

4

The School for Africa: Redesigning the Curriculum to Meet Current and Future Challenges

By

J. P. GBENU

*Department of Educational Management,
Lagos State University,
Ojo.*

Abstract

The study examines the state of African countries' economies through their characteristics namely poverty, agro-economy, underdeveloped natural resources, high level illiteracy brought about by poor quality education, lack of enterprise, deteriorating health conditions, prevalence of HIV/AIDS, among others. With this picture, the study laments that it will be difficult for Africa to catch up with the rest of the world especially Europe and USA, except the continent devises a schooling system whereby the current challenges facing her would form the basis of countries' curricula after which new trends could be addressed as they relate to the future. Through this, the 'complete' African child who can face challenges as they come and at the same time be proud of his culture and tradition would be produced, hence the emphasis on peculiar education for the continent. This is the only way, as observed by the paper, that Africa can sail through the wind of change blowing the world around and thus close the gap between her and the developed world. To make this successful, the paper calls for assistance from International Organizations in terms of financial, economic and academic.

The school as could be aptly described is a strong agent of education where the total development of the child takes place. Hornby (2000) saw it as "an institution for educating children". Total development in this regard implies a "complete" product of the educational system capable of creating jobs and to a large extent confronting major challenges in life with high level creativity and vigour. Indeed, a functional education as it is is designed to give knowledge and develop skills which are meant to build the individuals involved directly and the nation eventually. Such an education is meant to produce an informed citizenry and develop the economy. It is not surprising therefore

to see many nations of the world anchoring their development around education albeit around the school.

By the structure of African countries in terms of geographical position, value system, culture, moral, religion, among others, the educational system must be designed to allow the individual to fix himself up in the society (social adjustment), equip himself with the ability which will enable him explore the world and manipulate it (self-discovery), enable him to develop his potentials to the full so that he could acquire knowledge and training in a profession and earn a good living from there (development of potentialities) and enable him cultivate good habits and develop the right attitude to life and work in order to develop as a good citizen (cultivation of good habit and attitude). In addition, education is meant to remove social vices among citizens, promote national unity, discourage tribalism and ethnicity, create inter-cultural balance, moral soundness and political stability and inclination in a nation. Today, a high wall of difference exists between developed countries and their developing counterparts, which as observed by Jhingan (2000), is as a result of 'higher increasing outlay on education'.

Many African countries today are developing but are still characterised by general poverty, agriculture as the main occupation, underdeveloped natural resources, unemployment, economic backwardness, lack of enterprise, poor quality education and initiatives (Jhingan, 2000) to mention but a few. There are six indicators according to Hicks and Streeten (1979) of basic needs, stated as health, education, food, water supply, sanitation and housing. In a related manner, since 1990, the United Nations Development Programme (UNDP) has been presenting the measurement of human development in terms of a Human Development Index (HDI) in its annual Report as reported by Jhingan (2000). The HDI is a composite index of three social indicators: life expectancy, adult literacy and years of schooling. It also takes into account real Gross Domestic Product (GDP) per capita. Thus, the HDI is a composite index of achievements in three fundamental dimensions namely long and healthy life, knowledge and a decent standard of living.

The HDI value for each country indicates the distance it has travelled towards the maximum possible of 1 (100%) and how it has to go to attain certain defined goals: an average life span of 85 years, access to education for all and a decent standard of living. The HDI ranks countries in relation to one another. Countries with HDI value below 0.5 are considered to have a low level of human development, those between 0.5 to 0.8, a medium level and those above 0.8, a high level. The HDI Report (1999) classified Canada, USA, Japan, Australia, United Kingdom, New Zealand, Argentina and Costa Rica as countries having high values of HDI. Sierra Leone leads the countries in Africa as the country with low HDI value and consequently highly underdeveloped. Other countries include Uganda, Tanzania, Zambia and Nigeria.

Though quantitative increases (growth) can be measured in some areas: increase in number of schools and students, hospitals, number of industries, population, trade volume, etc., these increases have failed to transform to qualitative improvements (development). Why is this so? It is therefore the interest of this paper to examine the challenges posed to African countries which largely centre around education, health, politics, information technology, unemployment among others, and what can be done to confront same with vigour so that Africa does not get drowned in the ocean of underdevelopment and crises for ever. These challenges are meant to form the underlying bases of curriculum for the kind of school for African countries and the curriculum in turn would therefore be meant to combat the challenges.

