

## REPOSITIONING EDUCATION IN NIGERIA THROUGH CURRICULUM DESIGN

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### Abstract

*Curriculum Design is a process of critical questioning to frame learning and teaching. It is an arrangement of curriculum materials for effective implementation. The choice of a design is dependent upon the purposes set to achieve the context of each learning experience. This paper examined the concept of curriculum design, steps involved in curriculum design, concept of curriculum diversification, elements of curriculum design; essential characteristics of subject centred design, learners centred design and online curriculum design. Recommendations were made amongst others that adequate fund should be provided for effective curriculum diversification; adequate infrastructure and facilities should be produced and evenly distributed to ensure proper implementation of curriculum design.*

**Keywords:** Education, Nigeria, curriculum design.

Curriculum design refers to the patterning, structuring, organizing and building of curriculum in order to facilitate effective planning and implementation of school curriculum. In the designing of curriculum, curriculum experts need to select and map our feasible objectives, appropriate content and suitable learning experience that will comprehensively reflect the three major domains of educational goals and objectives namely cognitive, affective and psychomotor. (Morrison, 2013).

The curriculum planners resemble an architect designing a house. First the architect established the needs of his/her client. Based on the needs assessment or analysis he/she makes sketches to produce a blueprint that will direct his/her activities to ensure that the house is built according to specifications. The curriculum planner follows similar steps. Unlike the architect's building materials, drawing board, scales, ruler and so on, the curriculum planner's materials are human beings, ideas, concepts, skills and values. Curriculum planners are the architect of the learner's destiny. The curriculum planners map out educational experience that will lead the learner to achieve predetermined goals in a most effective and efficient manner with due consideration of available human and material resources and within a specified period of time (Mbakwem 2009).

Curriculum designs are like building designs whereby a house is designed with its purpose borne in mind. Simple put that each curriculum design or pattern should reflect the purpose of that curriculum or the Offorma (2002) conceptualized curriculum design to mean the framework or the structural organization used in selecting, planning and presenting educational experience for schools. Curriculum design is also interpreted to mean a particular shape, framework or pattern of learning opportunities mapped out of

use in a particular society, based on society's educational ideology and goals (Offorma, 2010).

This paper therefore focuses on the following highlights:

- ✓ Concept of curriculum design;
- ✓ Concept of curriculum diversification;
- ✓ Elements of curriculum design;
- ✓ Types of curriculum design;
- ✓ Essential characteristics of subject centre design;
- ✓ Learners centred design and
- ✓ Online curriculum design

#### **(i) Concept of Curriculum Design**

Curriculum design is a process of, critical, questioning to frame learning and teaching. The main purpose of the process is to translate broad statements of intent into specific plans and actions. The intention is to ensure, as far as possible, alignment between the three states of curriculum:-

1. the planned curriculum (what is intended by the designers);
2. the delivered curriculum (what is taught by the teacher) and
3. the experienced curriculum (What is learned by the students).

The curriculum design process at course level sets the context for topic design and topic design sets the context for each learning experience. Topics need to be designed to come together in structured combination to form coherent major and minor sequences and courses.

Parts of the process especially at the course and topic levels overlap and ideally should occur interactively with course design informing and influencing topic design, and topic design informing and influencing course design.

Curriculum design is the arrangement of curriculum materials for effective implementation. The choice of a design is dependent upon the purposes set to achieve. Designing a curriculum is like building a house because the design of a house reflects the purpose of the house. It is the organizational framework of the curriculum. It is a structured framework for selecting, planning and presenting educational experiences to the learners. The design guides the teacher in the provision of learning experiences to the students. Therefore, a design must aim at producing functional citizens, at the end of their educational careers (Onyia, 2010).

