## Reconceptualising Education in Sub-Saharan Africa: Realising Equity and Social Justice

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## ABSTRACT

Although the sub-Saharan Africa region has made giant strides in education, the quality still requires improvement. Linked to this is the high unemployment rate among youth, which has led to migration, with dire consequences. Apart from training people to be literate and numerate, education prepares individuals for life. In this article, the authors present teachers' ideas on a proposed conceptual framework that synthesises the current education system with the traditional African system of education and training. To capture the complexity of the challenge and evaluate its relevance, the authors have adopted the Capabilities Approach Theory, using the explanatory sequential mixed-methods approach. The main research question that guided this study is: "To what extent is the evidence-based conceptual framework feasible for the reconceptualisation of education in the sub-Saharan Africa region, and what are the implications of the findings for education in this and similar contexts? Purposively selected participants made up a sample of 200 teachers for the survey and 10 teachers for the focus group discussion. Data analysis involved descriptive and thematic analysis. Findings revealed that all participants agreed on the need to reconceptualise education in the region and complimented the suggested framework. However, ideas were divergent on how to implement the reconceptualisation of education. The study recommends the need for an African formal education curriculum to be functional, and to focus more on contextualised skills training and job creation, among other things.

***Keywords***: *Education systems, sub-Saharan Africa, social justice, capabilities approach*

## INTRODUCTION

The United Nations Sustainable Development Goal (SDG) 4 (quality education) is a far cry from reality for almost all African countries (Nalugala, 2020). SDG 4 (quality education) means "ensuring inclusive and quality education for all and promote lifelong learning" (UNESCO, 2016). Although giant strides have been made, the quality of education in Africa remains undesirable. Sub-Saharan Africa continues to fall behind the rest of the world in terms of educational attainment, despite recent advancements in economic development (Baxter, 2017). The introduction of the SDG on education is designed to provide inclusive and quality education for every child (United Nations Economic Commission for Africa (UNECA), 2015). The rate of unemployment has led to the migration of youth to seek greener pastures, with dire consequences. One of the reasons for unemployment among this group stems from a mismatch between acquired skills and labour market demands, which depict a poor quality of education (Amadeo, 2022). To support this, a recent World Bank (2022) report that covers 22 Western and Central African countries, indicates the region is presently at the lowest end of the global human capital development rankings, and cites low quality of education as a key hindrance to job creation. Both formal and informal education are deemed critical to the continuity of any society. In an era of global reform and technological innovation, education is the key tool for sustaining and enhancing the development of the African continent. Although giant strides have been made on the continent regarding formal education (Bennel, 2021), the challenges

confronting Africa's education system demand the reconceptualisation of education if education is to meet the needs of society in Africa.

In this article authors suggest a framework, tagged "the best of two worlds", which comprises some elements of Africa's traditional system of education and training, combined with some of the elements that comprise 21st-century education. The framework was developed based on previous research and published work to address the challenges of education across the African continent in line with the United Nations SDGs (Mampane, Omidire & Aluko, 2018; Omidire, Aluko & Mampane, 2021). The aim is to present an eclectic approach by probing the relevance of Sen's Capabilities Approach Theory (Sen, 1993) and using this as a framework by obtaining teachers' perspectives. Hence, the main research question that guided this study was: To what extent is the evidence-based conceptual framework feasible for the reconceptualisation of education in sub-Saharan Africa, and what are the implications of the findings for education in this and similar contexts? The theory adopted for the study helped the researchers interrogate the extent to which Africans are given the opportunity to be and to do what they really value and what has value in their society.

## STATEMENT OF THE PROBLEM

The countries in sub-Saharan Africa share similarities in the post-colonial development of their education sectors. The region has witnessed significant progress in the provision of access to education (Bennel, 2021), as driven by the United Nations. Despite access to education, there are still low levels of literacy, high numbers of early school leavers (dropout rates) and high levels of youth unemployment within the region. These are signposts of a poor-quality education (Education Encyclopaedia, 2021; Fox, Senbet &

Simbanegavi, 2016). Countries within the region grapple with similar challenges, resulting from unactualised expectations from the education systems (Baxter, 2017). A different approach to addressing education should thus be explored. This should encourage relevance to the global context without losing sight of local applicability (Featherston, 2017; Ndille, 2018).

