Evolution of Functional Basic and Senior Secondary Education Curriculum in Nigeria: Implications for Effective Implementation

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Abstract

The development of curriculum is a deliberate and direct effort within a given programme framework for strengthening synergy and relevant services for ensuring the acquisition of knowledge needed for the improvement of human's surrounding. One major instrument to drive the MDG vision statement and NEEDS is a functional curriculum which guarantees and brings about poverty eradication, wealth/job creation, knowledge and innovations in the formal and non-formal systems. A strategic curriculum renewal is one of the educational reforms that have been witnessed by the education sector in Nigeria. In this paper, the evolution, philosophies, goals, challenges and implications of the Basic and Senior Secondary Education Curriculum Implementation were highlighted, the "New" Basic Education, Senior Secondary Education and Trade/Entrepreneurship Education Curricula were the focus of this paper in an attempt to familiarize ourselves with these documents and suggest ways the curriculum can be effectively implemented.

Keywords: Curriculum, Evolution, Implementation, Functional

1.0 INTRODUCTION

The Millennium Development Goal (MDG) vision statement, the National Economic Empowerment Development Strategy (NEEDS), and the transformation Agenda of the present administration are all relevant instrument for national unity, peace, a stable policy, advancement of technology, including ICT, industrialization, transparency, loyal and patriotic citizenship.

It has been argued that sustainable development is not a function of policies alone. It must involve active participation of this our society or stakeholders in our own sector of education, the government, NGOs, development partners, communities, the private sector, parents, guardians, teachers, students etc.

Nigeria is sometimes perceived as having an unenviable long list of abandoned projects' of educational plan and policies. The list includes the National Policy on Education (NPE), Universal Primary Education (UPE), Universal Basic Education (UBE) and research work in education, many of which are gathering dust on library shelves.

Developing the human capital of young Nigerians is vital if only to keep our dwindling economic growth. Our future entrepreneurs need the twenty-first century skills and knowledge to create successful ventures and to spur innovation in the Nigerian economy. It is in consideration of this that the National Policy on Education (NPE, 2004) section 1, sub-section (7d) tries to explain the objectives of Nigerian education system, thus:

"...the inculcation of the right type of values and attitudes for the survival of individual and the Nigerian society. The training of the mind in the understanding of the world.....the acquisition of appropriate skills and the development of mental, physical and social abilities and competencies as equipment for the individual to live in and contribute to development of the society."

According to Eze (2011), Nigeria developed and adopted the National Economic Empowerment Development Strategy (NEEDS) in 2004 as part of its national policy. NEEDS has four critical elements as follows:

- Value re-orientation,
- Poverty eradication,
- Wealth creation and
- Job creation

The national policy has long adopted education as the instrument for change and development. As the driving force of the current world order and globalization (Wushishi & Kubo, 2011)

In response to ongoing national and global reforms in the social, physical and economic contexts, the Nigerian Educational Research and Development Council (NERDC), with curriculum development as one of its core mandates, developed the 9-year Basic Education Curriculum, the Senior Secondary Education Curriculum and 34 Trade/Entrepreneurship curriculum for use at both the basic and senior secondary education levels in the country.

The implementation of SSEC in September, 2011 further consolidates on the gains derived from the 9-Year Basic Education Curriculum (BEC) introduced in 2008. This was carried out with the main thrust of, among others, to achieve; job creation, poverty alleviation, empowerment of the citizens through quality education and value reorientation with imparting on impacting entrepreneurial skills for students in senior secondary schools (ERC, 2011). Although the success of this programme requires a very good policy, the main challenges would be in the area of implementation.

1.1 Background Features Of The Basic Education Curriculum

Between 2005 and 2007, the NERDC, in response to the challenge and the on-going national and global reforms in the social and economic sectors, developed a 9-year Basic education Curriculum that will facilitate the achievement of the core objectives of NEEDS, EFA and the MDGs. The 9-year Basic Education Curriculum (BEC) has been approved for use in all Nigerian Primary and Junior Secondary Schools since September 2008. This present BEC structures consists of 20 subjects listing. A lot of sensitization has already been carried out on these. However, recent feedback on the BEC suggests curricula overload in terms of subject offerings at both the primary and JSS levels. This issue was reiterated at the presidential summit on the State of Education in Nigeria held in October, 2010. Consequently, delegates at the summit called for immediate action to compress the curricula offering at all levels of Basic Education. NERDC has since completed the revision of the curriculum. The curriculum is in the process of printing and circulation.

