

The Lacuna in African Education Systems: Why the Systems are not Achieving the Needs for 21st Century Learned Citizens

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Abstract

This is a library-based research paper that explored problems facing African education systems in the 21st century and how to address these challenges. It is almost six decades since first African country received its independence from colonial masters but African education systems are still ineffective and pupils are not in schools and those in schools some are graduating without basic literacy skills of writing, reading and doing simple numeracy. The findings indicated that African education systems has a lot structural problems such as policy issues, management problems, poor curriculum, lack of funding and lack of 'political will' to improve education system. This study provide some suggestions on how to reform African education systems so as foster the skills development for the 21 century citizens.

1.0 Introduction

Although it is almost six decades since most of African countries attained their independence from colonial masters and embarked on deciding their own destiny, Africa is still struggling to provide basic education to its people despite its wealth natural resources endowment. The key questions that we need to ask as Africans, African scholars, African think tanks and political leaders are: What is wrong with the current African education systems? Why is African education ineffective in addressing the needs of the learning masses? and 'How do we move Africa from the current educational stalemate into a prosperous continent where education is a key for skills development that meets the needs of 21st century citizens? Off course, the cardinal role of education as a key factor for human social, economic, cultural, and political (democratic) development is incontestable. It is agreed internationally that education is fundamental to human development because it:

- offers the poor a route to a better life because educated society would not transfer poverty to the next generation;
- transforms employment prospects – education improves the likelihood of employment opportunities for both men and women;
- boosts economic prosperity – education increases people's skills and knowledge that help them to exploit both physical and human resources which helps to generate productivity and fuel economic development; and
- improves people's chances of a healthier life - country with unhealthy citizens finds it difficult to develop because a sickly population is unlikely to concentrate in building the nation (see UNESCO, 2014, pp. 143-148).

Despite the prospects agreed worldwide on the potential of education on human development, education systems in African have a lot of structural problems that hinder economic development and prosperity of its people. This paper discusses what is wrong with the current education systems in Africa and why the systems are not effectively playing their role of bringing prosperity of the society at large.

2.0 Problems facing African education systems

Problems of African education systems are historical while others are culturally made and some have political and ideological¹ roots. Historically for example, Africa inherited western education systems that by nature are immiscible with African cultures and traditional education systems. This incompatibility nature between western education and African values has resulted into passive acceptance of formal education in some communities across Africa. Most displeasing issue in African education systems is yet almost after six decades since independence the systems are producing illiterate graduates', who cannot read and execute simple numeracy. The education systems in Africa are in perplexing state because of the following problems.

First, the myth that pupils enrolled in schools receive quality education. This fallacy is contributed to by the African Government education policies where the major focus is on education access and equity. Since independence and even today many African countries have been pulling their scarce resources to ensure more pupils are enrolled in schools and increased pupils enrolment is politically used as measure of education achievement. This narrow thinking that success of an education system is an increase in pupils enrolment has unforeseen impact on quality education provided in schools because little resources are allocated to facilitate

¹ One of such ideologies is the newly emerged religious movement in Nigeria and Somalia that is resisting formal western education

classroom teaching. As a result pupils enrolled in schools graduate from schools neither with employability skills nor self-employment skills. Enrolled pupils in schools graduating without literacy and numeracy skills has major negative impact to education systems itself because it set a precedence that staying in classroom for six or seven years does not add any qualitative value to the pupils life and therefore de-motivate parents on role of formal education for their well-being. Africa south of Sahara for example has achieved almost 77% of pupils' enrolment. However, 40 million children from the region are not in the walls of the classrooms² - and this suggest that sub-Saharan Africa has a long way to achieve Education For All and the second Millennium Development Goal (achieving universal primary education). Despite success in terms pupils enrolment, African education systems have failed to transform success in enrolment into pupils learning outcomes.

Second, education in Africa is not properly funded either because of inadequate budget or less priority accorded to education in governments' budgets. For example, according to the World Bank report, public spending on education in sub-Saharan in 2010 was 4.66% of total GDP (World Bank, 2010). UNESCO proposes that, for achieving basic education individual countries particularly developing nations should increase education spending to at least 20% of their GDP. As results of poor funding many schools in Africa particularly where majority of poor families send their children are schools with no chairs, books, science laboratories and others basic needs for pupils learning. However, in my view inadequate budget is not essentially the major issue but management of the little funds allocated to schools is a major concern all over the continent. Various studies (Thenga, 2011, Teferra, 2013) have reported mismanagement of education funds, corruption in school system are engulfing African education systems.