## LITERATURE REVIEW

Education is largely accepted as being the process of acquiring or developing knowledge and skills through structured or unstructured formal or informal learning. It is also the process of transferring the values and traditions of one generation to another. The members of communities and society are educated to ensure that, in adulthood, they can meaningfully contribute to the sustainability of the societies to which they belong. Education plays a key role in elevating the socioeconomic standard of persons around the globe (Arifin, 2017).

Prior to the advent of the formal education system in Africa, these were the goals of education. According to Ezeanya-Esiobu (2019), although in the olden days, on the continent, education among ethnic groups differed, there was a noticeable uniformity in the way of learning and passing on knowledge." Moumouni (1968, p. 16), cited in Ezeanya-Esiobu (2019, p. 22), asserts that "far from being undecided and incoherent, education in Africa is so structured that, from the time of birth until adulthood, the individual is subjected to a well-thought-out plan of inculcating values, discipline, education and all that is needed to ensure an adult who will be useful to the overall growth and development of society".

According to Labé, Dembélé, Sirois, Motivans and Bruneforth (2013, p. 30), most African countries obtained their independence in the 1960s, which generally "marks the end of education provision oriented to the needs of colonial countries

and the start of a more Euro-centric education system tailored to native traditions and needs". Since then, giant strides have been made on the continent, despite the poverty that is prevalent across the region (Education Encyclopaedia, 2021). The available World Bank analysis of basic education in sub-Saharan Africa, conducted in 2012, indicates that the general progress in attaining the goal of universal primary education has been "nothing short of astounding" (Bashir, Lockheed, Ninan & Tan, 2018, p. xxxi). For instance, despite its shortcomings, "total primary school enrolments increased from 63 million in 1990 to 152 million in 2015" (Bennel, 2021, p. 1). There have also been sharp increases in both secondary and tertiary school enrolments, although this has been in poorer countries (Burns, 2021).

Despite this progress, diverse challenges confront education in the sub-Saharan African region. For instance, the dream of realising universal primary education, which should be the right of every child, is still being inhibited by "large populations, high annual child population growth, low GDP growth per capita, high inequality, high share of population in poverty, high linguistic diversity index, and high conflict" (Bennel, 2021, p 1). Other features are elitism, which "only rewards the few candidates who perform well in high stakes national examinations while ignoring the rest" (Fox, Senbet & Simbanegavi, 2016, p. 34), too few facilities that are in a poor state of repair, instructional materials that are in desperately short supply, and underpaid and underqualified teachers who are under-supervised and under-supported (Education Encyclopaedia, 2021). In addition, scholars have identified gender inequalities, which are still prevalent because the schooling of the male child is considered more important than the schooling of the female child, "granting that the girl is considered as the property of another family after marriage" (Asongu,

Orim & Nting, 2019, p. 386). Elu (2018) agrees with this view.

Of significance to this article is the relevance of education to the context of students (Featherston, 2017). Although, according to the author, in about a decade, the number of people joining the workforce will be the highest in the world, the sub-Saharan African education system is still below the workforce's needs. Linked to this is the use of mother tongue education. Although research has persistently shown the value of using the mother tongue in education, which contextualises teaching and learning, most parents are not in support of its use because of the perceived value and life opportunities "metropolitan colonial language competency" … bring to their children (Bennel, 2021, p. 7).

Given the above, it appears that the region has lost the alignment between education and its purpose. It becomes imperative to reconceptualise education. According to Ndille (2018, p. 4), "worthwhile education should grow out of the environment and the learning process should be directly related to the pattern of life in the society concerned". This, Ndille argues, involves developing "local contents curricula, and proliferating the use of African mother tongues in the development and dissemination of knowledge in African institutions of learning and in the establishment of unique structures of education based on African indigenously established purposes making African institutions, and not merely institutions in Africa" (p. 5).

Reconceptualising education will help Africa to "give life turning opportunities to the youth, who drop out of school at different ages" because this will play "a major role in the economic, social, political development of any country by contributing to improved quality of life of every person" (Nalugala, 2020, p. 40, 43). According to the author, this will help the

region achieve SDG 4. Therefore, to help with this, authors of this article have developed a conceptual framework that embraces the best of two worlds: the African traditional education system and the 21ˢᵗ century education system.

