

ENSURING SUSTAINABILITY OF UNIVERSAL BASIC EDUCATION: THE FOUR WHEEL DIMENSIONS

OMOOGUN, AJAYI C.

ENU, DONALD B. (Ph.D)

AKPAN, DAVID S.

Abstract

Sustainable Development has assumed considerable importance as the world continues to experience economic, environmental and social challenges. If education is a critical tool in the transformation towards sustainable development, policies relating to education should provide the ways and means to attaining sustainability. This paper examines the Universal Basic Education (UBE) and how it can be apply to attain sustainable development can be mainstreamed into UBE to be a model for sustainable transformation of the economy, environment and social challenges.

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Introduction

Education is regarded as the richest and highest treasure of man and should be treated as a basic human need for human (Nanda, 2007). As affirmed by Aristotle "educated men are as much superior to uneducated as living are to the dead". Nigeria recognizes education as an instrument "par excellence" for effective national development; and fosters the worth and development of individual for each individual's sake, and for the general development of the society. Its policy also recognized that education is the most important instrument of change and that any fundamental change in the Nigeria society has to be preceded by an educational revolution. To this end, education shall continue to be highly rated inits national development (Federal Republic of Nigeria (FRN), 1981,1998,2004).

This is perhaps why Nigeria is a signatory to the 1990 Jomtien declaration of Education for All by the year 2000, a member of the group of E-9 Nation's committee on the total eradication of illiteracy, the Amman Reaffirmation (1995) calling for the implementation of Jomtien recommendations of Education for All as well the Durban (1998) statement of commitment to the promotion of education for all. Nigeria also signed the OAU decade of education in Africa (1997 2000) which placed strong emphasis on vigorous pursuit of basic education. All these suggest strongly that Nigeria acknowledges the need for education for all her citizens.

It is against this backdrop that a Universal Basic Education (UBE) was launched in Nigeria in September 1999 by the new democratic president, Chief Olesgun Obasanjo. Before this, Nigeria had ventured into Universal Primary Education (UPE) in 1976 at the Federal level after the trials by the western and eastern regional government of Nigeria in 1952 and 1957 respectively. Largely due to inadequate planning, poor management and implementation the UPE did not produce the desired outcome.

The UBE is expected to offer a free basic universal education for all children of school age (6 years of primary education and 3 years of junior secondary education). The programme will also cover nomadic education as well as non-formal education for out-of-school children, youth and illiterate adult. Specifically, the objectives of UBE include:

- a. Develop in the entire citizenry a strong consciousness for education and a strong commitment to its vigorous promotion
- b. Provide free compulsory universal basic education for every Nigerian child of school age
- c. Reduce drastically dropout rate from the formal school system through improved relevance and efficiency.

- d. Cater for dropout and of-school children and adolescents through various forms of complementary approaches to the provision and promotion of basic education
- e. Ensure the acquisition of the appropriate levels of literacy, numeracy, manipulative and life skill (including moral and civic values) needed for laying the foundation for life-long learning.

These objectives are very laudable and require great effort in human, material and financial resources to aid its achievement (Iwuamadi, 2008).

The success of any education enterprise depends on many factors. For the UBE to meet its objectives and further address the issue of sustainable development, the curriculum must address key fundamental issues. These issues are discussed within the framework of what will make the scheme to be sustainable.

We also examined education and sustainable development, primary school in Nigeria post 1999 era and suggest key curriculum areas that will maximize UBE contributions to the triumvirate areas which serve as the key to sustainable development: society, environment and economy. We also examined how UBE can enhance the acquisition of literacy, numeracy and socially appropriate life skills.

Education and Sustainable Development

Education is a veritable tool in socio-economic and political development and progress of the individual (Iwuamadi, 2008) and society. The quality of a nation's education and training system is seen to hold the key to future economic prosperity (Brown & Lauder, 1997). Economists and sociologists have long viewed education as the solution to many social challenges including economic growth, inequality, overpopulation and productivity

among others. Education is, thus viewed as an investment in human capital (Levin & Kelley, 1997).

Education for sustainable development is now globally acknowledged as a key priority for the twenty first century and beyond (Summers & Childs, 2007). To this extent, the United Nations launched a Decade of Education for Sustainable Development in January 2005. According to UNESCO (2004:7), education for sustainable development:

is a life-wide and lifelong endeavour which challenges individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or it will not belong to anyone.

According to the Council for Environmental Education (1998:3)

Education for sustainable development enables people to develop the knowledge, values and skills to participate in decisions about the way we do things individually and collectively, both globally and locally, that will improve the quality of life now and without damaging the planet for the future.

