

Restructuring and Re-alignment of Extant Primary and Junior Secondary Schools Curricula: Challenges to Basic Science and Value Education

Matthew CYRIL , Umar MUHAMMAD , Comfort Bissallah EKELE

Abstract— Before now, the existing curricula used in Nigeria primary and secondary schools have been described as being overloaded, as such could not induce in learners the needed entrepreneurial skills for self reliance and the ability to response to challenges posed by globalization. In an attempt to bridge these observable limitations, the National Education Research and Development Council (NERDC) restructured and re-aligned all extant primary and junior Secondary Schools Curricula, which gave rise to the new 9-year Basic Education Curriculum. This trend has left much to be desired. Hence, this paper is an attempt to identify and give answers to some basic challenges posed by the approaches adopted to reduce the overload identified in the curricula with respect to subject listings and composites subjects presented under sub-themes. Particular references were made to religion and national values as well as basic science and technology. It highlighted the basic features of the basic education curriculum, composite subjects and their corresponding sub-themes. Finally the paper suggested among others, that subject matters which are centered on values and skills acquisition should be presented to the learner in their own right and practices not under sub-themes. Secondly, ambiguous subject listing under a sub-theme would only compound content delivery and assessment requirements.

Index Terms— Basic Education, Curriculum, Values, Skills.

I. INTRODUCTION

Highlight One of the aims of education which stands out is the development of the individual child so that he can meaningfully share the values and aspirations of his society and state as well as contribute in no small measure to its growth and development. This suffices to say that values and aspirations of the society determine not only the manner of person that exists but also to some extent what manner of person is needed in the society; because every society has various types of needs, values and attitudes which must be fulfilled in other for that society to function adequately and effectively. The achievement of the right to education requires that young people be given the opportunity necessary for the acquisition of the knowledge, skills, attitudes and values which are expected to enable them lead happy and productive lives as individuals and discharge their social duties for the betterment of life in the society. These can be

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achieved through the school, beginning at the very basic foundation of learning – lower basic (Primary school) as well as middle basic (Junior Secondary School).

Primary education has been described as the basic and foremost right of every child (Morrison, 2010). Every single child, that means male as well as female should be able to complete full course of primary education, be it from public or private schools. The concept of basic education however, is not a completely new term to the Nigerian society. Within the last decade; it has assumed a global significance and its meanings have been broadened (Yoloye, 2004). It is also described as that level, type and form of learning needed to build firm roots for literacy and numeracy, to inculcate basic life skills and more importantly, to consolidate the skills of learning how to learn (Obayan, 2000). Hence, through the school, the right type of values and skills are imparted in the child with the help of a well developed curriculum.

Two of the National Educational Goals outlined in the Nigeria National Policy on Education (FGN, 2004) are: the inculcation of the right type of values and attitudes for the survival of the individual and the Nigerian society; the acquisition of the appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to the development of the society. No doubt then that in Nigeria, primary education is said to be compulsory and free.

II. CONCEPTUAL FRAMEWORK

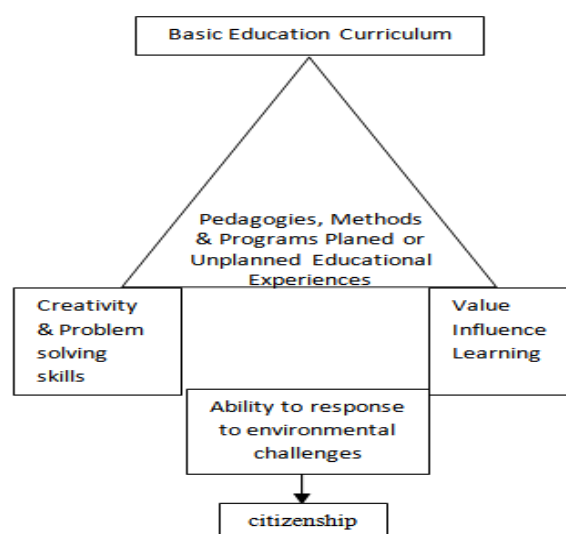


Figure 1: A schema showing link among Basic Education, values & skills for citizenship