## Proposed conceptual framework for reconceptualising education in sub-Saharan Africa

Miles and Huberman (1994, p. 18) defined a conceptual framework as a visual or written product; one that "explains, either graphically or in narrative form, the main things to be studied – the key factors, concepts, or variables – and the presumed relationships among them".

Figure 1 tagged "the best of two worlds", depicts the proposed conceptual framework for reconceptualising education in sub-Saharan Africa. The term, as used in this article, refers to the best ideas from both the African (traditional) education system and the 21ˢᵗ-century education system.

**Figure 1: Conceptual framework: The best of two worlds**

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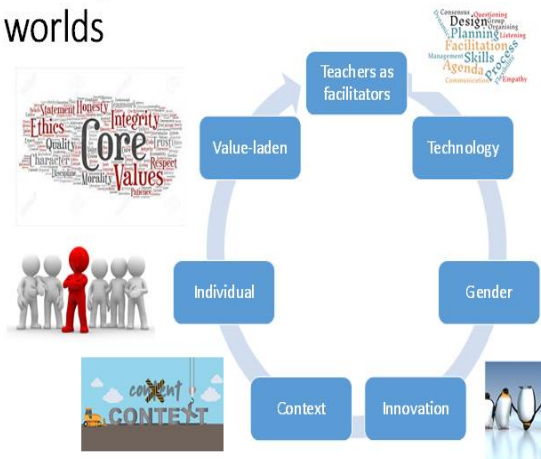


According to Shields and Rangarajan (2013), conceptual frameworks are connected to a research study's purpose. Although the concepts in the suggested framework are not entirely new ideas, l they have not previously been brought together as a whole to address the problem of education systems in the sub-Saharan African context. Thus, the framework is made up of elements that each country can focus on in the reconceptualisation of its education system without losing sight of its local environment. While the concepts are not simply descriptive (Miles & Huberman, 1994), they have been put together to critically examine the phenomenon and suggest a way forward. The proposed framework assisted the researchers to synthesise the 21ˢᵗ-century education system with the system of education and training African societies used to know (the traditional African education system). It also guided the question items of the survey.

The seven concepts that make up the framework are given below, with a brief description of each.

- *Teachers as facilitators*

"In the arena of teaching, facilitation as an engaged practice is best appreciated when the teacher subscribes to the experiential learning method. This means that the teacher departs from the traditional lecture method. The teacher treats the learners as having responsibility for their own learning" (Purnama, 2015, p. 365–366).

- *Value-laden education*

The Open Education Sociology Dictionary (OESD) (2021) defines "value" as "an ideal or principle that determines what is correct, desirable, or morally proper". Examples are honesty and strong work ethic. "Depending on social and cultural contexts, different terms may be used instead of "attitudes and values". These terms include "affective outcomes", "aptitudes", "attributes", "beliefs",

"dispositions", "ethics", "morality", "mindset", "social and emotional skills", "soft skills" and "virtues" (or "character qualities")" (Organisation for Economic Cooperation and Development (OECD), 2019, p. 4).

- *Context-specific*

Although hazy in its definition, scholars agree that education is context-dependent and very important for learning (Dohn, Hansen & Klausen, 2018). According to the authors, it encompasses location (both physical-geographical and institutional), knowledge domain, sequence of occurrences, activity, historical period, social relationship, and an individual's set of experiences. Education is expected to get people ready for life, work, and citizenship (Strauss, 2015).

- *Technology*

Technology in education refers to "the use of machines and educational equipment of different sorts (e.g., language laboratories, tape recorders and video) to assist teachers and learners" (Richards & Schmidt, 2010, p. 190). "Technology cannot be effective in the classroom without teachers who are knowledgeable about both the technology itself and its implementation to meet educational goals" (DeCoito & Richardson, 2018, p. 362).

- *Individual needs*

According to Thiele, Mai and Sherri (2014, p. 80), student-centredness describes "the ability of the teachers to actively engage students so that they could learn, discover, and/or be trained". Some of its benefits include "student motivation, critical thinking, and academic skills" (Keiler, 2018).