#### **(ii) Concept of Curriculum Diversification**

Curriculum diversification calls for effective application of delivery strategies. In the knowledge-driven economy, the following delivery strategies must be applied: hands-on projects, field-trips, simulation, use of information and communication technology (ICT), team teaching and so on. Hands-on strategy provides students with practical experiences to facilitate understanding. It deals with the principle of do-it-yourself. Projects create opportunities for students to personally plan and organize their learning activities (Afforma, 2010). The teacher's duty is to guide and direct the learners. Field-trips enable the students to be taken to the site where they can experience the required information or skills unadulterated. Simulation deals with the creation of the natural scene to elucidate the knowledge, skills, attitudes and values being presented to the learners. These strategies are stipulated in the National Policy on Education for



attainment of the goals of higher education in Nigeria. The essence of these strategies is to expose the learners to the practical knowledge required for comprehensive comprehension of the required knowledge and skills, values and attitudes which should be transferred after graduation problem-solving (Oyesiku, 2010).

Diversification according to Kanno (2012) is enshrined in the desire to ascertain that all the needs and interests of all learners are taken into consideration during content delivery. She maintained that curriculum should be functional, useful and relevant to the needs and interests of the learning. This implies that the curriculum should be diversified to cater for the various interest and talents of the learners. Kanno (2012) outlined how to maintain high relevance in curriculum to include:

- Occasioned practical review of the curriculum based on seminars and workshops where experiences are brought to bear and some major mentoring skills explored;
- Collective accreditation of academic programmes of schools at an interval of three years.

In addition, school should put in place an in-house accreditation team that monitors and ascertains the quality of their academic programmes;

- Effective utilization of the comments or remarks of the school inspectors, external examiners and major stakeholder in education; and
- Encouraging exchange of ideas from other education institutions within and outside immediate locality or state.

### **(iii) Elements of Curriculum Design**

In designing of an effective/comprehensive curriculum certain element must be adequately considered. These elements are:

- a. The philosophical base, support or areas of emphasis;
- b. The education of those responsible for the education programme;
- c. The needs of the society;
- d. The resources of the schools;
- e. The needs and interests of the students and
- f. The purpose or the outcome of the education programme.

### **(iv) Types of Curriculum Design**

There are various patterns of Curriculum Design, as there are differing ideology and educational goals. Four designs have been identified. Obih (2018) used a memory tip called SCAB to represent the four basic curriculum design; namely

- S - Subject centered Design (Teacher centred Development);
- C - Cove Curriculum Design (Problem - Centred Development);
- A - Activity based Design (Learner - Centred Development) and
- B- Broad field Design (Integrated - Centred Development)

### **Teacher - Centred or Subject Centred Design**

This is the oldest and widely used form of Curriculum design subject-centered Curriculum design often revolved around what needs to be studied and how it should be studied. This type of curriculum design focuses more on the subject rather than the individual. During the planning and designing of subject centered, the planner and the school organizes educational activities, skills or the contents of education to be mastered into special subject areas of instruction. Chronologically, subject centered design could



### *Academic Scholarship*

be traced to schools of ancient Greece and Rome as well as the Monastery and Cathedral school of the Middle Ages. The Curriculum then, was made up of the seven Liberal Arts namely: Grammar, Rhetoric, Dialectic (logic), Arithmetic Geometry, Astronomy and Music, which were grouped into the Trivium for the first C arithmetic, geometry, astronomy and music (Emenyonu, 2015).

The Trivium and Quadrivium with time expanded based on emerging needs of the society to include literature and history; and algebra, trigonometry, geography, botany, zoology, physics and chemistry respectively. The number of subjects of instruction has continued to increase to the extent that there were three hundred subjects by 1930. The number of school subjects have increased drastically due to the introduction of none knowledge and skills in the 21st century. Subject centered design organizes content of education into subjects of instructions taught in complete isolation from one another even if they are related. This is as a result of compartmentalization or atomization of subjects into different subjects. Learner under subject centred is not allowed to be exposed to other subject area of specialization (Conn, 2014).

