used to pilot ICT project plan, unfortunately, there was no substantial outcome from the exercise. The inability of the proposed plan to reach the light of the day constitutes the major point of Aduwa-Ogiegbaen and Iyamu (2005) critique;

*"That mediocrity, corruption in high places, misplaced priority, and consumer culture within the political power in Nigeria battered economy and the educational system".*

In the survey of ICT usage conducted in Africa by Agyeman (2007), it was reported that the Federal Republic of Nigeria has no specific policy for ICT in education. The major obstacle was attributed to the lack of electric power supply and telecommunications infrastructure in substantial parts of the country. In other words, there is low range of coverage of communication with some parts of the country being completely neglected. Worse still, the existing power station of mobile telephone are powered with the use of generating plant, thus accounting for high cost of running expenses. Pudaruth and Bahadoor (2011) investigated how education in pre-primary and primary is conducted and the positive impact of ICT in Mauritius. It was opined that while ICT tends to offer a positive impact on children in pre-primary levels, it also has a tendency to affect children's social adjustment to immediate environment. Likewise, Nigeria early childhood settings are still struggling with how to utilize ICT gadgets in mediating between cherished cultural heritage and global ideals. However, there are gaps in extant literature on the negative effect of ICT in Africa childhood education. There is a clear divide in Global South and North availability and usage of ICT in early years settings (Graham, 2002) which requires contextual understanding and analysis. However, beyond this North-South divide, the underlying influences and impact of ICT in learning and

development are contestable and requires a democratic approach to unveiling tensions and agreement between societal values and ICT usage in early childhood settings.

Studies on ICT in Africa and Nigeria specifically abound with emphasis on positive contribution (Mac-Ikemenjima, 2003; 2005). Government and non-governmental level of involvement in ICT-aided education in Africa varies from one country to another in partnership with International Development partners (IDPs) and private organizations in the formulation of appropriate policy (Hennessy, et.al, 2010). Consequently, this study explores ECCE stakeholders' understanding of ICT use as social innovations in children's learning in Nigeria.

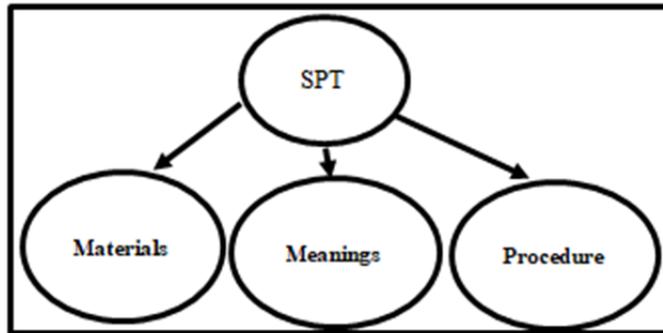
## **2. Theoretical Underpinning and Literature Review**

### *2.1 Social Practice Theory (SPT)*

Approaching the tensions and benefits of ICT usage in learning process from the perspective of social practice theory (SPT) indicates different levels of application in the context of behavioural change in an individual. SPT, according to Bourdieu (1990), expresses the emergence of actual personalities of an individual from an exposure to a procedure and circumstances they have experienced overtime; including the ways of seeing the world, ways of talking, thinking and feeling. This is in agreement with the general opinion that character is contagious. A child often acts, based on the environment and society where he or she is brought up. This theoretical stance perceives an emergence of children's new perspectives about their world due to their exposure to ICT. Bourdieu (1990) further illustrated the influencing roles of the society on individual's way of life. This suggests that as society embraces new innovations and advances, learning becomes more sophisticated and children respond accordingly. Related studies by Reckwitz (2002), Lee and Macdonald (2009) suggest the usefulness of SPT as a premise for the description of human 'practices' (ways of doing, 'routinized behaviour', habits) and inter-connected elements such as physical and mental activities, norms, meanings, technology use and knowledge. Undoubtedly, non-human actors such as technological gadgets have a way of influencing children in their formative stage of life.

In Holman and Borgstrom's (2015) study on social practice theory in the health-related behaviour, it was opined that, the behaviour observed within clinical management are viewed not as acts of choice but as actions and practices situated within a larger sociocultural context. Because SPT describes social order as rooted in everyday practices, this provides a theoretical underpinning to justify the fact that children's behaviour is the manifestation of their interactions and exposure at early ages of life.