- *Gender*

The United States Agency for International Development (USAID) EducationLinks (2021) describes gender as "the socially constructed roles and relationships, personality traits, attitudes, behaviours, values, relative power and influence that society ascribes to sexes. Gender refers not simply to women or men, but to the relationship(s) between them". The Education Agenda 2030 "ensures that girls and boys, women and men not only gain access to and complete education cycles but are empowered equally in and through education" (United Nations Educational, Scientific and Cultural Organisation (UNESCO), 2019).

- *Innovation*

According to Serdyukov (2017, p. 8), innovation in education refers to looking "beyond what we are currently doing" and developing "a novel idea that helps us to do our job in a new way" with the aim of creating "something different from what we have been doing, be it in quality or quantity or both". Hattori and Wycoff (2004), cited in Van der Elst (2016, p. 9), identified the four components of innovation in education as "people", "creating value", "new ideas" and "implementation". To bring about an effective change, innovation must be diffused and implemented on a large scale (Serdyukov, 2017).

The authors of this article are of the opinion that the conceptual framework will enable Africa and other developing countries to meet the conditions for global competitiveness. Detailed discussion about each of the concepts that form part of the framework will be integrated into the discussion section of this article in relation to the theory adopted for the study.

**THEORETICAL FRAMEWORK**

The Capabilities Approach Theory propounded by Sen (1993) and developed by the philosopher Martha Nussbaum (Nussbaum, 2011) guided this study.

Sen (1993, p. 90), who popularised the Capability Approach Theory, defines

capability as "a person's ability to do valuable acts or reach valuable states of being; it represents the alternative combinations of things a person is able to do or be". This invariably determines the sort of life they are effectively able to lead (Robeyns, 2020). Therefore, the states of human beings and activities we can undertake are referred to as "Functionings", which determine the value of life (Sen, 1993; Robeyns, 2005; Nussbaum, 2011).

On the other hand, according to the authors, capabilities become the real freedom to achieve functioning. Freedom is conceived as a valuable option that is made available to the agent. Nonetheless, the idea of freedom embraces "ethical individualism" (Robeyns, 2005, p. 108), although not in a selfish way. Therefore, the question is: "What is each person able to do or be?" It does not just ask about a person's total or average wellbeing, but about the opportunities (freedom) available to each person. This shifts the axis of analysis to establishing and evaluating the conditions that enable individuals to take decisions based on what they have reason to value (Walter & Unterhalter, 2007). Therefore, capabilities evaluate policies based on their impact on people's lives.

In 2005, Robeyns (2005) introduced the term "conversion factors" to the debate, in which he identified personal conversion factors (internal to a person, e.g., intelligence and disability), social conversion factors (e.g., public policies, social norms and power relations) and environmental conversion factors (e.g., the physical or built environment). These tie in with Sen's view that capabilities are opportunities made feasible and constrained by both internal and external conversion factors. In essence, we are being compelled to now view development less and less in economic terms, but to be more concerned about human beings by placing them in the centre (Chikunda, 2013).

In this study, the authors focused on the three core ideas of the approach – functioning, capabilities, and conversion factors – to examine the extent to which formal education on the African continent has prepared individuals for life and work by equipping them with the skills required to succeed and be productive, functional members of society. The teachers that participated in this study were invited to assess the validity of the proposed framework by the researchers to mitigate the challenges faced by the formal education system on the continent using an eclectic approach.

**RESEARCH METHODOLOGY**

The explanatory sequential mixed-methods approach in which the quantitative data was first collected was adopted for this study, followed by the qualitative approach. However, the emphasis was on the latter (quan + QUAL) (Edmonds & Kennedy, 2017). The purpose of adopting this design was to clarify the findings of the quantitative instrument.

**Data collection**

In the first phase of the study, the authors developed a survey questionnaire, using purposive sampling, which was distributed to 200 teachers from Ghana, Nigeria, Rwanda and South Africa. The second phase involved a focus group discussion with 10 teachers (from diverse African countries) in Gauteng, South Africa. A focus group discussion was deemed necessary to gain further insights and elaboration on the survey findings from the teachers. The focus discussion questions were formatted as open-ended questions.

Ethics approval to conduct the study was granted by the authors' institution. The researchers adhered to all the research ethics guidelines, such as informed consent, voluntary participation, anonymity, and confidentiality. There was no risk of harm

to any of the participants. The participants granted permission to audio record the discussion session.