#### **(v) Essential Characteristics of the Subject Centred Design**

Essential characteristics of the subject centred design are stated below:

- a. Subjects are grouped into required or core and elective courses;
- b. Some subjects are constant in all programmes of study;
- c. Courses are planned in advance;
- d. The subject curriculum design may or may not have deliberate social direction;
- e. There are certain requirements that are needed for effective implementation;
- f. The content and methods of exposition for each subject are organized systematically and
- g. The subjects has standard of attainments to measure excellence, as well as guide teachers and learners towards examination, certification and careers choices.

#### **(vi) Learners Centred Design**

Here are the major requirements for effective implementation of the activity curriculum.

- Teachers should be well grounded in general education with specialized training in child and adolescent psychology. Growth and development, guidance and project method of teaching. The teacher, in addition, should have thorough grounding in philosophical and sociological foundations of education to be able to relate and plan out the activities with the children;
- The physical features of the school such as buildings, grounds and classrooms should be large and flexible enough to accommodate as many activities as possible. Furniture should be light, movable and in large quantity;
- Equipment and materials in the classroom must be such as will satisfy the interests of the children. A classroom for the activity curriculum would not look like a laboratory, arts studio, library, and workshop but will be a combination of all, so that while some children are drawing others will be reading, still others will be constructing and yet another group will be writing and so on. Remember there is no advance planning;
- Transportation for facilities should be available to take children to places where their interests lead them;

- Timetable should not be decided in advance, as there is no change of periods, rather children are allowed to change activities when they are satisfied with the ones at hand;
- There is no grading or streaming as such, rather grouping is decided on the basis children's interests. It is assumed psychologically and otherwise that children of the same age may have common interests and
- All administrative arrangements should be flexible and this is much more difficult than planning for an organized programme such as the subject curriculum.

#### **(vii) Online Curriculum Resign**

On-line curriculum design came as a result of innovation in curriculum. It is technological advancement. Mbakwem (2009) described this on-line design as a design which enables curriculum planners and teachers to present instructions, tasks, discussions and examinations to the learners through a system which consists of a number of students input devices, networked to a central computer and controlled by teachers and instructors. The systems and instructor consists of the non-material components, and the material components which are the system software and other networks. According to Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi (2013), working of design demands that the teacher delivers the topics of instruction on any subject in form tasks, questions, discussion, analysis, response and audition to his or her audience- the learners, by displaying them on a monitor to projecting onto a computer screen. The students usually participate in discussing the topic later; the students will do the material using the network smart connecting system. Student responses current thinking about the topics and their idea about the topic provide the assessment of the usefulness of the different types of topic.

#### **Characteristics of On-Line Curriculum**

In the online types of curriculum design, the teaching is done after defining the tasks.

#### **Merits of On-Line Curriculum Design**

- It is an innovation design that facilitates communication and makes provision for creating a lively and rich learning environment without losing control of the class.
- It carries every member of the class along.
- It inculcates spirit of co-operation, to learners and team work amongst class members.

#### **Demerits**

- On-line curriculum is time consuming.
- It is a very expensive design.
- It reduces course coverage in terms of content and materials.
- Many students and teachers do not make use of this design because of shyness, timidity and lack of confidence.

#### **Modular Approach Curriculum Design**

This is a form of teaching given to learners who may or may not see the teacher but they may see learners and interact with them.



### **Characteristics**

In this design, what is taught is broken down into small units. It may be electronic calling down or in print.

### **Merits**

- It helps many people to make their living.
- It helps to reduce the number of dropout.
- As people realize the importance of education, hence, they train themselves.
- It is useful in designing curriculum for people in polytechnics and colleges of agriculture/education.

### **Demerits**

Modular approach curriculum design “makes professional teachers to be less relevant because learners no longer see them face to face for regular classroom interactions.