State of Education

The state of education in Africa largely explains the high level of underdevelopment in the continent. Schools are dilapidated, infrastructure have collapsed, population is increasing, teacher supply and quality are declining, and more devastating is the issue of old curricula which are still in use in many countries of Africa today. These have failed to address the modern day challenges let alone capture future problems. Many school age children are not in schools and there is a high rate of illiteracy especially in villages in Africa. This should be a great source of concern for African leaders. Ezinwa (1990) lamented gloomily that “what is of greatest concern is that most curricula offerings are not current... Most learning is paper and pencil work. There is very little practical hands on learning in our schools”. As pointed out by Onifade (2006), the greatest challenge to our country in this century “is making our large rural illiterate community literate, especially in science education”. Equally too, Ogunleye (1999) posited that “about 80% of our population translating to about 85 million Nigerians live in rural areas”.

More worrisome is the education of women in Africa which is at low ebb. Women are hardly given the opportunity to learn or attend schools yet studies have shown that educating the girl child has positive socio-economic implications in the world. Indeed, education of women is a key to improved family health as well as the socio-economic status of the entire country. Education empowers women to participate in decision-making in the society and thus gives them the opportunity to make positive decision affecting their lives.

In Nigeria for instance, sex inequality is deeply embedded in her culture to the extent that in reality, both men and women themselves have deeply internalized the belief in the appropriateness of the women’s deference and subordination. Groups outside the family (e.g. peers, friends, community organizations, work structures, the government, etc) tend to support and encourage gender inequality and reinforce men’s and women’s ‘innate’ inferiority and responsibility to serve others. The traditional cultural setting of the country compounds the academic situation of Nigerian women.

The Nigerian society perceives the female learners not to be suitable for the rigours of academics and also to be weaker than their male counterparts. Women are viewed as inferior species of human beings that do not worth any serious educational investment. Traditionally, women are expected to depend on their husbands for their daily needs, hence most parents prefer training the male children. Poverty is another major factor that militates against educating the female child. Nigeria is one of the poorest countries of the world as reported by World Bank (2000). In line with this gloomy picture, Jhingan (2000) stated that “Nigeria is also one of the countries identified as accounting for 75.2% of the world’s illiterate”, a view corroborated by Ezinwa (1990) on the account that “Nigeria as at 1990 ranks 5th among the ten most illiterate countries in the world”.

Education has been the bedrock of developments all the world over. Nations and individuals globally now agree that the way out of series of bondages plaguing them is education. Thus, the educational standards set up for the school must be challenging to meet the needs of the students and the society (Olaniyonu, Adekoya and Gbenu, 2008). It is necessary to establish challenging academic standards in schools for students so that they face the myriads of problems in the area of economic, social, political, and cultural issues now and in the future. In many developed countries of the world, science, technical and vocational education is the major form of education that has transformed their economies. According to UNESCO (2008), curriculum has to be revised ‘if they are to prepare youngsters to live in a society marked by explosion of new knowledge in science and technology, by information and communication’. UNESCO (2008) referring to the Education for All (EFA) declaration adopted in Jomtien declares that: every person shall be able to benefit from educational opportunities designed to meet their basic needs. These needs comprise both essential learning tools (such as literacy, oral expression, numeracy and problem solving) and the basic learning content (such as knowledge, skills, values and attitudes) required by human beings to be able to survive, to develop their full capacities, to live and work in dignity, to participate fully in development, to improve the quality of their lives, to make informed decisions and to continue learning. The scope of basic learning needs and how they should be met varies with individual countries and cultures and inevitably, changes with the passage of time (UNESCO 2008: 24).

The implication of this is that what should form the basis of every nation’s educational standards or system should be the challenges confronting such nation locally and internationally as these affect the students and the society and the schools must be equipped to address these issues. Developing countries in particular must develop educational system and standards that must address issues on health (HIV-AIDS, infant and maternal mortality rates, sickness, polio, etc), long-term economic competitiveness, information technology, politics and culture.