III. BASIC EDUCATION CURRICULUM (BEC)

Curriculum as defined by Offorma, (2002) is a deliberate and systematic planned attempt to change the behaviours of the young and inexperienced and, also, to enable them gain the insight that will enable them to build a better society. It represents the channel or instrument of change through which the desired values and attitudes of the society are transmitted by the school to the child. Curriculum is the medium through which educational institutions seek to translate the societal values into concrete reality (Alade, 2011). Curriculum trends according to the International Bureau of Education (Ibe, 2018), refers to increasingly important changes that are taking place in the field of curriculum to respond to current and anticipated developments in society and education. In other words, curriculum trends are geared towards the attainment of societal needs. At the primary and junior secondary school levels, these were meant to be achieved through the introduction of the Basic Education Curriculum (BEC).

Following the decision of the Federal Government to introduce the Universal Basic Education (UBE) program, the Nigerian Educational Research and Development Council (NERDC) re-structured and re-aligned all extant Primary and Junior Secondary Schools (JSS) curricula into a 9-Year Basic Education Curriculum (BEC) for implementation in Nigerian Schools (FGN, 2012). The 9-year basic education curriculum was particularly developed for the attainment of the Education for All (EFA) Goals, the critical targets of the National Economic Empowerment and Development Strategies (NEEDS) and the Millennium Development Goals (MDGS). In like manner, at the United Nations Sustainable Development Summit on September 2015, world leaders adopted the 2030 agenda for Sustainable Development, which includes a set of seventeen (17) Sustainable Development Goals (SDGs) to end poverty, fight inequality and injustice, and tackle climate change (Clark, 2015). Implementation of the 9-Year BEC commenced nationwide in Primary 1 and JSS 1 classes in September 2008. The first batch of JSS students graduated in June 2011. It was expected that by September 2014, the group of pupils that benefitted from the use of BEC at the primary school level will be entering class one of the Junior Secondary School.

With the introduction of the new 9-year basic education curriculum however, it was expected that basic science is not only presented to students but taught in all our primary schools with sole objectives of imparting the needed basic knowledge and skills for entrepreneurship, wealth generation and educational advancement. Regrettably however, since the implementation in 2008 of the new nine year basic education curriculum (BEC); prior to its general acceptability and full implementation, the Nigerian Educational Research and Development Council (NERDC) has in less than three years reviewed the curriculum on the basis that the BEC had 20 subject listings, which is contrary to global best practices of a maximum of ten subjects in primary schools and indeed in junior secondary schools (Obioma, 2012).

The introduction of Basic Science and Technology in school curriculum implies an attempt for a radical change in emphasis and focus. Innovation in Basic Primary and Junior Secondary Schools in Nigeria is characterized by features of

the national core curriculum which is the incorporation of concept formation and skills acquisition. The Nigerian Educational Research Development Council (NERDC) has recently scrapped integrated science and primary science and replaced them with Basic science and technology.

The Universal Basic Education (UBE) program, an educational reform program of the Federal Government of Nigeria was introduced to serve as a catalyst for achieving free, compulsory and universal 9-year education for all school age children irrespective of their socioeconomic circumstance (FGN, 2006). The program was launched on 29th September 1999 by former president Olusegun Obasanjo in Sokoto, Sokoto state. UBE Act (2004) which was signed into Law in May 2004 provided the legal framework for the program and an indication of its effective take up. However, the implementation started in July, 2005 with the appropriation of the UBE fund to the Universal Basic Education Commission (UBEC) and subsequent disbursement to states. The education program is regarded as a reinforcement of the 6-3-3-4 policy on education rather than a new policy in itself. The New Basic Education curriculum was approved by the National Council of Education (NCE) in December 2005. There is no doubt that the curriculum is the bedrock of any educational reform of which the Universal Basic Education is not an exception.

The 9-Year Basic Education Curriculum emphasizes among others, value re-orientation, poverty eradication and employment generation capabilities in learners. In this curriculum reform initiatives, science, technology, mathematics, and vocational education and training are specifically designed to provide the contents, learning experiences and skills for the socio-economic transformation of the Nigerian nation (Ibokwe, 2015). It was developed in response to Nigeria's need for relevant, dynamic and globally competitive education that would ensure that learners at the Basic Education level are capable to compete favourably anywhere in the world in terms of knowledge, skills, techniques, values and aptitude.

