



Digital education in Africa: An approach towards success for a better and advanced future for adult and children

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ABSTRACT

As a part of the Educational growth in various parts of the underdeveloped areas throughout the country, it's a challenge for an educator to face hurdles in society through various sources. By understanding the hurdles through the process of transforming the poor background and illiteracy it's the Education itself that has found a way to minimize the risk of illiteracy in both Adults and children with rural background with a flexibility to learn while you go by going through a proper study of conditions of the people and their economy.

Keywords—Flexibility, Illiteracy, Rural, Transforming, Hurdles

1. INTRODUCTION

The past for the African country is a nightmare where education is difficult due to lack of resources illiteracy was sky rocking. Days passed off with a new generation education have made an impact in their societies many are still working out for good schooling now a day. Due to poor economic conditions and backwardness. Apart from rich culture and civilization integrated into it, it's struggling to get better along with other parts of the world. The origin of African education may be found in Egypt in Northern Africa. One of the first convenient mediums for retaining information, papyrus, was used to develop systems for learning and developing new ideas. Well before contact with external cultures, Africans had developed pools of understanding and educational tools. In fact, the world's first university was located in Timbuktu, opened in 2600BC. The overall purpose of the task-orientation type of education was to both learn specific skills and "produce an individual who is honest, respectable, skilled, co-operative and conforms to the societal order of the day" [1] to have a better life through it.

2. HISTORICAL APPROACH

2.1 Lack of proper facilities and educators

Low education rates in Africa are the lack of proper schooling facilities and unequal opportunity for education across countries. Many schools across Africa find it hard to employ teachers due to the low pay and lack of suitable people. This is particularly true for schools in remote areas. Most people who manage to receive education would prefer to move to big cities or even overseas where more opportunities and higher pay await. Thus there will be an overly large class size and the high average number of students per teacher in a school. Moreover, the teachers are usually those unqualified with few teaching

aids and poor textbook provision. Due to this, children attending schools in rural areas usually attain poorer results in standardized tests compared to their urban counterparts. This can be seen in the reports given by the northern and eastern Africa Consortium for Monitoring Education Quality (SACMEQ)[2]. Those taking the tests in rural areas score much lower than those in small towns and big cities. This shows a lack of equal education opportunity given to children from different parts of the same country.

2.2 Military and conflict

Military spending is causing education spending to decrease immensely. According to a March 2011 report by UNESCO, armed conflict is the biggest threat to education in Africa. There is the number of dropouts across the continent has been increasing dramatically, one of the influences of war and conflict on education is the diversion of public funds from education to military spending. Due to past Boko Haram killing across different places in the country there was a dramatic decrease in population which has to lead to the displacement of children. It often forces them to remain in camps or flee to their neighboring countries where education is not available to them [3].

2.3 Major progress in access to education

A joint study by the World Bank and AFD carried out by Alian Mingat, Blandine Ledoux and Ramahatra Rakotomalala have lead out as 33 countries in Sub-Saharan Africa had 14.9 million pupils enrolled in the first year of secondary school. If the rate of completion of the primary stage reaches 95% by 2020 with levels of transition from primary to the first year of secondary maintained at their current level in each country, the first year of secondary school would have 37.2 million pupils in 2020, or 2.5times the current number. If all the pupils finishing primary school could continue with their education, the number of pupils in the first year of secondary school would reach 62.9 million by 2020, a multiplication by 4.2 over the period. Only a few countries are falling seriously behind in education at the same time as having to address a steady growth in their school-age population: Niger, Eritrea, Senegal, and Malawi are particularly affected by this dual constraint. The EFA 2012 report highlights great disparities between the sub-Saharan Africa countries: the percentage of children excluded from primary school is only 7% in Gabon and 14% in Congo compared to over 55% in Burkina Faso and Niger. Less than half the children in sub-Saharan Africa can neither read nor

write: a quarter of primary school age children reach the fourth year without having acquired the basics and over a third do not reach the fourth year. According to the 2010 EFA Global Monitoring Report, “millions of children are leaving school without having acquired basic skills. In some countries in sub-Saharan Africa, young adults with five years of education had a 40% probability of being illiterate” [4]. In Chad, for example, only 35.5% of teachers are certified to teach.

2.4 Discrepancies in education

A 2010 Transparency International report with research gathered from 8,500 educators and parents in Ghana, Madagascar, Morocco, Niger, Senegal, Sierra Leone, and Uganda, found that education is being denied to African children in incredibly large numbers. The African Education Watch conducted surveys all over the continent and identified the three most classified common practices of discrepancies in child Education. One of which makes difficult for an average of 44% of parents with an average fee cost of \$4.16, a major expense for families in countries like Madagascar, Niger and Sierra Leone. Without this basic education, the report found it as nearly impossible to go on to high school or college. African children are missing this link that allows them to have a chance in a trade or to go beyond their villages.

2.5 Women education in Africa

Women in general play a prominent role in children growth in a family. In most of the parts of Africa they are at different literacy rate compared to men as per the literacy rate is given by UNESCO, the facts are due to various causes like Poor Economic Conditions, lack of facility in schools, lack of security like common bathrooms or only single-sex bathrooms, lack of teachers (this could be due to poor maintenance or maybe unavailability of properly educated people, insufficient funds etc). On the other hand dropout in schools and colleges are kept increasing due to high fee rates which are some kind of burden to the parents because of the average income rates could not be met with their fee along with family expenses. If a girl child above age 10 did not enter school then the chances that she enters the school will be almost zero. Parts of country like Guinea, Mali, Niger, Nigeria, Senegal have deadly girl literacy rates like 78%, 93%, 91%, 78%, 77% respectively, as well the literacy rate of boys are similar too which is a kind of inability and a kind of very bad situation with a Technologically Advanced countries as neighbors. It's a fact and hopes that technology could be used to overcome such simple issues for at least 60 to 70% with minimal human resource required.