**Description of questionnaire**

The questionnaire comprised two sections and seven subcategories. Section 1 dealt with the demographic details of the participants, while Section 2 contained the subcategories of the conceptual framework (teachers as facilitators, value-laden education, context-specific, technology, individual needs, gender, and innovation).

Each of the subsections had three questions, except for the subsection on gender, which had two questions. There were four demographic questions and 20 questions based on the conceptual framework. The questionnaire was designed on a five-point scale, which required responses ranging from strongly agree to strongly disagree. Survey data was analysed using Microsoft Excel to generate descriptive data, while the focus group data was analysed using thematic analysis. The audio-recorded data was transcribed, coded and categorised to arrive at the emergent themes.

**FINDINGS**

The participants' demographic information reveals that most of the participants from Nigeria and South Africa were between 41 and 50 years of age. The participants from Rwanda and Ghana were between 21 and 40 years of age. The educational attainment of the teachers also differed across the countries, with Nigeria and Ghana having the most teachers with a tertiary education.

The findings revealed several similarities in the curriculum content and delivery modes across sub-Saharan Africa. Participants' comments reflected consensus on the need to reconceptualise education in sub-Saharan Africa. Most of the participants also agreed with the concepts included in the

suggested conceptual framework. However, there were divergent views on how the reconceptualisation could be implemented in the various aspects of the framework.

- *Teachers as facilitators*

The findings demonstrated that teachers believe that they play a significant role in the stability of the education system and in educating students. The teachers unanimously concurred, with about 98% agreeing and strongly agreeing that it is necessary to transform education in Africa. They furthermore agreed that teachers play an important role as facilitators in the transformation of education. In addition, the findings show that teachers admit that they need structured support to transform education in Africa.

- *Value-laden education*

Although 96% of the teachers agreed and strongly agreed that African values and indigenous knowledge systems are relevant to 21$^{st}$-century education, it is worth noting that 4% of them disagreed with this statement. This warrants further investigation. The findings indicated that 31% of the teachers were either neutral or strongly disagreed with the fact that African values and indigenous knowledge systems should be more visibly incorporated into education. Furthermore, they disagreed that traditional ancestral African values have a strong influence on multicultural education. Although 69% agreed and strongly agreed that African values, traditions and indigenous knowledge systems are important and should be incorporated into the education system, the 31% disagreement is worth further investigation.

- *Context-specific*

With context-specific education, the survey questions explored whether the African education curriculum should only

address African concerns, whether it should only address Western concerns, or whether the curriculum should combine issues relating to both contexts. In this section, 89% agreed or strongly agreed that the African education curriculum should address both African and Western concerns. Those who were neutral constituted 9% of the group and 2% disagreed.

The following are relevant quotes from the focus group discussion.

*"But we can align the skills that we think that we need as a country and train them in that way."*

(FGP8)

*"At the end of the day, we have a graduate in Limpopo roaming around the street, no jobs. Why? Because that person has no skill that is relevant to the economy of the environment."*

(FGP1)

- *Technology*

Regarding the place of technology, 94% of the teachers agreed and strongly agreed that technology creates avenues for education transformation, while 99% believed that teachers and students need support to use technology in education. In terms of whether teachers hinder the implementation of technology in education, 54% disagreed and strongly disagreed with this statement, but surprisingly, 46% were neutral or strongly agreed with this statement. These findings are reflected in the participants' comments below.

*"I think technology is good because the learners should start there, but grow up with it, we must see them as engineers. We must see them planning our countries."*

(FGP3)

*"With technology, it gives the child the opportunity to see how things are done."*

*"I think we need to introduce technology from especially primary."*

(FGP9)

*"Then the role of teachers, I think we need to put it in their mind. Its mindset…, I think the attitude to technology depends on that teacher's exposure also."*

(FGP6)

- *Individual needs*

The findings showed that the teachers were divided on the statement that "all students' needs are the same in the same environment". A total of 31% of teachers agreed with this statement. They were mainly from Nigeria and South Africa. However, 69% believed that students have various individual needs, even within the same environment. In addition, 79% of the teachers strongly agreed that 21$^{st}$-century education can be made relevant to individuals' needs in Africa, while 88% believe that access to student support is the greatest and most urgent need.