1.2 Structure of the Revised Basic Education Curriculum

It was recommended at the Summit on Education that the number of subjects offered for Basic Education should be reduced to between 6 and 13 subjects in line with international practices. The new framework, therefore, identifies and groups related disciplines together to become one, thereby, achieving a reduction in subjects listing. The listed components in those subjects are to serve as themes. However, some subjects still remain single while one is optional. Repetitions across the themes were avoided while basic contents were admitted in the revised curriculum.

The newly revised structure adopted by stakeholders therefore consists of 8 subjects for primary 1-3, 9 subjects for primary 4-6 and 10 subjects for JSS 1-3. The structure is as follows:

- 1. English Studies
- 2. Mathematics
- 3. Cultural and Creative Arts
- 4. One Nigerian Language
- 5. Basic science and Technology
 - Basic Science
 - Basic Technology
 - Physical and Health Education
 - Information Technology (IT)
- 6. Pre-Vocational Studies (PVS)
 - Home Economics
 - Agriculture
 - Entrepreneurship
- 7. Religion and National Values Education (RVE)
 - Christian Religious Studies/Islamic Studies
 - Social Studies
 - Civic Education
 - Security Education
- 8. **French**, which is to be introduced from primary 4 as a core subject?
- 9. Business Education is to be introduced in JSS one
- 10. Arabic Language is optional

Other highpoints of the newly revised curriculum are:

- Presentation of a minimum of 7 subjects and maximum of 8 subjects for primary 1-3 pupils, a minimum of 8 subjects and a maximum of 9 subjects for primary 4-6, while Junior Secondary School (JSS) 1-3 students are expected to offer a minimum of 9 and a maximum of 10 subjects.
- English Studies, Mathematics, Cultural and Creative Arts and one Nigerian Language as single subjects in the curriculum.
- Inclusion of the study of Entrepreneurship in Pre-Vocational Studies.
- Introduction of IT in Basic Science and Technology
- Infusion of creative and critical thinking and relevant elements of the National Economic Empowerment and Development Strategy (NEEDS) into the relevant contents of the curriculum.

- Infusion of emerging issues such as Drug Abuse Education, Peace Education, Road Safety Education, Consumer education, Food and Drug Safety element, National Values and Orientation, Disaster Risk Reduction Education etc. in the curriculum.
- The implementation of the new BEC structure begins hopefully, in September, 2013.

1.3 Background Features Of Senior Secondary Education Curriculum

To consolidate the gains of the present 9-Year Basic Education programme as well as ensure the actualization of Federal Government's agenda for national development, NERDC developed a new curriculum structure for Senior Secondary School (SSS) in Nigeria. The new Senior Secondary Education Curriculum (SSEC) is systematically connected with the contents of the present Junior Secondary Education Curriculum (JSEC).

The curriculum is diversified that it is made to cater for the differences in talents, opportunities and future roles of individuals. It is developed to provide trained manpower in the applied sciences, technology and commerce. Technical knowledge and vocational skills necessary for industrial and economic development were also greatly considered in the development of the curriculum. The curriculum is also designed using the thematic approach and the provision of options in school subjects.

1.4 Structural Design of the new Senior Secondary Education Curriculum

The new SSS curriculum structure is geared towards job creation, poverty alleviation and eradication, and wealth creation. The curriculum is designed to drive the development of appropriate skills for social and economic transformation. It will provide effective support/foundation for higher education if well implemented. It is also expected that a community of Nigerian youth with trade/entrepreneurship skills will emerge. The steps taken in the curriculum transformation to achieve this included, but not limited to the following:

- Developing the curriculum with respect for individual and cultural differences.
- Including curriculum subjects and resources, which are societal-needs driven inclusive in content, language, teaching and assessment methodology.
- Providing a curriculum which facilitates challenging learning environments, which are socially and culturally appropriate, supportive and physically comfortable.
- Developing a curriculum which promotes social responsibility, empathy, sensitivity and equal and non-violent relationships.
- Ensuring more participatory teaching and learning methodologies which are geared towards national development and which will give equal opportunities for citizens to participate actively in nation building.