An adolescent girl may be forced to abandon school to help with chores, to prepare for marriage, or out of fear of harassment. In sub-Saharan Africa, girls who do go to school can expect as little as 5 years of schooling in total, some which might be spent repeating grades. On the other hand, average school life expectancy, primary to tertiary of female has very least duration of 6 years for the Central Africa Republic, Niger followed by Chad. Young women make up two-thirds of the global illiterate population of about 25 million live in sub-Saharan Africa

3. INFLUENTIAL INITIATIVES

3.1 Intra-continental

- **NEPAD's** E-school programme is an ambitious plan to provide internet and computer facilities to all schools on the continent.
- **SACMEQ** is a consortium of 15 Ministries of Education in Southern and Eastern Africa which undertakes integrates research and training activities to monitor and evaluate the

quality of basic education and generates information that can be used by decision-makers to plan and improve the quality of education.

- For 10 years, the **Benin Education Fund (BEF)** has provided scholarships and educational support to students from the Atakora province in northern Benin. Over 450 students have been able to stay in school because of their programmes.

3.2 International

- Working through local organizations, **The African Children's Educational Trust** is supporting thousands of youngsters with long-term scholarships and a community rural elementary schools building programme. It has built seven schools to date and is raising funds for more.
- **British Airways'** project which, in collaboration with UNICEF, opened the model school **Kuje Science Primary School** in Nigeria in 2002.
- The **Elias Fund** provides scholarships to children in Zimbabwe to get a better education.
- The **Ahmadiyya Muslim Community** in association with **Humanity First**, an international charity organization, has built over 500 schools in the African continent and is running a 'learn a skill' initiative for young men and women.
- The Volkswagen Foundation has been running a funding initiative called “**knowledge for Tomorrow – Cooperative Research Projects in Sub-Saharan Africa**” since 2003. It provides scholarships for young African researchers and helps to establish a scientific community in African Universities.

4. FUTURE PERSPECTIVE

After the few developments done in Educational fields throughout the world, the rapid change in technology in various fields should be able to handle any such situation especially Education and its Hurdles in underdeveloped countries. As a part of survey done with gender disparity in Education since women's education has many hurdles to face in daily life on other hand in different parts of Africa some of the parts are rich enough to dedicate a uninterrupted Internet facility to rural parts with almost no background of economy as a part of “Charity Towards learning System”.

4.1 Education for Rural Africa

A major advantage in Digital Technology is that the freedom of learning and the flexibility in the learning system. Rural parts of the civilization should require only the knowledge of growing food, Cultivation, Cattle, Farms in general as well as at first preference, unlike technical knowledge and knowledge that comes scientifically. On a study involved through past few decades, financial backwardness is a major hurdle for rural parts of Africa.



Fig. 1: Accelerated education of women in Africa

Adult Education should be done at home first as an initiative for both women and men to some minimum extent which will

have an impact over their household, business, socio-economic growth. Figure 1 shows a possibility of community-level implementation of the learning center as a partime for educating women with a poor economic background irrespective to race and marital status.

This part of education should be taught at a different level so as to help them to take care of their children as well as their health and proper sanitation needs which in general be taught by medical researchers rather than conventional community level teachers. Child Education in all schools should be totally free which has an impact over the rural population very greatly. Since their economic background is the very week it would be a great human nature to educate them for free as a part of compassion in Education.

On other hand not all children could require a technical skill or good knowledge as equal to a normal child throughout the world as in developed countries, but a quite requirement is needed in the field of agriculture and rural development through enlighting in a simple along with practical aspects as the land is full of survival resources everywhere, which could be done along with some basic knowledge like electricity, food, and health.

4.2 Lack of minimum resource

In half of the countries with data in sub-Saharan Africa, primary classes exceed 50pupils, approximately 20% of schools have access to electricity, and less than half have access to drinking water. The data collected by UNESCO has a projection of countries like Cameroon and Chad have lower reading resources as 12:1 and 6:1 and with lower electricity as 10% and 5% respectively along with water access as 10% and 5% respectively. But on the other hand, Ethiopia and Ghana have 45% and 73% of Electricity and water access respectively. As a part of balancing resource towards a development in the economy, it's relatively a tradeoff to understand the basic needs to maintain and to spread the Education to lowest literacy.

4.4 Proposed Education Learning System

- a) In Rural parts where agriculture is a major survival, Adult Education is supposed to be done on only farming and cultivation at different levels through a proper medium using radio waves, Digital media, and campaigns. However for children still schooling is a challenge through digital medium only.
- b) In Urban parts for Adults, the medium should be completely digital from classroom to textbooks. For children, a challenge should be taken to accomplish the task through Digital 30% to eliminate the loss of time along with a reduction in finance effort as one-time investment throughout the year devices like digital slates could be helpful instead of materialistic cost like notes textbooks etc.
- c) Electrifying and groundwater extraction with renewable resource solves the major problem in most of the places where electricity is a problem.
- d) Adopting school automation as well as changes in construction material adds a positive advantage to economic backward places in the country.

5. CONCLUSION

In a close and dedicated effort towards enhancing the Education beyond all hurdles, it could be concluded that Digital medium could be better used by really economically backward countries in their children education for fast and better future rather than conventional teaching methods.

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