IV. VALUES

Value is an old concept commonly associated with philosophical axiology, which is the study of values. Because of its philosophical bases, values have varied meanings attached to it depending on the school of thought. For instance, Hunnax (1986) in his book "*Chronological and thematic charts of philosophies and philosophers*" ex-rayed the different views held about the concept of values as follows: for idealists – value is a certain quality of objects, *bona fide* belonging to them but especially revealed in their manifestations within the attitude of human minds. These views present attitude of the human person as a true reflection of his values. For the Phenomenologist, values are essence, that is, self-subsistent entities which are emotionality intuited. In this case, values can only be discerned through emotion and reason. Intuitionism on the other hand see values as, for instance, *the good* as indefinable, that is un-analyzable properties not reducible to terms other than value terms, but nevertheless may be factually predicated of acts or objects. In any case, one's value determines his actions in the society,

whether good or bad, whether good or bad. No doubt, value judgments are in some sense objective because values are constituents of or reside in objective reality in the human person. Yes, values could be said to be grounded in reality, contextually however, value education refers to the realistic nature of education in bringing about the needed change in attitude for the survival of individual and the society. This is clearly manifested in the sociological aspects of science, which among others seeks to inculcate in the individual; those habits and skills for effective role in the society vis-à-vis his right and responsibilities in relation to his environment.

V. SKILLS ACQUISITION

Science contributes its unique skills, with its emphasis on hypothesizing, manipulating the physical world and reasoning from analyzed data. Basic Education Curriculum (BEC) was organized around the development of skills. According to Ogbuanya (2010), skills are the abilities in carrying out a task. This implies that students at primary school level, must be actively engaged on the collection and use of observed evidences based on problems appropriate to their level of maturity, through the use of educational resources and the skills acquired to overcome them.

The noticeable high rate of corruption, kidnappings and willful killings and destruction of life and property in Nigeria could be attributed to the failure in our value system. No doubt, Sambo, Udofia and Okoko (2018) describe the current times in Nigeria as associated with general insecurity manifesting in terrorism, militancy, kidnapping and armed robbery for which youths have been greatly involved. However, whether the current trend in Basic Education Curriculum (BEC) and the introduction of National Values as well as basic science under composites subjects: Religion and National Values, Basic Science and Technology respectively are capable of adequately and effectively addressing these issues, is what this paper seek to address. Hence, the paper examined the implication of the restructuring and re-alignment of the extant curricula as it relates to value education in relation to National Values and the acquisition of the appropriate skills in relation to basic science and technology.

VI. CREATIVITY AND PROBLEM SOLVING SKILLS

Creativity and problem solving skills are two of the most important lifelong skills. Creativity refers to the ability to think independently, responsively and productively. In other words, any thought which is independently conceived responsively and which results into productivity of goods and services for the common good is creativity. Critical thinking is that kind of thinking that can lead to meaningful result through creative ways of understanding and willingness to consider views where necessary (Solomon, Kabang and Edward 2018). Critical thinkers are concerned about productivity in an attempt to solve global phenomenon. Hence, they are inquisitive about the physical world, how things are and how things should be for the wellbeing of all. Skills in creative ability enables the child have control over the perceived ideas he/she has about the physical world. It enables him to establish

relationship between two or more ideas, which he may organize into a common whole.

Fundamentally, progresses and achievements of life are a function of a good and strong problem solving skills one poses. Problem solving is the ability to identify real world problem or challenges, define the problem, design an appropriate process of solving the problem and apply relevant techniques in solving the problem.

VII. THEORETICAL FRAMEWORK

The general theory of value - Axiological Objectivism Theory (1890) has its origin in the debate between Alexius Meinong and Christian Von Ehrenfels during 1890's concerning the source of value (Hunnes, 1986). Meinong saw the source of value as feeling or the expectation or possibility of pleasure in an object, while Ehrenfels saw the source of value in desire. Thus, the human person is endowed with value through actual or possible desire; the person possesses value because it is desired. In both views however, for axiological objectivism theory, value is the property of an object (Human person), because values reside in objects (human person) as do colors, temperature, attitudes etc and are grounded in reality. In education, it is through the curriculum that the desired type of values, skills are acquired and only those who acquired the right type of values and skills contributes meaningfully to the development of the society and the individual attitude and habit for citizenship.