The Senior Secondary Education Curriculum (SSEC) is designed and broken as follows:

- 1. Theme- this refers to a broad concept which provides an umbrella for a cluster of relevant and related topics.
- 2. Topics- topics are derived from the given theme. These themes are broken into different topics for easy implementation. These topics can also be broken down into chapters depending on the volume of the content and objectives to be achieved within a stipulated period.
- 3. Performance Objectives These are statement of achievable task, i.e. what we want the students to achieve within the stipulated period (perhaps in a year, a term, a week, a day)
- 4. Contents These are the body of knowledge, skills, principles, ideas that would lead to the achievement of the stated objectives.
- 5. Activities These are broken down into teacher and student activities. These activities are what the teacher or the students would do that make learning take place. It could be discussion, demonstration, drawing, speaking, writing, reporting, dramatizing, etc. Selected activities depend on the content and what should be taught and learnt to achieve stated objectives.
- 6. Teaching and Learning Materials These involve the choice of suitable teaching and learning materials that would lead to the achievement of the stated objectives. The choice of materials would depend on the topic to be taught. All these have been provided in the curriculum.
- Evaluation Guide At the end of the teaching/learning exercise, students should be able to perform or demonstrate certain tasks that would indicate how far they have learnt or grasped what has been taught. Evaluation Guide helps to assess learners' ability as far as the lesson or topic taught is concerned. The evaluation guide should closely test the performance objectives.

Therefore, in the new SSEC, the following high points of the curriculum structure are identified:

- Alignment of the compulsory cross cutting subjects
 - English language
 - General Mathematics
 - Civic Education
 - Trade/Entrepreneurship Studies

- Alignment of curriculum into four distinct field of study
 - Senior Secondary Education (Science/Mathematics)
 - Senior Secondary Education (Humanities)
 - Senior Secondary Education (Technology)
 - Senior Secondary Education (Business)
- Inclusion of Trade/ Entrepreneurship, and Civic Education as compulsory cross cutting subjects.
- Alignment of subject offerings from the:
 - Compulsory (cross cutting) core subjects
 - Core subjects in specialized field of study
 - Elective subjects
 - Trade/Entrepreneurship.

The new Senior Secondary Education Curriculum Structure therefore comprises:

- A group of 4 compulsory, cross-cutting subjects that must be offered by all students.
- Four field of study.
- A group of 34 Trade/Entrepreneurship subjects
- Elective subjects

(Note that a field of study is a group of subjects representing a student's potential area of specialization) The implications of this new curriculum structure are as follows:

- Senior Secondary education has four distinct streams, and any secondary school in Nigeria can stream into all four or any combination of the four.
- An appropriate degree of comprehensiveness is brought to bear on the education system.

1.5 Subject Offerings in the New Senior Secondary School Education in Nigeria

a. Compulsory Cross Cutting Subjects:

- English language
- General Mathematics
- Civic Education
- One Trade entrepreneurship studies

All students irrespective of their field of study are to take the above listed compulsory cross cutting subjects.

b. Core Subjects in Specialization Field of Study

Humanities	Technology
Nigerian Languages	Technical drawing
Literature in English	General Metal Work
Geography	Basic Electricity
Government	Electronics
Islamic Studies	Auto-Mechanics
History	Building Construction
Visual Arts	Wood-work
Music	Home Management
French	Food and Nutrition
Arabic	Clothing and Textiles
Economics	
Christian Religious Studies	
Science & Mathematics	Business Studies
Biology	Accounting
Chemistry	Store management
Physics	Office Practice
Further Mathematics	Insurance
Agriculture	Commerce
Physical Education	

c. Electives

Health Education Computer Studies/ICT

These are subjects chosen outside the student's specialized field of study e.g. a science student may decide to take music as elective

d. Trade /Entrepreneurship Subjects

Respective school is expected to choose a specified number of trade/entrepreneurship subjects in relation to what is available and or obtainable in its immediate environment. It is however recommended that school should choose between three (3) and five (5) trade/entrepreneurship subjects

for their students from where they will chose one or two as the case may be. These subjects include:

- 1. Auto body Repair and Spray painting
- 2. Auto Electrical work
- 3. Auto Mechanical Work
- 4. Auto Part Merchandising
- 5. Air conditioning & Refrigerator
- 6. Welding and fabricating Engineering Craft Practice
- 7. Electrical installation and Maintenance Work
- 8. Radio, Television and Electrical Work
- 9. Block-Laying, Brick-Laying and Concrete Work
- 10. Painting and Decoration
- 11. Plumbing and Pipe-fitting
- 12. Machine Woodworking
- 13. Carpentry and Joinery
- 14. Furniture Making
- 15. Upholstery
- 16. Catering Craft Practice
- 17. Garment Making
- 18. Textile trade
- 19. Dying and Bleaching
- 20. Printing Craft Practice
- 21. Cosmetology
- 22. Leather Goods Manufacturing and Repair
- 23. Stenography
- 24. Data Processing
- 25. Store Keeping
- 26. Book Keeping
- 27. GSM Maintenance
- 28. Photography
- 29. Tourism
- 30. Mining
- 31. Animal Husbandry
- 32. Fisheries
- 33. Marketing
- 34. Salesmanship

Based on the new SSS curriculum structure:

- Students are to offer all the four (4) compulsory cross-cutting core subjects, namely English language, General Mathematics, Civic Education, and One Trade/ Entrepreneurship studies. Note that students are to select one (1) Trade Entrepreneurship subject from the list of 34 Trade Entrepreneurship subjects.
- Students may then chose two (2), three (3), four (4), or five (5) subjects from each of their preferred four field of study depending on their potential, interest and capability.

It is important to note that:

- If students chose two (2) subjects, they can select two (2) or three (3) subjects from any other fields of studies or Trade Entrepreneurship subjects to make a minimum of eight (8) or maximum of nine (9) subjects.
- If students chose three (3) subjects, they can select one (1) or two (2) subjects from any other fields of studies or Trade Entrepreneurship subjects to make a minimum of eight (8) or maximum of nine (9) subjects.
- If students choose four (4) subjects, they have already selected the minimum of eight (8) subjects and can select one (1) more subject from any other fields of studies or Trade Entrepreneurship subjects to make a maximum of nine (9) subjects.
- If students chose five (5) subjects, they have already selected a maximum of nine (9) subjects.
- In all, students are to take a minimum of eight (8) subjects or a maximum of nine (9) subjects.

1.6 Emergence Of Trade / Entrepreneurship Curriculum

The need for introducing entrepreneurship education in Nigeria educational system can easily be attributed to the scary unemployment statistics of the nation, while the academic institutions are busy turning out graduates mostly regarded as unemployable by the employers of labour. Unemployment, according to Olaitan (1996) leads to frustration and disillusionment, which may result in crime or ill attempts to escape from the pains

and humiliations of poverty and lack. Unemployment has posed serious problems not only to the welfare of individuals but also to that of the families. The current waves of terrorism in the country can also be described as a fall-out of improper or poor education.

Entrepreneurship education in a school curriculum ensures that each learner has a chance to become an entrepreneur and each student is the architect of his / her fortune or destiny. The National Bureau of Statistics (NBS) put the figure of the unemployed Nigerian in the first half of the year 2011 at 23.9%, up from 21.1% in 2010 and 19.7% in 2009. With 23.9% unemployment rate in 2011, it means that among the 165 million estimated population of the country, about 40 million Nigerians are living without job.

