Kerr's model of Curriculum design and Curriculum development in Education

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ABSTRACT: *The paper outlines the Kerr's model of curriculum design and the phases of developing a curriculum in the education sector. According to Foshay (1969), a curriculum is defined as "all the experiences a student has under the supervision of the school." The curriculum development process systematically organizes what will be taught, who will be taught, and how it will be taught. Each component affects and interacts with other components. There are four main phases of the curriculum development process: a) Planning, b) Content and Methods, c) Implementation, and d) Evaluation and Reporting. The planning phase starts with a need analysis, which include identifying the issue/problem/need. A Curriculum Development Team is set up that conduct needs assessment and analysis. The next stage consists of stating intended outcomes by selecting content and designing experiential methods. Then there is the implementation phase where the curriculum product is produced, tested, and revised. Facilitators are recruited and trained. Lastly there is the evaluation of the curriculum which includes designing an evaluation strategy and reporting and securing resources. Curriculum design refers to how the components of the curriculum have been arranged in order to facilitate learning (Shiundu & Omulando, 1992).*

I.   INTRODUCTION

The word curriculum comes from the Latin word "currere," which means to run, to proceed, a 'race course' or 'running course'. The word is said to have been given to a play activity engaged in by the people living in Rome during ancient times when horses were used. Participants started at one point and had to get to the finish line before they were awarded. It represents a plan from start to finish. Different authors have defined a curriculum. Huebner (1976) said there is a lack of precision and ambiguity surrounding the meaning of the word curriculum

to support this notion. Bobbit (1918) described a curriculum as the actions and experiences that pupils should have to develop into the adults they should become. Good (1959) defined curriculum as a broad overview of the subject or specific instructional materials that the school should offer the student to prepare for graduation, certification, or entry into a professional or vocational sector.' According to Foshay (1969), the curriculum is defined as "all the experiences a student has under the supervision of the school." Wilson (2005) defines curriculum as "everything and everything that imparts knowledge through planned or unplanned instruction." Humans are born with the capacity to learn; hence, anything humans learn, whether hidden, written, societal, or null, is a curriculum. Wilson (2005) argued that because students constantly learn through exposure and modelled behaviours, they learn critical social and emotional lessons from everyone who works in a school. Ogunyemi (2009) stated that it is a process of achieving educational goals through formal/semi-formal educational settings such as elementary/secondary schools, colleges of education, monotechnic/polytechnic institutions, adult literacy/innovative enterprise institutions, and universities. A curriculum is viewed as a methodical approach to influencing learners' experiences. Depending on the needs, there exist various types of curricula from taught to hidden. From these definitions, Curriculum can be viewed as a concept, product or process.

Curriculum as a Concept : The curriculum is seen as a concept when the definition emphasizes the things being studied, such as textbooks, materials for instructions, etc. The curriculum is traditional when it is conceptualized as a body of knowledge to be transmitted, 'course of study, 'syllabus' prepared to be taught by teachers.

Curriculum as Product : The curriculum is viewed as a product when defined in terms of its 'ends' such as the Intended Learning Outcomes , which can be described as aims, goals, and objectives. When a curriculum is defined, the subject matter is chosen to represent the desired results. They frequently have pre-planned experiences for the learners.

Curriculum as Process : Ogunyemi (2009) defined curriculum as "a process of achieving the goals of education." In this regard, the definition lays much emphasis on the means of achieving the ends.

II.   LITERATURE

Curriculum design refers to the ways in which we position the curriculum components. Regardless of the curriculum model, all curriculum designs address four curriculum components namely why do we initiate instruction or aims, what should we teach to realize our set aims and objectives, how can we interconnect target learning experiences What have we realized and what actions should we take accordingly in relation to the instructional program, learners, and teachers. Most curriculum designs include these four components but they significantly differ in how they address these elements, because of the curriculum philosophy and model on which a design is based.

III.   FINDINGS

Curriculum design is governed by four main principles or criteria as follows (Yakubu,1989): (i) Aims and objectives (ii) Learning experiences and methods (iii) Knowledge (iv) Evaluation**.** These principles/criteria in turn, are influenced by issues emanating from philosophy, sociology, psychology and societal constraints among others. Tyler (1949) argued that curriculum development could be regarded as consisting of four elements. He therefore proposed that curriculum planning should comprise: (i) Objectives (ii) Content or subject matter (iii) Methods or procedures (iv) Evaluation.