Third, African education systems still use traditional and outdated curricular resources. The curricular are overloaded with content knowledge, emphasis is on content completion rather than students learning and skills development. Most curriculum materials in Africa were inherited from colonial regimes. Some of these curriculum materials are even divorcing Africans from their own philosophies of life into the western philosophies which are immiscible by nature with African culture. Apart from curriculum irrelevance, classroom teachings are lagging behind and most of the teachers' practices are on 20th century pedagogical practices that consider pupils as passive learners. Despite recent curriculum reforms in different African countries (e.g. Tanzania, South Africa, Botswana, and Kenya) that introduced competence-based curriculum, research shows that there is no significant change in teacher's classroom practice and assessment system (Anney, 2013). As a result of the fragmented curricula, teaching in most African classroom is characterised by:

- time-based teaching where success in education is determined by completing number of years in classroom instead of teachers focusing on personalised student learning outcomes;
- memorisations of disconnected facts rather than focusing on what pupils will know and can do after all details have been forgotten after learning;
- teachers focusing on the lower level of Bloom's knowledge taxonomy such as remembering, comprehension and application instead of teaching higher order Bloom's knowledge categories such as synthesis, analysis and evaluation that develop pupils critical thinking (see Anney, 2013);
- Teaching that is textbook driven and some of these books contain irrelevant and incorrect information instead of education that is research based;
- The belief that teachers are sole source of knowledge (teacher-centred), authoritative and they act as transmitters of knowledge—and so a teacher is the centre attention rather than facilitator of students' learning;
- The belief that all students are intellectually equal which ignore the potential of diversity as key for student creativity and learning—and because lack of diversity, African education systems are not preparing students for complete self-reliance but for further employment; and
- The belief that the purpose of teaching literacy to pupils is to enable pupils to learn the 3R's – writing, reading and arithmetic - instead of equipping them with skills that would empower them to compete in the global market (see 21st Century Schools, 2014).

Fourth, education success in Africa is under pressure of shortage of teachers and even the few teachers available in schools are less motivated and their professional skills do not match with the needs of 21st century education. Many teachers in current African education systems subscribe to a paradigm of teaching and thinking which is still influenced by teacher-centred orientation. Unfortunately, teacher support system such as professional development and learning opportunities are inadequate and if available are uncoordinated and unsustainable in enhancing teachers learning needs. Most professional development activities are based on one-short workshop visit instead of using school-based professional learning communities. Despite inadequate ability of universities in Africa to train teachers to fill the current shortage, half of trained teachers do not report to teach in schools—they are employed to other non-teaching jobs such as banks, police, military, business, etc. The teacher demand in Africa is worse in science-related field and if care will not be taken, African education

¹Some basic facts about education in Africa

systems are likely to lose their little pride in science and technology.

Fifth, poor teaching and learning environment that demotivate both teachers and students across the continent is another challenge facing African education systems. For example, many schools across sub-Saharan Africa do not have required facilities that an ideal or even a basic primary school or secondary school should possess. Classrooms are overcrowded by students, books are not available, students sit on the floor which discourage even student learning as a results there is absenteeism for both teachers and students. A recent UNESCO (2012) report claimed that “the countries that provide almost all pupils with both a reading and a mathematics book are few, throughout the [Africa] continent” (p. 13). Poor learning environment has negative consequence on student learning outcomes and this is felt more by poor communities in rural schools and marginalized groups.

Sixth, use of foreign languages (English, French, and Portuguese etc.) as medium of instructions in education is another tricky problem currently facing African education systems. This problem has established roots in African education systems as both elites and non-elites are the ambassadors of foreign language across the continent—and Africa has been franchised into languages of their former colonizers. Language of instruction affects technology transfer, pupils’ creativity and problem solving ability. Pupils in countries where foreign language other than pupil’s mother tongue is used as medium of instruction typically struggle first to learn the medium of instruction while at the same time they are required to learn the subject matter. This means that students have to translate knowledge in textbooks from foreign language into the local context given that Africa has different heterogeneous dialects. This implies that an education system that uses foreign language in country with many dialects itself sets pupils in a burden of learning their lessons with difficulties and hence resulting into poor pupils learning outcomes. Unfortunately, existence of different language dialects in African society and impact of colonial hegemony necessitated the use of foreign language across African continent, in particular, Sub-Saharan Africa.

Last, brain drain is another bottleneck facing African education systems as well as other important sectors such as health and technology. The best brain required to boost African education has been migrating into developed countries with a claim that they are looking for greener pasture. One of critical negative impacts of brain drain Africa is the widening gap in science and technology innovation between Africa and the developed world (Tebeje, 2013). Tebeje (2013) claimed that there are more African scientist and engineers in the USA than in the entire African continent. For example, in the Republic of South Africa after the end of apartheid policy, many white teachers have been migrating to New Zealand, United Kingdom and Australia. The similar problem is also facing education sector in Zimbabwe. The widening gap of science and technology between Africa and the west has negative consequences in science technological innovation in particular hardware and software technology development. To move African education, Africa must address the problem of brain drain facing its education systems.