As pointed out earlier, modern world is now dominated by vocational, science and technical/technological education to the extent that, in the words of Njoku (2001), “there is hardly any economic activity that is not propelled by science and technology”. Technology according to Edem (2005) “is a systematic application of the fundamental scientific phenomena and principles in a device, process or concept that performs a function useful to mankind. It draws heavily upon applied science and technical innovations”. Science and technology have been recognized as the basis for economic development by countries, hence the huge investment in materials and humans so as to ensure the production of the critical labour force in these important disciplines in order to ensure their socio-economic development (Njoku, 2001).

In Britain for instance as reported by the Department of Education and Science in 1981, the country attaches special importance to craft, design and technology as part of the preparation for living and working in a technological society. Equally too, a report from Her Majesty Inspectorate (2001) recommended that ‘technology merits a place in the curriculum of all pupils up to the age of 16. It also emphasizes equal relevance of craft for both boys and girls’. Ellis (1990) also reported a rapid science and technological development in the Caribbean societies.

Primary and secondary education in New Zealand is meant to develop scientifically and technologically literate society that is able to utilize knowledge, skills and opportunities for social, environmental and economic betterment of the country. To achieve this, according to Edem (2005), teachers in science and mathematics, social science and technology are released from school (through the NZ Science, Mathematics and Technology Teacher Fellowship) to work for the project of their choice, hosted by industry or institutions such as tertiary institutions, local or territorial authorities, communities, groups or research institutes. This enables a better understanding and appreciation of the importance of science and technology education in schools by the teachers as well as exposing the students to the world of work.

In Germany, the school system trains two-thirds of the young people in technical skills: electronics, new technologies, mechanics, etc. In Australia, the curriculum combines both traditional secondary and vocational subjects. On completion of secondary education, students are given a diploma which is recognized by both industry and universities. Mathematics, science, engineering and technology are central to American education for economic competitiveness and quality of life of the citizens (Edem, 2005).

In Africa, where many countries claim to be running the scientific, vocational and technical system of education, its failure rate in terms of implementation is very high. In Nigeria for instance, the planned curriculum for the Basic 9 system of

education has not been affected or brought to limelight not to speak of giving out books freely as planned. This is glaring from the statement credited to Ismail (2006) that: the curricula for primary and junior secondary school levels are still being used in the new system. No doubt, one would expect to find frictions and frustrations associated with the re-organization of physical structures, as well as staffing... There is still some skepticism over the plausibility of full implementation (Ismail, 2006: 45).

The curriculum being run presently in African countries must be readjusted or re-designed to reflect the interests of Africans. Ismail (2006) admits this when he advocates for urgent review of Nigeria's school curriculum maintaining that this would enable the nation to experience growth in its socio-economic milieu. In his words the current curriculum in the nation's school system is not capable of producing knowledgeable, skilled, creative and globally-competitive pupils that will feed the nation's university system. We should redesign education to align with the challenges of the 21st century. Therefore, the focus of all levels of government for both the public and private schools should be review of the curriculum with a view to incorporating entrepreneurship, vocational, problem-solving, life and ethical skills in pupils. The creative arts such as music, dance and ICT and computer education should be integrated into the curriculum (Ismail, 2006: 45). By this argument, if pupils are introduced to such a curriculum at the primary and secondary school level, it will be easier for them to discover their talents. When this happens they will become useful citizens and the challenges being faced in education in many African countries will be a thing of the past.

Basic education, general and technical and vocational education are therefore needed in Africa to bail her out of the shackles of poverty. Basic education as defined by EFA (2000) refers to "a whole range of educational activities that takes place in different settings and that aims to meet basic learning needs". It thus comprises both formal schooling (primary and sometimes lower secondary) as well as a wide variety of non-formal and informal public and private educational activities offered to meet the defined basic learning needs of groups of people of all ages. General education is mainly designed to lead participants to a deeper understanding of a subject or group of subjects, especially, but not necessarily with a view to preparing participants for further (additional) education at the same or a higher level. Successful completion of these programmes may or may not provide the participants with a labour-market relevant qualification at this level. These programmes are typically school-based. Vocational education is designed to lead participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation or trade or class of occupations or trades. Successful completion of such programmes can lead, but not necessarily, to a labour-market relevant vocational qualification recognized by the competent authorities in the country, like Ministry of Labour and Employment, Education, etc. Technical education, designed at upper secondary and lower tertiary

levels, is to prepare middle level persons (technicians, middle management, etc.) and at university level is to prepare engineers and technologists for higher management positions. Technical education includes general education, theoretical, scientific and technical studies and related skill training. The component of technical education may vary considerably depending on the types of personnel to be prepared and the education level.