The Council identifies a framework for conceptualizing sustainable development (Summers & Childs, 2007) to include:

- i. interdependence where people, the environment and the economy are inextricably linked at all levels from local to global.
- ii. citizenship and stewardship where individual actions are important and where anyone take responsibility to ensure a good world
- iii. Needs and rights of future generations to meet our basic needs now without destroying future capacity of others to meet their own needs

- iv. Diversity we must recognize our cultural, social, economic, biological differences and respect, value other people
- v. Quality of life, equity and justice promote equity and justice for all. Everyone must benefit from the resources available,
- vi. Sustainable change we must recognize the limits of the environment and develop in line with its carrying capacity
- vii. Uncertainty and risk in our action. Today's solution may become problematic in the future, so the need for flexibility in our decisions and actions.

Any education policy must therefore develop its curricula towards attaining a sustainable society. Can the UBE scheme meet any of these framework? Can the structures of our existing primary school system provide the needed environment for sustainable education? How should the UBE be structured to serve as a veritable tool for sustainable development? These issues are examined in the subsequent subheads.

Primary Education in Nigeria Pre-UBE

Primary education is the education given in institutions for children between the age of 6 to 11 plus. The duration, is usually six years and it is the cornerstone and key to the success or failure of the whole education system, (FRN, 2004). The goals of primary education as contained in the National Policy include among others:

- inculcate permanent literacy and numeracy and ability .to communicate effectively
- lay a sound basis for scientific and reflective thinking
- citizenship education
- character and sound attitude and morals
- ability to adapt to changing environment

- manipulative skills

To achieve these objectives, primary education shall be tuition free, universal and compulsory (FRN, 2004). The curriculum includes languages, mathematics, science, physical and health education, religious knowledge, agriculture/home economics, social studies and citizenship education, cultural & creative arts as well as computer education.

Reports (Akande, 2001; Enem, 2004, Iwuamadi, 2008) show that the products of our primary school lack basic skill for literacy and numeracy. Many of them are unable to express themselves in basic and simple English Language (the official language of communication). The primary school that currently housed the UBE is either free or universal. Report has it that in 1996, only about 14.1 million children out of the over 21 million children of school age were in school. Out of number in school, only about 64% will complete primary education and about 43.5% will transit to the next level of education. Recent (UNICEF, 2005) report shows that about 7.3 million Nigeria children of school are out-of-school.

Most of the curriculum are outdate and out model and does not meet the requirement of a contemporary and democratic country like Nigeria that is in dire need of rapid development and transformation. The UBE ought to address the flaws of our primary education and produce outputs that are well educated and can function and participate in a globalized world driven by science and technology.

UBE for Sustainable Development

Generically, the word sustainable development means to develop only in a manner that does not damage future ability to develop. Technically, some see sustainable development can also mean using resources only at the rate they can be replaced in nature.

Education for sustainable development is becoming increasingly important at all levels of the educational system (Cotton, Warren, Maiboroda & Bailey. 2007). While sustainability is often couched in "economic market philosophy and economic growth (Rauch, 2002); we share the views of Bonnet (2002) that sustainability should relate to "human flourishing" and the views that sustainable development is a process (Summers & Childs, 2007), way of traveling (Gouch, 2002) and the journey one must undertake (Porrit, 2000). In the contemporary world, to develop means that a nation is:

- scientific and technological advanced;
- prosperous with a knowledge-driven economy;
- high level of human capital; and
- free, democratic with high level of equity and justice.

We conceptualize sustainability in terms of functionality and in this regard we define a sustainable education as education given to citizen to enable them cope adequately with their environment. Such education should provide the skills and knowledge that will enable citizens not only to read and write but apply such education to solve problems that confront them daily.

Sterling (2005) proposes three contextual levels to whole system thinking about education:

- a. the education paradigm which should address the purposes of education and how these purpose relate to society and the biosphere;
- b. organization and management of learning environment investigates how the whole management system views policies and practice towards education and the environment; and
- c. learning and pedagogy how practice are redesigned to put into practice a participative, integrative model of learning and teaching.

To achieve all these, education which is a cornerstone to development must be well structured. The UBE provides the opportunity for Nigeria to meet these development paradigms and attain sustainability. For the UBE to do this some of the following issues must be urgently addressed.

Schools with Contemporary Outlook: Good schools ensure a clean and secure physical environment. The physical appearance of a school and its environment communicates a lot about the school and its people (Berkowitz, Kuchn & Smith, 2003). Government must pay attention to the school facilities. The facilities must be inviting and this in a way can create a sense of security (Centre for Fourth and Fifth RS, 2003). Between 1999 and 2008 (about nine years after the launch of the UBE), many schools facilities remain at a very deplorable and repugnant state. The grandiose launching of the UBE scheme did not attract any constructive remodelling of the school environment. Currently, children are crowded in an environment where modern poultry and piggery cannot take place. Government should utilize the millions of Naira petrodollar to construct new school buildings with modern facilities toilet, water, electricity, computer etc.