Lamb (2012) argues the usefulness of technology in bringing about improvement in language learning among rural learners in rural Indonesia. The author avers that language learning outcomes are reflections of agencies and social system that surround learners. Likewise, Southerton et al. (2012) study on a comparative analysis of reading in France, Norway, the Netherlands, the UK and the USA, using time diary data on the practices of reading frown against the notion that decline in reading culture among children and adults is as a result of technological advancement. This suggests that an attempt to generalise the negative side effect of ICT on behaviour has no sufficient evidence to reckon with. Hargreaves (2011) posits that SPT offers up a sufficient opportunity for behavioural change, over and above individuals' attitudes or values, using an ethnographic case study- nine months of participant observation and 38 semi-structured interviews. It was concluded that the benefits and shortcomings of a practice-based approach to technology use are rooted in the social interactions and power relations in the performance of such practices. Borrowing from the opinion of Shove (2010) as cited by Morris et al. (2012), SPT is embedded within three elements model which incorporate materials, meanings and procedure. Figure 1 presents the simple framework:



**Figure 1:** Three Elements Framework of SPT- Shove (2010)

**Source:** Morris et al. (2012)

Implicit in Figure 1 are three elements; *material* (the object and information captioned in the technology). *Meanings* (internalisation or conveyance of the information and image captioned from the technological gadgets) and *procedure* (manifestation or expression of the message derivable from the communication via a technology instrument.). This approach was confirmed by Morris's et al (2012) assertion that SPT is a veritable theoretical position in the evaluation of human behaviour, particularly in the context of technology use during formative state of life.

In relation to the use of ICT in the Nigerian childhood education, children in cities today often behave or act in accordance to what they observe through contacts with ICT and social media. Hence, how profitable are these outcomes? Findings in this study comprise extracts from parents and teachers' narratives.

## 2.2 Innovation Diffusion Theory

Morris et al. (2012) and Rogers (2003) opine that innovation diffusion theory is much more concerned with adoption of behavioural attitudes that emanated in form of innovative ideas. This is described as a process of disseminating an idea through a medium from a technology source to the adopter. According to Roger (2003) innovative behaviour is acquired and utilised through technology use if the information derived is situated with the context of relative advantage, compatibility with the current needs, not difficult to adopt, visibly appropriate and convenient to experiment with useful result. It also important to state that the diffusion of idea is not in isolation. It is achieved through a network or social interactions. In Nigeria parlance, especially among children and youths, pieces of information are rapidly shared through Facebook, Twitter and other social media. Children are not left out in this, they get information through mobile phones, televisions and satellite.

Applying innovation theory, diffusion of creative ideas emanating from technology use is centred on knowledge, persuasion, decision, implementation and confirmation (Greenhalgh et al. 2004). In essence, an idea is spread across different domains of exposure to ICT, entrenched in societal social and cultural orders. Subsequently, acceptability or otherwise of new ideas through an exposure to technology is established (Aizstrataa et al, 2015).

Following the exploration of the theories above, it implies that the understanding of technology use in children's learning and subsequent outcomes thereof can be best situated within the socio-cultural contexts that materials, meanings and procedures of technology is being used. In this case, a multi-ethnic society of Lagos state, Nigeria. Hence, this study is situated within these theories for empirical investigation. Furthermore, an insight into existing literature on the innovative features, globalisation factors and socio-cultural dilemmas of ICT makes the revelation of the situation clearer in subsequent sections.

### 2.3 ICT: A veritable tool for innovation

The correlation between innovation and ICT adoption is often described to be strong and significant in educational and socio-cultural development (Kalaš, 2010; Bolstad, 2004; Ala-Mutual et al., 2008; Redecker, 2008). The study initiated by the UNESCO Institute for Information Technologies in Education (IITE) and conducted by Kalaš (2010) examined the potentials of ICT in ECCE. Having acknowledged the important role of ICT in the 21<sup>st</sup> century, the study adopted a review of literature and interview approach with 17 ECCE centres from nine countries around the world to elicit information on the subject. While the study aimed to develop principles and recommendations for stakeholders in ECCE to harness the benefit of ICT, it also revealed that substantial regions of the world do not have access to a wide coverage of ICT owing to the poor state and low education status of parents.