### **Conclusion**

Curriculum design is based on backwards planning, which starts from the identification of desired learning results and how these can be measured, and then determines the learning experiences that can lead to these outcomes (Tomlinson, & McTighe, 2016). There has long been a debate about the relative merits of traditional didactic approaches, versus constructivist or student-centred approaches to curriculum. However, research on learning shows that this is a false dichotomy: for curriculum to be effective, it needs to include a balanced and integrated use of teacher-led guided learning, student-led action learning, and whole context-dependent experiential learning (OECD, 2012). To be relevant as Tomlinson et al observed, the curriculum also needs to connect to learners’ daily lives, interests, and motivations, and allow for differentiation of learning experiences to meet different students’ needs. In addition to stating what should be learned, the curriculum therefore needs to give teachers guidance on how to structure teaching and learning activities and how to assess learning achievement.

### **Recommendation**

In order to ensure some improvement in curriculum design in Nigeria, I hereby make the following suggestions:

- (a) Adequate funds should be provided for effective curriculum diversification;
- (b) Adequate and qualified teachers should be recruited to take care of diversification in curriculum;
- (c) Professional development programmes such as seminars, conferences and workshops should be organized for teachers (lecturers) on innovative areas and approaches of curriculum diversification;
- (d) Curriculum design should be structured to incorporate the needs, interest and aspirations of the learner and the society at large and
- (e) Adequate infrastructure and facilities should be produced and evenly distributed to ensure proper implementation of decision in curriculum.

**References**

- Conn, K. (2014). Identifying Effective Education Intervention in Sub-saharan Africa: A meta-analysis of rigorous impact evaluations (Doctoral dissertation, Columbia University). Retrieved on March 16, 2017 [www://academiccommons.columbia.edu/download/fedora.content/download/ac:175015/CONTENT/Conn\\_columbia\\_0054D\\_11992.pdf](http://www://academiccommons.columbia.edu/download/fedora.content/download/ac:175015/CONTENT/Conn_columbia_0054D_11992.pdf)
- Emenyonu, C.B. (2015) "Curriculum Implementation Modles" In Obasi, V.A. & Okoro, I.F. (eds) *Fundamental Concepts of Curriculum Implementation*. Owerri: Cel-Bez Publishing Co. Ltd. ISBN: 978-978 54695-3-0
- Kanno, T.N. (2012). *The Image of An Effective Teacher in Contemporary Nigeria Society. Being a Guest Lecture at the 1<sup>st</sup> College Seminary, Federal College of Education Technical, Umuoze, Owerri; Barloz Publishers Inc.*
- Mbakwem, J.N. (2009) *Curriculum Implementation and Instructional Plan*, Owerri: Upthrust Publishers
- Morrison – Saunders, A and Hobson J. (2013). Teaching and learning forum retrieved, *Principles of Curriculum and Development (PDE) 104. Retrieved online on 31<sup>st</sup> October, 2015.*
- Obih, S.O.A. (2018) *The 21<sup>st</sup> Century Curriculum Text: An Introductory Approach*, Owerri: Divine Mercy Publishers
- OECD (2012) *The nature of learning. Using research to inspire practice. How can the learning of science inform the design of the 21<sup>st</sup> learning environments?* Paris: OECD.
- Offorma, G.C (2002). (Revised) *Curriculum Theory and Planning* Enugu; Gouze press.
- Offorma, G.C (2010). *An Opening Address Delivered by the Dean of Faculty of Education during the 2010 interactional conference on Nigeria @ 50. Rethinking Teachers Quality, held at the University of Nigeria, Nsukka, May 20.*
- Onyia, C. (2010a). *Nigeria @ 50: Rethinking Teacher Quality Lead paper presented at the University of Nigeria, Faculty of Education International Conference. May 2010.*
- Tomlinson, C.A. and McTihe, J. (2016), *Integrating differentiated instruction and understanding by design*. Danvers, Massachussets: Association for Supervision and Curriculum Development.
- Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., & Salvi, (2013). *Pedagogy, Curriculum, Teaching Practices and Teacher Education in Developing Countries.. Education rigorous literature review. Department for International Development. Available from (<https://eppi.ioe.ac.uk/cms/Portals/0/PDF%20reviews%20and%20summaried/Pedagogy%202013%20Westbrook%20report.pdf?ver=2014-04-24-121331-867>)*