*"There is not enough personnel in that area. Even if they say you are very skilful, you cannot teach 40 learners and attend to their individual needs in one class. Those 40 learners can be constituted of eight different groups."*

(FGP1)

- *Gender*

In terms of gender, most of the teachers disagree and strongly disagree that females enjoy more access to education

than males in Africa, and conversely, they agree that males enjoy more access to education than females in Africa.

*"The general behaviour with our learners, they say I am a man, I need to be a manager. I am a lady, (being a receptionist) is fine for me. Now, there is physical science where you can even burn your toe and get cut and no one will pay for you."*

(FGP3)

- *Innovation*

The majority of the teachers (98%) concur that education innovation requires incorporating contact and online activities in the hybrid learning format. However, 15% of the teachers disagreed and strongly disagreed that education innovation in Africa means incorporating other cultures, and 16% were neutral regarding this question. Finally, 83% of the teachers agreed and strongly agreed that African students need 21st-century skills to survive.

*"The African education system is not innovative and that is why it seems our education, we are pushing the learner."*

(FGP2)

From the above, we can deduce that teachers are key facilitators in the transformation of education, but they need structured support. In addition, African values and indigenous knowledge systems are relevant to 21st-century education and should therefore be more visible in the education system. The African education curriculum should address both African and Western concerns. Furthermore, teachers and students need support to use technology in education, and 21st-century education can be made relevant to the individual needs of Africa, but students need support regarding access. It was strongly agreed that males enjoy greater access to education

than females in Africa, and that education innovation is critical. African students need 21st-century skills to incorporate contact and online activities (hybrid learning) to survive and thrive in their studies.

## DISCUSSION OF THE FINDINGS CONSIDERING THE CAPABILITIES APPROACH THEORY WITH IMPLICATIONS FOR EDUCATION IN SUB-SAHARAN AFRICA AND OTHER SIMILAR CONTEXTS

The Capabilities Approach Theory that guided this study takes the attention of society away from viewing development as largely economic but emphasises the need to place human beings at the centre of development (Chikunda, 2013). Therefore, the theory accentuates three major aspects: functioning, capabilities, and conversion factors. The discussion in this section will revolve around these aspects in relation to the suggested conceptual framework and the findings of the study.

According to Jacobson and Chang (2019, p. 113), "the concept of *functioning*, which has distinctly Aristotelian roots, reflects the various things a person may value doing or being". These sum up the various states of human beings and activities that a person can undertake (Robeyns, 2020). Findings from this study strongly suggest that the formal education system in sub-Saharan Africa is not paying adequate attention to these aspects. An example, as provided by the participants, is the education curriculum that is not context-specific, which is what the 21st-century education system advocates. They have buttressed this with the high number of jobless graduates – as is also supported by literature (Trading Economics, 2021). This invariably means that many people could be doing menial jobs that are not commensurate with their qualifications, just to keep body and soul together. According to Hamilton-Ekeke and Dorgu (2015),

joblessness is a result of education not embedding indigenous local knowledge into school curricula that leads to a misalignment, coupled with the failure of education to foster economic self-sufficiency. Therefore, the African formal education curriculum needs to be functional by focusing more on skills training and job creation.

The participants further argued that it is necessary to align acquired skills to the African environment by providing more entrepreneurial and vocational education. However, according to them, for this to work, African communities need to return to the concept of dignity of labour, which a former Deputy General of the International Labour Organisation (ILO), Somavia (2014, p. 67), refers to as "decent work" and defines as "a foundation of personal dignity, as a source of stability and development of families or as a contribution to communities at peace". Nonetheless, because of its lack of "societal significance" (Somavia, 2014, p. 67), Cruddas (2021) argues that dignity of labour needs rethinking, especially after the global COVID-19 pandemic. Consequently, it is not enough for Africans to have formal qualifications; these should be able to support the African economy. The authors of this article argue that this could be a major reason for the low level of development in Africa. The authors think that the tenets of the Capabilities Approach Theory (Sen 1992, p. 39) – that valuing what one does leads to a flourishing life – are generally absent in Africa. This theory further argues that functioning is constitutive of a person's being, which "means that one cannot be a human being without having at least a range of functionings", which makes one's life different from that of innate objects and animals (Robeyns, 2020, Sec. 2.6, par 2).