Bolstad (2004) examined the potentials of ICT in childhood education utilising literature review. It was reported that ICT has a positive effect by establishing that it offers new opportunities and innovation in early childhood education practices. While enumerating the significance of ICT in the quest for innovation, Redecker (2008), posits that ICT is a social computing tool that diffuses innovation in four dimension:

*“Supporting different senses with multimedia visualisations and representations. Supporting collaboration with new online production, commenting and networking tools, improving both overall and individual performance. Supporting differentiation and diversity by supplying teachers with a wide variety of didactical and methodological tools. Empowering learners to personalise their learning process in a supportive environment of mutual assistance, reflection and critique and in interaction with their teachers and peers, combining formal, non-formal and informal learning activities.”*

According to Redecker (2009), experimentation, networking, best practise exchanges, teacher training and support should be encouraged for better diffusion of innovation in educational and socio-cultural development. Ala-Mutual et al. (2008) study explained that ICT is part of new technologies that contributes to the way a person lives, works and interacts because it is a veritable instrument of enhancing learning, teaching and creativity development. Through learning a new idea, innovation and creativity are developed and facilitated, useful for an individual, society and organisations. Indeed, the present demands of the aim of education is social, economic and technological advancement which is built on effective usage of ICT. In a similar approach, Ala-Mutka et al (2008), Punie and Ala-Mutka (2007) examined some latent innovative benefits attached to the use of ICT to include an opportunity for informal learning via online, acquisition of new skills associated with collaboration, networking, reflection, identity formation and digital competence and e-skills.

Koutroumpis et al. (2015) evaluated the gains realised from ICT innovation across Europe and America at varied degree of impact. According to the authors, different sector of the economy benefits differently, for instance, it was reported that sectors like financial services record more investments gains in the UK and Netherlands, manufacturing in Germany, electronics in Finland and substantial venture capital in the US. Spezia's (2011) study assessed the effects of information and communications technologies (ICTs) on firms' capabilities to innovate in a selection of OECD countries. Findings indicated that ICTs act as an enabler of innovation, particularly for product and marketing innovation, in both manufacturing and services.

Innovative benefits of ICT have been the central focus of European Union, EU. For instance, EU (2012) averred that ICT innovation would extend the broad goal of ensuring international cooperation, mutual benefit, standardisation, economic growth, security and collaboration. In the study conducted by Gasser and Palfrey (2007) on the interaction of innovation and ICT- DRM-protected music, Digital ID, and Mashups in the Web services context with the aim to confirm interoperability. The study concluded that “*interoperability*” often supports and promote innovation, however, the interaction between the two is highly *complex and fact-specific*.

Specifically, children are perceived as creative individuals with ability to manipulate objects and machines. The opportunity for innovative capability that technology has endowed on human

actions is usually explored by children and young people at home and schools. It is quite impressive to see children use technology in creative ways. For instance, children can explore interesting games on mobile phones and internet. Technological gadgets appeal to their sense of curiosity to ask pertinent questions that relate to their learning. It can further be used to encourage self-discovery and learning.

#### 2.4 *Instrument of Globalisation and Cultural Identity*

Global influence cuts across economy, socio-cultural way of life, governance, economy, industrialisation, immigration and technology (Vesajoki, 2002; INCD, 2003; UNEP, 2001; Tomlinson, 2000; 2003). It is imperative to state that society with the aforementioned influences are characterised with hybrid culture which are manifested within the context of comparative advantages derived from the use of ICT (Walsham, 2001; Baughn and Buchanan, 2001; Tomlinson, 2000).

Walsham (2001) used structuration theory to examine three cross-cultural case studies extracted from literature in relation with software teams, technology transfer, and knowledge sharing. It was reported that ICT, though provides a glimpse across culture globally, but fails to encourage homogeneity of culture considering the sensitive nature of diverse culture. Similar to simple homogeneity, is the aspect of imperialism, governance and socio-economic prospects that are constructively associated with globalisation, through the adoption of ICT (Ya'u, 2002; Thomas, 1996; Rodrik, 2001). New knowledge structure and its dissemination across the globe, leading to universalising of experience and assessment are dominant discourses in ICT and globalisation (Ben, Karima, 1999; Bangura, 2001; INCP, 2012; Dahlberg, Moss and Pence, 2007, Hartley, 2002). In spite of the global influence, there are yet distinctive features observed within specific country and critique are found in literature to that effect (Morley, 2000; Palmer, 2004).

Relating this to childhood education, technological advancement and transfers have given children the opportunity to experience global treats. In other words, children are able to relate with distant culture and relationships. Through this, they know what is obtainable outside their contexts and how to advance their learning.