1.7 Prospects of Entrepreneurship and Skills Acquisition in Schools

The introduction of entrepreneurship education in Nigerian schools is surely expected to lead to a lot of positive development within the education sector and, more importantly, in the larger Nigerian society. Some of the expected outcomes of this laudable policy include:

- Increase the number of employable graduates in the society
- Increase number of small and Medium Scale Enterprise (SMEs) and employment
- Reduced crime rate and other social vices
- Increase competitiveness
- Leads to the empowerment of teachers

1.8 Challenges And Suggestion For The Implementation Of The Curriculum In Schools

Maintaining a viable educational system requires various elements, considerations and, of course, various resources. These are inputs that could lead to excellent output. Therefore, in any system of education, the following must be given adequate consideration:

- Educational objectives
- Instructional Materials, including Textbooks
- Funds
- Educative School Environment (adequate infrastructural facilities, equipment, etc.)
- Teacher preparation, Competence, Utilization and advocacy

As laudable as any curriculum may be, it usually does not go without some challenges. Inadequate funds, infrastructural facilities, human and material resources may constitute some challenges in the implementation of the curriculum. The issue of costs in education and particularly in curriculum development and implementation must be satisfactorily addressed in order to enjoy the gains of the newly introduce entrepreneurship curriculum. Some of these challenges include:

- Lack of necessary support from stakeholders, e.g., the private sector, teachers and government
- Inadequate provision of fund
- Lack of adequate training for the users (teachers) of the curriculum
- Inadequate instructional materials, facilities and equipment
- Lack/inadequate skilled instructors
- Lack of proper (grass root) circulation of the curriculum
- Lack of adequate remuneration for the curriculum operators.

Funding problem will affect provision of necessary resources, facilities and provision of adequate and quality teachers. Education should be given an emergency status and hence accorded relevant and adequate funding. The newly introduced subjects such as civic education, computer studies, and trade/entrepreneurship need specialized teachers. There is urgent need to train and retrain more teachers to cope with them.

Textbooks need to be developed; existing ones need to be reviewed in line with the new arrangement in the curriculum structure. There is the need to sensitize teachers, parents, students and the general public on the new curriculum.

Schools need enough guidance counselors who would implement the broadened curriculum of such that include entrepreneurship skills subjects and provide necessary counseling and guidance to school, students, and parents especially in the area of choice of list of subjects, field of study and the trade/entrepreneurship subjects a school could present to their students, relevance of entrepreneurship subject related to the students' field of study. With a government that is desirous of effective transformation through quality education that guarantee value reorientation, poverty eradication, wealth creation and Job creation it is believed that these are issues that would be surmounted.

1.9 Strategies For A Sustainable Curriculum In Schools

Any plan of actions designed to achieve or implement a programme such as the new Basic Education, Senior Secondary Education, and Trade/Entrepreneurship Curriculum in the school system should be directional, activity based, spell out the benefits/advantages, prescribe resources, spell out expected outcomes and be amenable to changes or modification.

For the sustainability of the emergent curricula, there is need to focus on the following strategies for its sustainability. These include:

- Articulated sustainable education policy in the school with a clear roadmap.
- Private sector support in the provision of adequate resources for the programmes in schools.
- Training and re-training of teachers and managers on how to impart skills acquisition to students in schools.
- Introduction of basic productivity related topics in the curricular such as, strategic planning (vision, mission, goals of enterprise), team building, simple productivity measurement techniques, etc..
- Proper monitoring and evaluation of the scheme.
- Availability of equipment and relevant facilities, e.g., for laboratories, workshops, resource room, the curriculum etc.
- Increasing funding because of the capital intensive nature of the programme.

It is not however possible to have all the above measures in place. There should be room for improvisation; for example, any teacher worth his salt in the technical domain should be able to teach the theoretical basis of the curriculum.

2.0 CONCLUSION

It is a known fact that education is an instrument for social and economic transformation. Failures in the challenge for effective implementation of these curriculum could lead to a run-down system and a crash from the heights sought by the players.

The mission of operational curriculum in the secondary school is to give effect to the nation's drive for self-reliance, prepare a world class and African leading, create skilled and creative work-force in capacity building, service delivery that would transform Nigerian natural resources into goods and services thus affect economic, social well being and quality of life of people. The current policy shift in this direction by the Nigerian Government through the introduction of a pragmatic curriculum in schools would definitely lead to increase in employment rate, decrease in crime rate, decrease in poverty rate and overall increase in national productivity. Hence, all hand must be on deck to make the curriculum a success. Funding, well planned, transparent supervision and evaluation are expected of all stakeholders as suggested in this paper.

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