Closely related to this is the teacher, who the participants see as playing a significant role in the stability of the education system and in educating students. In support of this assertion, Chikunda (2013, p. 136) shows that the "teacher is a crucial resource in any learning environment". However, teachers need to become facilitators so that learners can learn how to do things for themselves. African teachers need to focus more on hands-on teaching; there is a need for an attitude change that stems from a changed mindset. They need to move away from being the sage on the stage. In their study, Muganga and Ssenkusu (2019) assert that there is ample evidence that most developing countries still rely mainly on teacher-centred learning in contrast to the Western world.

In addition, according to Tsindoli (2018), teachers often push their own culture and that of their students to the background because they have not been trained to diversify their curricula to teach students from diverse cultures. Abah, Mashebe and Denuga (2015, p. 668) assert that it is necessary to consider "whose and what knowledge is considered worthwhile", especially in developing countries where "formal education continues to be Euro-centric in outlook and academic in orientation, reflecting Western scientific cultures rather than the cultures of learners and the teachers". Therefore, scholars aver that there is a need to revamp teacher training curricula, with less reliance on Western textbooks for the dissemination of knowledge and information; finding a balance between globalisation and Africanisation, and the management of multiculturalism that embraces varied philosophical narratives (Ndlovu-Gatsheni, 2016; Ndille, 2018).

For Africans to be actualising their functioning in the 21st century, the participants stressed the relevance of technology. Therefore, they advocated the early exposure of learners to technology so that they can get used to it, and to boost collaboration. The authors of this article

argue that the current COVID-19 pandemic has made this argument more solid, where most schools on the continent had to shut down and could not continue their core business of teaching and learning due to a lack of resources (UNESCO, 2020). The participants also sometimes lamented the prevalence of technology that is irrelevant to the environment and rather advocated tailor-made technology. According to Ezeanya-Esiobu (2019, p. 99), "for technology to be considered appropriate, it must be founded on certain fundamental principles, which include accessibility and affordability; ease of utilisation and maintenance; meeting real needs of end-users; and effectiveness."

In relation to the relevance of the 21st-century education system to the African context, most of the participants in this study frowned on the idea of the previous Western education system teaching Africans to live an individual life, which is quite different from Africans' communal life. They argue that the African value system should be infused into the formal education system. The first concept stressed is Ubuntu, the African philosophy where the community is more important than the European concept of individualism.

It is interesting to note that the 21st-century education system now focuses on "non-cognitive skills", known as "character strengths or developmental assets such as motivation, delayed gratification, self-discipline, and grit" (Ball, Joyce & Anderson-Butcher, 2016, p. 1). According to OECD (2019, p. 4, 7), "international bodies have identified attitudes and values as integral to individual and social wellbeing…and those competencies go beyond knowledge and skills".

The participants also identified gender stereotyping as a major concern in the African traditional system of education, which they asserted stems from society. To buttress this, the United Nations Children's Fund (Unicef) (2020) confirms that, although most countries have achieved gender parity in, for instance, primary enrolment, in many countries, inequalities that do not favour the girl-child continue. This assertion is buttressed by other scholars (Chikunda, 2013; Mwalongo & Mwalongo, 2018).

Capabilities refer to the real opportunities provided to citizens to be or to do. The emphasis here is on opportunities, which Sen (1985) also refers to as freedoms – the availability of prized options or alternatives. Findings from this study show that, in some instances, where the curriculum has been improved upon, the participants complained about inadequate resources at schools, citing the example of bio-fertilizers in agriculture. According to the respondents, although African students have the theoretical knowledge, they have no practical experience. Therefore, they are not provided with diverse options to choose from. The lack of resources limits students' options, which can also be linked to innovation, which the 21st-century education system advocates. Although technology transfer has helped the continent, technological innovation has not really been based on the pre-existing indigenous knowledge of Africa (Ezeanya-Esiobu, 2019). "In nowadays knowledge-based society, the local embedded knowledge and innovation are considered as the core competence of the curriculum of the region" (Hamilton-Ekeke & Dorgu, 2015, p. 32). Therefore, Ezeanya-Esiobu (2019, p. 100) asserts it is time to bridge the gap between what is researched on the continent and what it needs because Africa "records the lowest patent applications around the world". To be functional in society, students need exposure to diverse combinations or sets of potential functionings (Robeyns, 2020). The Capabilities Approach Theory asserts that a society cannot talk about development if citizens do not have the freedom to choose from "among preferred development

options…that may range from development priorities to cultural values, preferences to individual identity options or various sustainability efforts", which Sen advocates (Jacobson & Chang, 2019, p. 111).