#### 2.5 *Disasters to socio-cultural values*

Globalization is facilitated with the use of ICT and often portrayed in literature as danger to cultural values (Palmer, 2004). As stated by Palmer (2004), policy makers and other stakeholders are continually sensitive about global cultural homogenization dominated by the American, Western values and lifestyles commonly found in entertainment-industrial sector. This development often ignites debate and controversial expression that, eroding other individual local culture is tantamount to doom of the entire world value, as culture is part of national heritage should be preserved for posterity.

Proliferation of crime has been attributed to the abuse of internet usage (Eluwole et al., 2014, Onah and Nche, 2014). Eluwole et al (2014) examined the impact of ICT on African culture and education and observed among others, detrimental results of cyber-crime and the downgrading effect on educational distinction. A study on moral implication of social media was conducted in Nigeria by Onah and Nche (2014) and found that social media has resulted to moral degeneration in Nigeria. These immoralities manifest in the form of sexual promiscuity, cybercrime, fraud, drug trafficking, indecent dressing and sexual harassment. Abuse of children has equally become a subject of discourse (UN, 2015). While ICT offers positive benefits, it is important to acknowledge the menace of addiction and abuse that takes place in the privacy of children's lives. Clarke (2006) stated that; '*bluejacking*', and '*happy slapping*', an expression of assault. According to Clarke (2006), it also includes the phrase '*Am I hot or not?*' and other sorts of offensive language from children. Against this backdrop, the use of internet calls for monitoring.

### 3. Research Question and Methodology

This study adopts an interpretative qualitative approach. This was conducted via interviews with ECCE stakeholders in Lagos Nigeria and personal observations of children age between 5- 8 years. The justification for the approach is to ensure the trustworthiness of finding through pragmatic steps that involved direct observation and getting a first-hand information from stakeholders in Lagos -the largest city in sub-Sahara Africa, where the use of ICT is more prevalent. It is also important to obtain socially construed meanings on agencies and structures that guides ICT in children's learning.

In achieving this aim, some important questions were raised to solicit information from five parents, eight childhood education practitioners and two policy makers in ECCE in Nigeria. These questions are embedded in two scientific theories discussed above.

As discussed earlier on, social relations in children commence with their interactions with parents and members of the immediate family. It is followed by the advancement to social groups like schools, neighborhood and religious organizations. At these two stages, children are encouraged to form relationships with peers and adults in ways that are deemed culturally appropriate. For instance, socialization goals for children's training involve kinship ties, conformity to rules and learning by direct instruction. However, with the advent of ICT in Nigeria, there appears to be a rapid paradigm shift in children's training. A situation whereby many parents and their wards imbibe the ideas of using sophisticated toys and gadget. Today, many children are observed interacting with telephone, i-phone, mini pads and others, both at home and outside homes that they have little or no time to form relationships within the neighborhood. While parents are caught complaining on the disastrous effect of ICT, some parents on the other hand narrate numbers of benefits often derived. The conflicting views necessitate this research, thus raise the research question:

What and how can we describe the impact and practical implications of ICT on Nigerian children's ways of life, and what values does it contribute towards socio-cultural aspect of children in Nigeria?

### 4. Findings

To achieve the aim of this study, implicit in the research question: *What and how can we describe the impact and practical implications of ICT on Nigerian children's ways of life, and what value does it contribute towards socio-cultural aspect of children in Nigeria?* This section provides the summary of responses from ECCE stakeholders. Two broad outcomes emanated; the positive or constructive outcomes and the negative or destructive outcomes. The positive outcomes include the innovative ways ICT contributes to the development of children in Nigeria. Extracts of the interview granted on early education stakeholders between July 2015 and December 2015 are presented below:

As much as the positive outcomes of ICT in children's training were widely acknowledged among ECCE stakeholders in Lagos state, it was not without contempt. Thus, it suggests stakeholders' dilemma in a way; the desirable and expedient adoption of ICT in children's learning and the domineering instrument of socio-cultural changes. For instance, Louise, a pre-school teacher admitted;

*"There is now technological advancement and children have access to variety of experiences from different parts of the world".*

Anne, a parent of a five year old echoed the usefulness of technology by stating;