Education and Poverty Elimination in Africa

African countries are poverty-ridden. Poverty is reflected in low Gross National Product per capita. The extremely low GNP per capita of low low-income economies reflects the extent of poverty in them. Among the low-income countries as reported by the World Bank (2000) were Nigeria with GNP per capita of \$300, Uganda \$320, Zambia \$330, Ghana \$390 and Zimbabwe \$610. The poverty in Africa is also reflected in low standard of living, malnutrition, poor health, clothing, shelter and inadequate education. Food is always the major item of consumption and about 80% of the income is spent on it as compared with 20% in advanced countries. The majority of Africans earn their livings through agriculture most as subsistence farmers and African soil according to Jhingon (2000) “is some of the least productive in the world”. In Western Tanzania from the United Nation’s report of 2006, herders graze small zebu cattle. The herds of stocky, almost-miniature cows migrate across the plains of the Rift Valley. The animals can survive in what is at times harsh, semi-arid environment, but they don’t produce nearly as much as milk or beef as Western breeds (United Nations, 2006). Then why would the continent not be poor?

However, there seems to be some agreement that the most fundamental way out of poverty is education. It has been found that the major cause of differences between the economies of developed and developing countries lies in the quality and quantity of education offered. The quality of education offered in developed countries is such that makes recipients creators of jobs rather than job-seekers largely in addition to the fact that basic education is mandatory which is responsible for high literacy level.

The African union (AU) has a vision of an integrated, peaceful, prosperous Africa, driven by its own people to take its rightful place in the global community and the knowledge economy. This vision is predicated on the development of the continent’s human resources. In its Plan of Action for the Second Decade of Education (2006 – 2015) according to the AU Report (2007), “the AU recognizes the importance of technical and vocational education training (TVET) as a means of empowering individuals to take control of their lives and recommends therefore the integration of vocational training into the general education system”. The AU also recognizes the fact that vast numbers of young people are outside the formal school system, and consequently recommends the integration of non-formal learning methodologies and literacy programmes into national TVET programmes.

Indeed, there is a fresh awareness among policy makers in many African countries and the international donor community of the critical role that TVET and education generally can play in national development. The increasing importance that African governments now attach to TVET is reflected in the various Poverty Reduction Strategy papers that governments have developed in collaboration with The World Bank. One of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills. TVET delivery systems are therefore well placed to train the skilled and entrepreneurial workforce that Africa needs to create wealth and emerge out of poverty. Another major feature of TVET is that it can be delivered at different levels of sophistication. This means that TVET institutions can respond to the different training needs of learners from different socio-economic and academic backgrounds and prepare them for gainful employment and sustainable livelihoods. The youth, the poor and the vulnerable of society can therefore benefit from TVET.

By and large, African education system must be vocational in nature which must be delivered alongside functional literacy and numeracy; family life skills (parental care and domestic skills); human relations and inter-personal skills, interaction with others from different ethnic backgrounds (considering the nature of African societies in terms of beliefs and cultures); communication and language skills (learning a second language in multi-lingual societies as it operates in Nigeria for instance); human rights and good governance practices (going by poor leadership qualities that characterize African leadership styles) and politics and politicking, culture and history. It is believed that if the right education is adopted to meet the yearnings of Africans, the continent's cherished cultures, attitudes, values and beliefs can be projected to the outside world and serve a source of foreign exchange earnings to reduce the ever rising poverty level in the continent. Indeed, Africa is endowed in terms of culture.