The goals of education have a long history to it. In like manner, pilot study report of the National Education Research and Development Council (NERDC, 2008) has it that before now, the existing curriculum in use in the Nigerian Primary and Secondary Schools have been overloaded in such a way that it cannot induce in the learners the entrepreneurial skills needed to be self-reliant nor responsive to the challenges posed by globalization. The overall objectives of the basics education curriculum as provided by the National Education Research and Development Council (NERDC) are to enable the learners to: develop interest in science and technology, acquire basic knowledge and skills in science and technology, apply their scientific and technological knowledge and skills to meet societal needs, take advantage of the numerous career opportunities offered by science and technology and become prepared for further studies in science and technology.

VIII. BASIC FEATURES OF THE REVISED BASIC EDUCATION CURRICULUM (BEC)

Core subjects are English Studies, one Nigerian Language, Mathematics, Basic Science and Technology, Religion and National Values, Cultural and Creative Arts, Pre-Vocational Studies, French and Business Studies. Elective (optional) Subject in the curriculum is Arabic Language. French and Pre-Vocational studies are introduced in Primary 4-6 as core subjects, while Business Studies is introduced as a core subject at the Junior Secondary school level. Basic science and Technology, Religion and National Values and Pre-Vocational Studies are composite subjects

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IX. COMPOSITE SUBJECTS AND THEIR COMPOSITIONS (SUB-THEMES)

i. Basic Science and Technology

Sub-Themes:

- Basic science
- Basic Technology
- Physical and Health Education
- Information Technology

ii. Pre-Vocational Studies

Sub-Themes:

- Home Economic
- Agriculture
- Entrepreneurship

iii. Religion and National Values (RNV)

Sub-Themes:

- Christian Religious studies (CRS)
- Islamic Religious Studies (IRS)
- Social Studies
- Civic Education
- Security Education

X. MAJOR CHALLENGES OF BEC ON VALUE EDUCATION AND SKILLS ACQUISITION

Regrettably, values which feature prominently in the curriculum reform were presented under a sub-theme, a practice which left more questions than answers. For instance, would thematic approach yield the desired result of impacting the right type of values for the needed change in attitude among the Nigeria teaming school age pupils? How realistic is the current practice with respect to composite subject approach of the curriculum in the attainment of skills?

In as much as school curriculum should undergo an adequate and effective periodic transformation in order to meet the changing needs of the society, reforms should be made un-ambiguous for implementers – teachers. They should be trained to interpret relevant subject matter provisions of the curriculum especially when shrouded under composite subjects (sub-themes) as presented in the BEC. BEC which brought about the much debated themes ‘Religion and National Values’, ‘Basic Science and Technology’, it is pertinent to note that the thematic approach given to subject listing under these themes has left more challenging questions than answers to value education and skills acquisition. Some of these major observable challenges are presented in line with Junaid (2018):

1. These trends are derivations from foreign cultural traditions designed to serve the later and may not necessarily be suitable for the Nigerian State and culture.
2. Commitment to high profile international policies (hinged on global best practices) on universalization of basic education had led to the ambiguous expansion of subject listings and curriculum contents under the guise of composite subjects rather than reducible manageable size.
3. The shift on emphasis from Christian Religious Studies (CRS) and Islamic Religious Studies (IRS) of the two major state religions, which hitherto has to some extent, met the value system requirement of the Nigerian State

call into question; the efficacy of National Values in value education delivery for citizenship.

4. Subjects presented to a learner under composite sub-themes will unnecessarily expand the scope beyond learners’ limits and understanding, hence pose problem to assessment requirements and procedures that leads to content validity and reliability of assessment instruments.

XI. CONCLUSION

It is clear that one of the major basis upon which reform of the basic education curriculum was made is, that BEC had 20 subject listings which is contrary to global best practices of ten. However, it is evident that composite subject approach by this practice only reduced composition of subjects but did not in actual fact reduce subject listings to ten as reflected prominently in: Religion and National values, Basic Science and Technology among others.

XII. SUGGESTIONS

1. Reforms in BEC should be made to meet state tradition and cultural practices of the child.
2. Ambiguous subject listing under a theme would only compound content delivery and assessment requirements of the subject matter.
3. Subject matters that relates to value and skills acquisition are better understood when materials are presented to the learner in their own right and practices not as sub-themes.

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