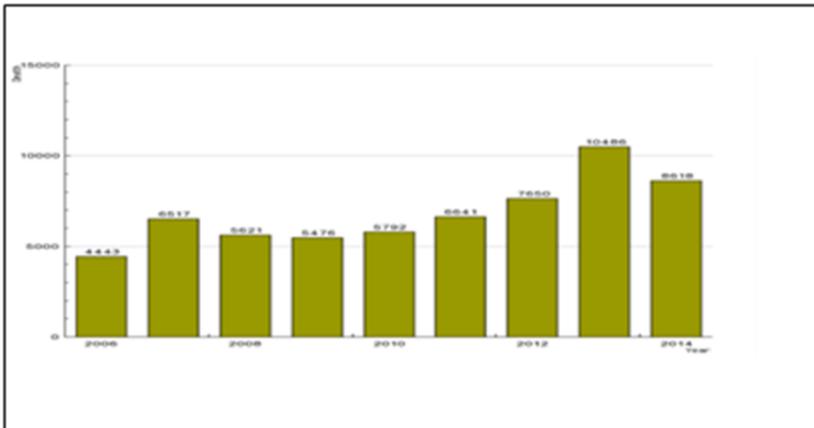
*"The introduction of technology has made children to be wise and know more than their immediate environment. They already know the extent of the consequence. They can chart a course for their lives. Days have gone when a child will have to be taught everything about life."*

In a similar view, a teacher resonated:

*“Pupils are now exposed to media and technology, parks and internet. Through this, children already know what they want to become and are working towards it”.*

As the cases of pornography becomes a common affair in the society, the subject of nudity which has been alien in pre-modern time (Prout, 2005) in Nigerian society has become the order of the day. Onah and Nche (2014) described this as loss of sense of sacredness of human life, indecent dressing and sexual harassment. As regards the cases of cybercrime in Nigeria, Economic and Financial Crime Commission (EFCC) is committed to eradicating this cankerworm. Hassan, et al (2012) attributed the causes of high wave of cybercrime to urbanization, unemployment and weak implementation of cybercrime laws. According to Okonigene and Adekanle (2009), the menace has badly damaged the image of the country and requires urgent policy step to combat the situation.

Cyber terrorism, militant grouping and suicide killing in Nigeria cannot be discussed outside the challenges of the emerging ICT. For instance Nigeria Watch (2014) documented the record of death caused by violence in Nigeria as shown in Figure 2. The death toll is not far from the use of technology by the underage fighters, romanced and brainwashed into militant groups like Boko Haram and Niger-Delta groups. Figure 2 presents the rising death toll occurred through violence in Nigeria between 2006 and 2014.



**Figure 2:** Rising number of violence deaths per year (2006–2014).

**Source:** Nigeria Watch, 2014

Moreover, with the evolvement of an endangered society, ECCE stakeholders perceived that the adoption of ICT might not actually achieve what it is intended to achieve. While technology use has produced an active learner in a way, it is not without a corresponding influence on some cherished societal values. Adelaide, a teacher stated;

*“If we are not careful, our values will go into extinction. There is no more respect. Technology is in vogue now. Tell me, what will primary school pupil be doing with a phone in the school environment? Who is he calling?”*

In like manner, Janet, a parent commented thus;

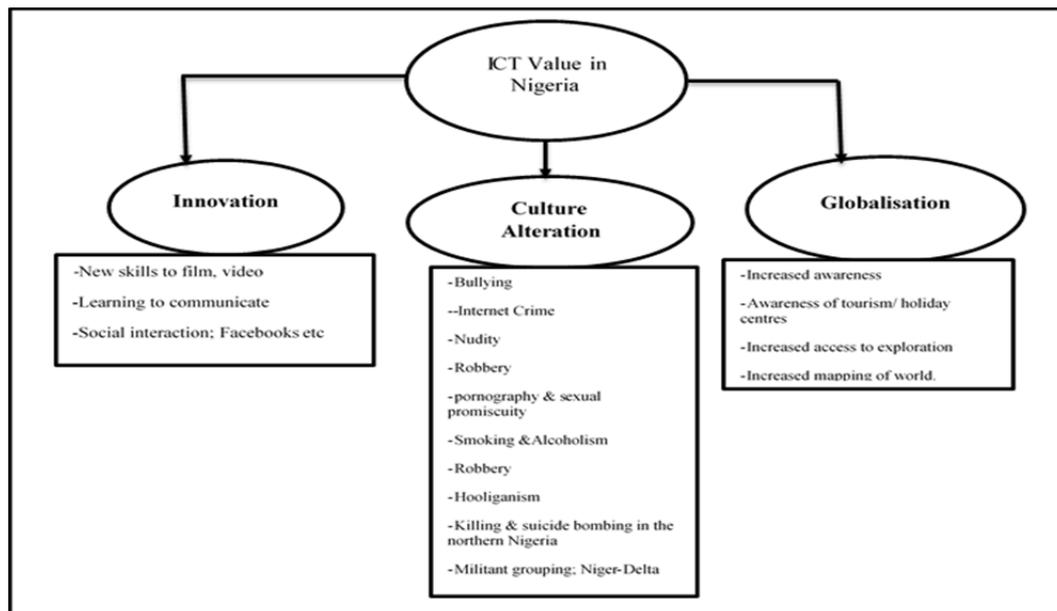
*“Technology is very good, but as good as it, it is affecting children’s loyalty to parents. Some of the things they watch, see on the internet, etc. even if they do not go out, the handset they hold will teach them many things right inside the home. For instance, I have been trying to make my children to reduce the use of this handset. I seize it from them, but after some time, I gave it back. It is causing a lot of disobedience in the society”.*