3.0 Reforms in education as means of addressing African educational challenges

Reforming the education system is not a new phenomenon but is a catalyst for socio-economic development of any society. In order for Africa to progress in the education sector to meet the needs and challenges of the 21st century, Bolstad, et al. (2012) proposed what they referred to as *emerging principles of the 21st century education system* that are needed if a nation is to move from the 20th century traditional education systems to a 21st century pragmatic education systems that addresses the needs of all learners. It is the position of this paper that some of these principles if adopted are relevant to current challenges facing African education systems and would indeed help to transform education in the continent. These principles are:

- Reforming education from whole school learning to personalising learning;
- Reassessing education policy to embrace new views on access, equity, diversity and inclusivity;
- Reforming the aim of the curriculum from gaining knowledge to developing learners’ capacity;
- Changing teachers and students bookish style of teaching and learning; and
- Adopting new kinds of partnerships and relationships in schools.

3.1 Reforming education from whole school learning to personalising learning

Currently in African classrooms the teaching style is based on whole classroom instruction with little emphasis personalised learning. Personalised learning according to Green, Facer, Rudd, Dillon, and Humphreys, (2005) means that “The logic of education systems should be reversed so that it is the system that conforms to the learner, rather than the learner to the system” (p. 3). Thus, the current education systems in Africa still embraces the idea that ‘one-size-fits-all’, where education requires learners to fit into the system, rather than the system meeting the needs of the learner (Bolstad, et al. 2012). This implies that African education systems forces learners to fit into the system instead of the system addressing the needs of learners, marginalised or disadvantageous communities in Africa, or communities with a unique culture such as the Hadzab and Barbeig in Tanzania, Herero and Bushmen in Bostwana, Toureg in west Africa still lag behind and the gap is widening,

and so other aspects, such as economic empowerment and obtaining justice, are affected. Personalised learning means that the education system has to support each student, take notice of their interests, meet their needs and recognise that diversity as a strength that can be used so that they achieve their full educational potential. If we reforms African educations systems the nations will achieve a goal of employable community and education that meet the needs of the learners.

3.2 Reassessing the education policy as regards to equity, diversity and inclusivity

Education and Training Policies in many African countries mainly focuses on educational access and equity - and education achievement is measured by expansion of pupils' enrolment. This narrow perspective of looking education achievement as enrolment expansions has negatively opaqued important aspect of quality education. There is need to reassess the concept of equity and access in African education systems. Education policies should go beyond student enrolment and distribution of resources, rather address the problem of enrolled learners' underachievement. This policy position where education attainment is determined by enrolment has failed to meet the needs of marginalized communities across the African continent in particular learning achievements. Successful education system should look on diversity and inclusivity of learners whereby education policies address individual learner's needs and education achievement and this state is measured by pupils learning outcomes. Bolstad et al. (2012) argued that education systems should ensure that learners are totally engaged and that all learners are successful, regardless of their social background. In the current globalized world citizens need to be educated more widely, because the current global environment requires people to work with others who speak different languages, have varied culture and religious backgrounds. Indeed, education that equips people with added skills will facilitate their mobility and could lead them out of poverty.

3.3 A curriculum that uses knowledge to develop the capacity for learning

Relevant curricular is one of the key to success to any education system. Globally, there are two epistemological positions that guide curricular: first is the traditional one, whereby knowledge is regarded as "content, concepts and skills selected from the disciplines to form the "subjects" or "learning areas" of the school curriculum" (Bolstad et al. 2012, p. 3). Of course if the curriculum is built on this epistemological position then the role of learners is to absorb knowledge and demonstrate it in the future using different forms of assessment. This view implies that knowledge is for future use. In order to reform current African education systems, this traditional thinking should be replaced by an education system that enables learners to use the knowledge gained not only in the future, but particularly in the present. Therefore, for education to bring impact instead of regarding the curriculum as content, it should be seen as a "guide for shaping and developing learners' abilities" (Bolstad, 2012, p. 32). This view is also shared by UNESCO, that the 21st century curriculum should adopt four learning pillars: learning to know, learning to do, learning to live together and learning to be (Delors et al., 1998), which is the missing ingredient in many African education systems.

The second epistemological position that curriculum is based is the 'knowledge age', whereby knowledge is "seen as something which does things ... Knowledge, in the Knowledge Age, involves *creating* and *using new* knowledge to solve problems and find solutions to challenges as they arise on a just-in-time basis"(Bolstad, et al. 2012, p. 3). The major argument in this epistemological position is that the core goal of education system is not reproduction of existing knowledge because is not possible for education system to predict what exactly knowledge people need and also thinking that knowledge can be stored for future use is irrelevant in how knowledge is developed in current globalised world where skills are diverse and changing (Bolstad, 2012). Based on this position, curriculum should equip learners with the *ability to use knowledge to do things and solve problems*, as well as the ability to share knowledge with others. It means that the curriculum should focus on developing the ability of individuals to work with knowledge, and "knowledge should be seen, not as an end in itself, but as a context within which students' learning capacity can be developed" (Bolstad, et al. 2012, p. 4). In adopting this position, the thinking and assumptions in school curriculum that the current traditional teaching will develop learners' capacities should change to developing individual learner's competencies to work with knowledge.