This is another way to developing tourism potentials in Africa via education. Health More worrisome today is the issue of HIV/AIDS that claims millions of Africans annually. The United Nations (2006) estimated that 2 million Africans die each year of AIDS and 24 millions are infected with HIV. According to the Report, "incidents of malaria, cholera and even polio are on the rise in Africa, all undermining social and economic development on the globe's most impoverished continent". Swaziland with about one million population for instance is reported to be the country with the highest HIV rate in the world. HIV has been found to be responsible as one of the factors that make the country one of the least-developed countries and her citizens very poor. Sleeping sickness, river blindness, yellow fever, cholera, bilharzias and tick bite fever – diseases unheard of in the developed world – are all too common in Africa. Malaria alone is said to kill nearly one million African children each year according to the Report of United Nations (2006). Malaria places a huge burden on Africa. It

reduces productivity, takes away resources, reduces school attendance, kills off children and makes Africa unsuitable for intensive foreign investment. In its analysis the Report claims that clinics are ill-equipped to deal with health-related problems.

They are under-funded. In Kinshasa for instance, and most of the African countries, patients must purchase their own medical supplies before being admitted to the central hospital because the facilities are not there. In Ethiopia, life expectancy is down to 54 years. Studies indicate that there are 2000 doctors in the country, the ratio of 1:37,000 people, being the lowest in the world. Malaria, HIV/AIDS, tuberculosis and women and children's health remain major issue in community health. With more than 4 million cases reported yearly, malaria is the leading cause of death. The health problems in the country are mostly linked to nutritional deficiency and preventable diseases. The continent according to United Nations (2006) "also has a serious shortage of medical professionals. Malawi has only 130 doctors serving a country of 12 million people. Africa needs a huge inflow of foreign aid to build up effective health-care programmes". According to Hunter-Gault (2006), "the open secret about poverty in Africa is that it has a woman's face and its newest grim companion is not war, but HIV/AIDS". The chance of a woman dying in childbirth is three times higher in Africa than in industrialized nations. Moreover, one out of every six children in Africa dies before the age of five (Hunter-Gault, 2006).

From all these, it is indicative that disease is part of the poverty trap in Africa. People get sick because they are poor and they get poorer because they are sick. A man cannot afford health care, his condition worsens until he cannot work and soon his entire family is malnourished as a result of his illness or even worse, the breadwinner of a family could die.

Agricultural movements in Asia and Latin America in the latter part of the 20th century dramatically boosted crop yields, allowed countries to feed growing populations and spurred economic growth. According to the United Nations (2006), "sub-Saharan Africa is waiting for a Green Revolution. It still does not produce enough food to feed its own people. Millions of Africans are chronically malnourished, and this region has become perennially dependent on international food aid". More hospitals have to be built, doctors trained and a lot of international financial assistances have to come to Africa. This can be assisted through the United Nations.

Unemployment

There is vast unemployment in African countries especially because of the poor quality education offered. The unemployment is spreading with urbanization and the spread of education. However, the industrial sector has failed to expand along with the growth of labour force thereby increasing urban unemployment according to Jhingan (2000). Then there are educated unemployed who fail to get jobs due to structural

rigidities and the lack of manpower planning, still there are those in the categories described as disguised and underemployed. Disguised exists when people are prepared to work but they are unable to find work throughout the year while a person is considered to be underemployed if he is forced by employment to take a job that he thinks is not adequate for his purpose or not commensurate with his training. Thus, with the right education, it is believed that unemployment rate will reduce and people will be job providers rather than job seekers (Onifade, 2006).

Information Technology

The high rate of growth in information technology (IT) which is the current wave propelling the development of communication and economies of the American and European countries has little hope of survival in Africa. There are new forces and ways of doing things in the world now with countries in Europe, America, Asia, etc meeting up with the challenges. Africa's position now is more of a bystander. The rate of change in technology, businesses and socio-economic spheres calls for organization of new skills at a fast rate in Africa. Ogbечи (1999) for instance suggested that the education system that will guarantee growth in the digital industry which comprises computer system supplies, computer operating system and application software companies, operators of digital network that transmit data and voice information technology companies, providing information contents and manufacturer of consumer electronics becomes inevitable. The low level of engineering and technological development in Africa manifests in inadequate supply of the manpower in the various categories in the middle level and skilled categories. This is another major challenge for Africa and can still be confronted with the right education and attitude.