On the other hand, teachers felt that ICT has laid undue demands on their professional roles and competence. This requires new knowledge system on its operations and workings. This seems to create tensions that are commonly associated with changes in educational system. Thus, there is the need to replace traditional teaching techniques with a more sophisticated one through the use of technology. This is a major challenge to the perception of childhood in a multi-cultural setting like Lagos state and resultant pedagogical practices in the classroom. Technology usage seems to alter the terrain of traditionally cherished values of child rearing. For instance, Sean, a teacher resonated;

*"I am just learning how to use computer because I was not taught that way. In fact, the pupils know more than I do and sometimes puts me through. Sometimes, I fidget because I am supposed to be in control"*

This implies that technologically driven pedagogy in ECCE classes are understood within the contextual clues that are provided by teachers. It is important to note that there is now increased social awareness of the impact of ICT on cultural outlook of the society. Thus, suggesting teachers' crossroads at making pedagogical choices.

In summary, the current situation in the large scale usage of ICT and its values (internet and social medial) is summarised in Figure 3.



**Figure 3:** The Value of ICT in Nigeria

**Source:** Author

Implicit in Figure 3 are tripartite effects of ICT usage in early childhood settings in Nigeria. As earlier discussed, three outcomes are seriously unfolding in the use of ICT especially in Lagos. Specifically, these events are listed as reported in the qualitative study conducted. Unfortunately, the wave of negative scenarios in Lagos state outweighs the positive contributions to children's learning. This confirms the findings by Onah and Nche (2014) as related to United Nation's report (2015).

The first effect is the innovative and integrative thinking that ICT can add to the practice childhood learning and teaching. This is imperative given the influential role of globalised ideas and

pedagogical practices that place children and teachers on comparative advantage at international levels. However, the changing roles of teachers and children in the classroom produce a cultural tension that suggests changes in how children and teachers are looked upon in the teaching-learning process.

The resultant changes in the construction of childhood and their capabilities (James and Prout, 2013) is undoubtedly linked to a blur in childhood-youth transition. Moreover, increased internationalisation and professionalisation of teacher education through ICT puts pressure on teachers and create a generational tensions and gaps (Gbadegesin, 2018). Thus, culture alteration and global influences are vital aspect of ICT usage and outcomes for children. The foregoing findings confirmed the theoretical underpinning identified in this paper. It also confirms some of findings by Clarke (2006), Hassan, et al (2012), Onah and Nche (2014).

## 5. Recommendations

In this qualitative study conducted through individual interviews on ECCE stakeholders in Lagos (the largest city in Sub-Sahara Africa and Nigeria with highest rate of internet usage), it is revealed that some important issues that pertain to socio-cultural dimensions of ICT usage require interventions based on the following reasons:

One, the intricacies of a sustainable future for children in the less developed or developing nations does not solely depend on ICT usage but also on important socio-cultural values in the society. This suggests that there is a need to look into how ICT can integrate societal values into its programming mechanism. Two, internationalisation of educational programme suggests that ICT becomes part of children's learning and teacher education, however, danger of negative influence can be mitigated if the use of ICT by children is properly monitored and teachers are given opportunity to critique any aspect that creates tensions.

In the light of this, urgent and pragmatic steps should be taken to address the wave of emerging vices orchestrated from the use of ICT in society especially in the developing countries of Africa.

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