3.4 Changing teachers and students bookish style of teaching and learning

The education system in Africa is bookish oriented and the teachers role is transmit knowledge to learners whereas the learners' role is to receive passively transmitted knowledge. The current bookish education system is not relevant in the current changing world - role of the teacher and student should move to that of supporting each other for the purpose of developing the potential of individual learners (Bolstad, et al., 2012). For education systems in Africa to succeed, there must be a paradigm shift from the current traditional view that regards the purpose of education and learning as the transmission of knowledge. Thus, the teacher's role in 21st century education system should not be that of transmitting knowledge and the learner's role should not be that of storing up knowledge for future use. It is obvious therefore, that teachers should move from the teacher-centred

approach to incorporating the views of learners so that they are equal partners in the teaching and learning process. As Bolstad, et al., (2012) argued, “the challenge is to move past seeing learning in terms of being “student-centred” or “teacher-driven”, and instead to think about how learners and teachers would work together in a “knowledge-building learning environment” (p. 3). This implies that, education systems should develop learning partnership between teachers and students for purpose of knowledge sharing to enhance meaningful learning.

3.5 Developing a culture of continuous learning for teachers and educational leaders

Acquisition of knowledge in the globalized world is a very tricky because challenges posed by changes in knowledge due to results of new technological innovation and research, demand competent and knowledgeable teachers to implement new changes. The current emerging education systems and educational reforms, which I am proposing for Africa, requires new thinking and new ways of doing things. This implies that education stakeholders such as teachers, parents, education policymakers and school leaders need particular qualities in order to enhance the learning of the younger generation. It is important for education stakeholders to receive continuous professional development and to go on learning so as to provide their students with the necessary attributes for meeting the demands of 21st century learners. Continuous professional development is important for teachers because the literature shows that teachers rarely adopt an innovation if it contradicts their traditional beliefs and practice (Garet et al. 2001, Borko, 2004).

This suggests that education system in Africa need to establish sustainable professional learning support for teachers. For more than two decades, there has been a paradigm shift in many developed countries with regard to teacher professional development, moving beyond mere support for the acquisition of teaching skills by teachers to knowledge creation through the development of ‘professional learning communities’ (Vescio, Ross, & Adams; 2008; Webster-Wright, 2009). According to DuFour and DuFour (2006) a ‘professional learning community’ (PLC) “is a group of educators committed to working collaboratively in on-going collective inquiry and action research in order to achieve better results for the students they serve” (p. 3). PLCs encompass a collaborative model of working relationships between school leaders and teachers as professionals (Mizell, 2009). As Ferrier-Kerr, Keown, and Hume (2008) asserted the “emphasis is now turning to collaborative models for professional development and learning, and attention in schools has switched to professional learning communities as the means by which meaningful, long-term change can be achieved” (p. 125). Adopting professional learning community approach it positively improve many schools in Africa give the scars resource for professional development.

3.6 Adopting new partnerships and relationships in schools

In many developing countries today there are few or no links between schools and communities. As a result, what children learn in school is not practically applied to the community in which they live. Therefore, it is important that schools and local communities develop partnerships that will support authentic ‘knowledge-generating activities’. In addition, such partnerships will help schools access the resources needed to implement educational reforms. Children not only learn from teachers but from home environment or from their communities and the knowledge acquired will enable the younger generation to compete with others in the global community. Thus, partnerships between communities and schools will provide learners with added knowledge that will give them the opportunity to share critical issues that face the community, such as environmental concerns, HIV/AIDS, democracy and women’s rights.

3.7 Integrating modern technologies into classroom teaching

Integration of technology into classroom teaching is one key issue that African education systems need to prioritise. The 21st century education systems need to adopt new technologies to enhance children’s learning. At the present moment, digital technology has not yet penetrated African schools to revolutionise classroom teaching. In some parts of the continent students have never seen a desktop computer as this facility is not available in their schools. Even in some African universities not all students have access to computers for learning. This digital divide is a barrier to African prosperity in the 21st century. In my view, Africa needs more investment in teaching technologies so that it will be a partner in the knowledge generation of this century.

4.0 Conclusion

Achieving educational reforms in many developing countries is not an easy task because of the human and financial resources that are needed and because their economies are young and their natural resources have not been sufficiently developed. In order to make educational reforms a reality, Africa should prioritise and invest more in education. Prioritising investment in education in Africa requires a change in mind-set and political will on part of the African political elite because across the continent funding of education is always a problem.

5.0 References

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