Although participants in this study attested to the availability of education policy in their respective countries and there appear to be similarities in the content and delivery modes, they lamented the non-involvement of stakeholders (for example, teachers and society in policy making). As a result of this, teachers felt left out and complained that policies with their implementation are left to the whims and caprices of politicians, who politicise education. In addition, Ezeanya-Esiobu (2019, p. 103) avows those policies have often been formulated on behalf of African leaders "by external parties, and/or copied from other nations". Therefore, generally, there is not much prevalence of "authentic public policy formulation and implementation based on local and contextual knowledge".

According to the Capabilities Approach Theory, opportunities should be selected by those affected, which is contrary to the findings of the authors of this paper. Alkire (n.d.) refers to this as "authentic self-direction…which is the ability to shape one's own destiny as a person and a part of various communities". Where this is absent, this means that others determine what citizens should value or what a good life must entail (Jacobson & Chang, 2019). Citizen "agency", according to the authors, is a related concept that builds on the feature of capabilities. However, it does not refer to "the narrow meaning in which an agent represents someone else" (Jacobson & Chang, 2019, p. 115). Rather, "it is a person's ability to act on what they value and have reason to value" (Sen, 1999, p. 19).

Lastly, the conversion factors introduced by Robeyns (2005) show that the theory is not oblivious of individual differences in students and the effect of inherent personal abilities. However, it argues that at least all students are presented with diverse opportunities (social and environmental conversion factors) to convert these into functionings. Although participants also acknowledge diverse innate differences in students, they lamented the absence of career counselling offered in most schools that could have assisted students to make the right choice for their lives.

Therefore, the participants in this study stress the need for Africa to go back to the drawing board, which Jacobson and Chang (2019, p. 116) refer to as "government by discussion". According to the authors, "Sen's overall theory holds that public communication should lead to more effective government understanding of public interests" (p. 116). Overall, each of the sub-categories of the conceptual framework interrogated by this study speaks to the core beliefs of the Capabilities Approach Theory.

**CONCLUSION**

There is ample evidence in literature and from the findings of this study to support the fact that there is a yawning gap between what the current formal education system in sub-Saharan Africa has to offer and what the African society needs. Although this article does not advocate for a unified education system due to the complexities and uniqueness of each country, the suggested framework contains elements that can be applied within the region and beyond. This is more so because it advocates for a blend of both the local and global paradigms. Ndille (2018, p. 4) rightly argues that the "content of education is the school curriculum, and its choice is primarily determined by the aims of education set by the society concerned, which, in turn, determines the structure of the education system and its sustainability. These are expected to be unique as societies

are unique in their composition, past experiences, daily challenges, world view and future".

The Capabilities Approach Theory adopted for this study has helped the authors to focus on the quality of the opportunities, education has to offer society on the continent. As advocated by the theory, we should not just be interested in the number of graduates educational institutions produce every year. It is high time we started asking the right question: To what extent are individuals given the opportunity **to be** and **to do** what they have reason to value, which, in turn, will positively impact their society? The authors believe that the conceptual framework interrogated in this study will go a long way to contributing to the holistic approach needed to reconceptualise education on the continent.

Lastly based on the findings from this study, the authors recommend the following:

- The African formal education curriculum needs to be functional by focusing more on contextualised skills training that leads to job creation and establishing counselling units in schools to guide students.
- Teachers need more training on their roles as facilitators of learning and how to integrate societal values and contextual realities based on collective experiences into their teaching and delivery of curriculum content.
- Increased access to technology should be prioritised; contextually relevant innovations should be promoted.
- Sub-Saharan Africa needs to return to its value system, now recognised in the 21st-century education system as non-cognitive skills.

- The region still needs to do more to remove prevalent gender-stereotyping.
- The involvement of key stakeholders in policy making is paramount.
- The framework should be applied in a longitudinal intervention study in representative countries across the sub-Saharan African region.

## DISCLOSURE

There is not any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations which could inappropriately influence, or be perceived to influence, our work. All authors have approved the final article.

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