Kerr's model of the curriculum is an improvement on the one proposed by Tyler. It starts with the specification of objectives followed by evaluation, knowledge and learning experiences in that order. Unlike Tyler's model, the relationships in Kerr's model are not linear but interactive. The idea of cross-checking to ensure conformity with original intentions and procedures is portrayed in the model. Apart from demonstrating the interactions among the various curriculum components, Kerr's model also provides an insight into reliable sources of data for the four important components of the curriculum. Unlike Tyler's model, evaluation is not performed only at the end of the process. Kerr (1972) underscored the interactive nature of the components of his curriculum model by noting that although objectives form the logical starting point in the process, in practice, one could break into the cycle of interrelated parts at any point . The model not only gives insight into how curriculum evaluation is to be conducted but also points out sources of curriculum objectives to make the whole exercise responsive and relevant to the needs of the child and society. Most of the features in Kerr's model resemble those in Wheeler's and Tyler's models. However, Kerr divided the domains into four areas (Urevbu, 1985): objectives, knowledge, evaluation, and school learning experiences. In Kerr's model, objectives are divided into three groups: affective, cognitive and psychomotor. The model further indicates that knowledge should be (Urevbu,1985) organised, integrated, sequenced, and reinforced. Evaluation in Kerr's model is the collection of information for use in making decisions about the curriculum.

Four essential phases of the curriculum development process: (a) Planning, (b) Content and Methods, (c) Implementation, and (d) Evaluation and Reporting. The planning phase lays the foundation for all of the curriculum development steps. The steps in this phase include: Identify Issue/Problem/Need, Form Curriculum Development Team and Conduct Needs Assessment and Analysis. The need for curriculum development usually emerges from a concern about a major issue or problem of one or more target audience. There are questions that need to be addressed to define the issue and to develop a statement that will guide the selection of the members of a curriculum development team. Once the nature and scope of the issue has been broadly defined, the members of the curriculum development team can be selected. Topics covered in this section include: (1) the roles and functions of team members, (2) a process for selecting members of the curriculum development team, and (3) principles of collaboration and teamwork. The goal is to obtain expertise for the areas included in the scope of the curriculum content among the team members and develop an effective team. Then assessment needs to be done. There are two phases in the needs assessment process. The first is procedures for conducting a needs assessment and the second part of this needs assessment step, describes techniques on how to use the data and the results of the information gathered. The second phase is content and methods and this sections determines intended outcomes (what learners will be able to do after participation in curriculum activities), the content (what will be taught), and the methods (how it will be taught). Once the issue is defined, the curriculum team is formed, the needs assessed, analyzed and prioritized, the next step is to refine and restate the issue, if needed, and develop the intended outcomes or educational objectives. An intended outcome states what the learner will be able to do as a result of participating in the curriculum activities. The next section in the curriculum development process is selecting content that will make a real difference in the lives of the learner and ultimately society as a whole. After the content is selected, the next step is to design activities (learning experiences) to help the learner achieve appropriate intended outcomes. Once the content and experiential methods have been agreed upon, the actual production of curriculum materials begins. This part includes: 1) suggestions for finding and evaluating existing materials; 2) evaluation criteria; and 3) suggestions for producing curriculum materials. Then there is testing and

revision of Curriculum. This step includes suggestions to select test sites and conduct a formative evaluation of curriculum materials during the production phase. A sample evaluation form is provided.

Recruitment and Training of Facilitators are needed. The curriculum is then implemented. The last part included evaluation and reporting.

IV. CONCLUSION

The curriculum is the instrument that translates desired outcomes of education into school programmes has been designed as to be comprehensive and well-balanced, spanning over nine years of study to ensure continuity in learning. Curriculum is a continuous reconstruction, moving from the learner's present experience out into that represented by the organised bodies of truth that is called studies, known as learning experience. Curriculum design and development is thus an essential step in curriculum implementation for the learning experiences to take place.

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