Quality of Teachers: Reports show that one of the reasons the UPE failed was due to lack of quality teachers. Despite the recognition that no education system can rise above the quality of its teachers (FRN, 2004), there are no discernible efforts have been made to train, retrain and employ high quality teachers. How do we expect to produce high quality students if teachers are not highly skilled? Many countries (e.g Singapore) recruit their teachers from the top third of its high school graduates with BA and B.Sc in Education and this category of graduates also earn salary more than other University graduates (Singapore, Ministry of

Education, 2005). This practice ensures that the best brains are attracted to the teaching profession. The failure of the UPE in 1976 is largely blamed on the no availability of quality teachers. Most of the teachers recruited for the scheme were hastily trained through a crash programme. This is the same haste that is being applied for the UBE teachers. By the timeline of 2009, grade II teachers are to upgrade their minimum qualification to NCE as the Federal Government has concluded plans to sack the affected ones at the lapse of 2009 (Ande, 2007). A very short programme to quickly achieve the minimum qualification is currently being "crashed" by the National Teachers Institute. For the UBE to produce high quality outputs the quality of teachers must be taken seriously and the following issues must be properly addressed.

- i. High quality teacher recruitment: we suggest the Singapore example. The apparently low status of teachers and interest on teaching is also linked to poor salaries and a number of countries have responded positively by increasing remuneration for all teachers (Stewart & Lucas, 2005). As Watereus (2002) point out, countries with relatively high teacher's salary (France, South Korea, Germany) had fewer problems attracting and retaining quality teachers.
- ii. Teachers hold the key to societal change and reports have documented a strong emphasis on the need to reorient teacher education towards sustainability (UNESCO, 2004; 2005; UNESCO-UNEP, 1990). As firth and Winter (2007) aptly observed, if education is a solution towards a sustainable future, the initial teacher training should provide a strategic opportunity for ensuring that all teachers are able to teach for sustainability.

Scientific and Technological Literacy

As the twenty-first century progresses, it is increasingly evident that it is the age of information science and computer technology. Friedman (2005) asserted that with the wiring of the world, digitization of production economy and space research, any country that does not take science, technology and mathematics literacy seriously does so at great risks. History has demonstrated that all human societies through the prehistoric cum industrial periods advanced through a breakthrough in science and technology. That the 21st century would be characterized by knowledge explosion has long been predicted. For example, Johnson (1964) noted that:

In...24 hours, the research that comes forth around the world would fill seven sets of encyclopaedia Britannica. In the next one year, the output of...research would require a man to read around the clock day and night for the next 460 years.

In the knowledge based society of the 21st century, ability to process and use large data, information and knowledge will pose great challenge to individuals, groups, institutions and the general society at large. As more countries develop and capitalize their knowledge assets for economic prosperity, the need to develop the ability to access, organize, process and apply knowledge within their environment becomes very crucial.

Research (Akinmade, 1996) shows that children who learn science using process and activity approaches not only improve their ability to apply knowledge to solve problems but they also become more creative, master science content better and develop positive attitude toward science. The predominant teaching method in Nigerian Primary schools is the traditional approach which is usually teacher centered and authoritative (Omoogun,2002). Pupils are mere passive recipients of knowledge as teachers more or less explain and describe all she wants the students to know. If the UBE is to be productive, teaching science at this

level must move from expository to investigative method. The current practice of passive, rote learning and memorization must give way to active participation of learners.

As the years progress, new discoveries from space, biotechnology, ocean depth and nuclear researchers will push more challenges at our door steps. With Nigeria still struggling with basic needs and infrastructure, it is an enormous task for the school to keep track of new knowledge and development. The need for a critical mass in science and technology education should be a national emergency. For the UBE to strongly address the models, sound generic sustainable education practice is fundamental. The curriculum must be "holistic, value focused, active and participative based on and in the environment" (McNaughton, 2007:624).

Indigenous Curriculum

Basically, the failure of modern education is not giving pupils "framework for linking knowledge, ideas, skills, values about their immediate environmental education." On a general note, learners should be allowed to construct their knowledge and understanding through active and local participation where they have the opportunity to discover facts, ideas and meanings. Regular direct experience and outdoor programmes are recognized as rich resources for developing enjoyable and effective learning. The UBE curriculum must thus be practical, attractive and stimulating. Any education for sustainable development must key into the curriculum issues relating to local problems. To do this effectively, the UBE curriculum should address the four-phase model of sustainable education namely reactive, receptive, constructive and proactive (Hesselink, 1992). Our educational systems will remain unsustainable and dysfunctional unless it addresses most of our local problems and issues.

Conclusion

We examine the key role of education in national and sustainable development. For Nigeria to join the super highway leading to development, the UBE provides a unique opportunity for her to provide the needed education for her citizen to effectively function in a knowledge-driven and globalize world.

To effectively do these, Nigeria must ensure the proper oiling of what we call the "four wheel" of sustainable education: the school environment, the quality of teachers, scientific and technological literacy and indigenous curriculum. We affirm that vigorous engineering of the four wheels can stimulate and sustain development.

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