Political and Administrative Factors

Political and administrative factors have helped many countries in Europe and America to produce substantial economic growth. The economic growth of Britain, Germany, the United States, Japan and France has been due to their political stability and strong administration since the 19th century. With the exception of the United States, these countries were directly involved in the two World Wars and were devastated, still they have continued to progress on the strength of their political and administrative traditions. Peace, protection and stability have encouraged the development of entrepreneurship in developed countries. The reverse is the case in Africa due to political instability and corrupt and weak administration. Recent development on political activities in Nigeria and Zimbabwe are pieces of evidence to this. Weak and political structure therefore is a big hindrance to the economic development of many African countries. The behaviour of government plays an important role in stimulating or discouraging economic activities. A strong, efficient and an incorrupt administration is therefore essential for economic development. The establishment of anti-graft institutions like Economic and Financial Crimes Commission (EFCC) in Nigeria is a welcome idea to deal with corrupt officers. The

appointment and election of corrupt-free leaders by the electorate will also assist in ensuring a smooth economy.

Conclusion and Recommendations

It seems to be a bit late but not too late. Africa can still stand up firmly to the current challenges giving the entire continent restlessness. Major challenges and others in the areas of health, poverty, unemployment and administrative activities can be anchored around education (technical and vocational, in particular) which as at today is the hope of many poor nations and individuals. With sound quality education, African countries can develop the rich potentials deposited in their economies both in terms of human and non-human and can therefore boast of competing with their counterparts in other continents of the world. There is the need for African countries to free themselves from the cobweb of diseases, hunger, strife, pollution, HIV/AIDS pandemic, among others which are symbols of poverty. After all there are resources within the continent to make this possible according to reports available. It is only a question of good leadership to put a square peg in a square hole through the adoption and management of functional education. Good leadership styles under democracy and adequate provisions of facilities in schools that propagate African values and aspirations are therefore recommended for the continent. To make this plan succeed, International Organizations in terms of financial, economic and academic need to assist in this regard. This is the only guarantee Africa has to sailing the winds of change.

References

- AU Report (2007). *Strategy to revitalize technical and vocational education and training (TVET) in Africa*. Addis Ababa, Ethiopia.
- Edem, E. (2005). Secondary science and technology education for development. In U. M. O. Iwori (ed): *science and technology education for development*. Lagos: NERDC press, p86
- EFA (2000). *Assessment – technical guidelines*, UNESCO
- Ellis, P. (1990): *Measures at increasing the participatory of girls and women in technical and vocational education and training*. London: Commonwealth secretariat
- Ezenwa, S. C. (1990). ‘Literacy: Nigeria among world’s ten’. *Education today*, 1(2): 8 – 14.
- Her Majesty’s Inspectorate (2001). *The entitlement curriculum*. London: Chapman

- Hicks, N. L. & Streeten, P. P. (1979). 'Indicators of development: the search for a basic needs yardstick'. *World development*, 7(1)
- Hornby, A. S. (2000). *Oxford advanced learner's English*. London, Oxford
- Hunter-Gault, C. (2006). *Talk of the nation*. <http://www.npr.org/templates/story>, accessed 10 August 2010
- Ismail, T. (2006). *The New 9 – 3 – 4 system of education in Nigeria: implications for higher education delivery*. Paper presented at the 2006 annual national meeting and conference of C.D.E. in Nigerian universities, BUK, Kano.
- Jhinghan, M. L. (2000). *The economics of development and planning*. Delhi: Vrinda publications (P) ltd.
- Njoku, Z. C. (2001). Enrolment of females in science and technical education in higher institutions in Nig. Implications for female empowerment. *The journal of science teachers association of Nigeria*. 36(1), 87 – 93.
- Ogbechie, C. O. (1999). 'Challenges to technical and vocational education in Nigeria'. *the Guardian newspaper*. Lagos: The Guardian press
- Ogunleye, A. O. (1999). *Science education in Nigeria: historical development curriculum reforms and research*. Lagos: Sunshine international publications (Nig.) ltd.
- Olaniyonu, S. O. A., Adekoya, S. O. A. & Gbenu, J. P. (2008). *Fundamentals of educational planning (revised and enlarged)*. Lagos: Micodex Nig. ltd.
- Onifade, A. (2006). 'Science education for all Nigerians: challenges of the 21st century'. *Eko journal of educational research* 2(2), 61.
- UNESCO (2008). www.unesco.org/iiep/eng/focus/efa/aftprim.htm accessed 10 August 2010
- World Bank (2000). *World Bank Report: A better investment climate for everyone*. New York: World Oxford University Press.