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Examining Models Of Curriculum Development And Processes: Implications For African Educational Heritage And Review

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ABSTRACT

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Curriculum remains the tool for regulating educational efforts all over the world. In a world that is becoming increasingly globally oriented, it is important to continually remind african educators that much as education should enable beneficiaries to fit into their society, which in a general sense may refer to this global world, that it is also important to note that the milieu in which education is taking place, is a

Paramount consideration in the fitting processes. No system should be swallowed hook line and sinker. The need to critically examine accepted models will not only enhance but also encourage the development of that curriculum that would be most suitable for the african educational heritage. This paper examines the strengths and weaknesses of some curriculum models that have been in existence and calls on african curriculum developers and thinkers to begin to generate documented and systematic models of african origin

Key Words : Storytelling, cybernated, communication

INTRODUCTION

Curriculum is planned, guided learning experiences and intended learning outcomes formulated through the systematic reconstruction of knowledge under the auspices of the school for the continuous and willful growth of the learner. Curriculum development involves the selection of objectives, content, learning experiences as well as organizing and evaluating these experiences to determine the extent to which they are effective in achieving stated objectives. The process of planning a curriculum involves different considerations as well as approaches (models). The purpose of this work is to examine some of the common models employed in the process of curriculum development . The

idea is to convince ourselves of their suitability in all circumstances, to meet the african educational heritage.

MODELS OF CURRICULUM DEVELOPMENT

A model is a representation of reality presented with a degree of form and order. It provides a conceptual framework for designing a curriculum based on the specific purpose of that curriculum. The concept of a curriculum has always been a point of great concern among educationist since the late 18th century. Various models of curriculum development have been proposed by different curriculum theorists and authors. For example,

1. Ralph Tyler's model (1949)
2. Wheeler's cyclic model (1971)
3. Nicholls and Nicholls (1972)
4. Giles
5. Walker's model (1972)
6. Hilda Taba's model (1962)

We need to examine some of these critically to better understand them.

RALPH W. TYLER'S MODEL OF CURRICULUM DEVELOPMENT (1949)

Ralph W. Tyler's model is one of the most influential models proposed for planning and developing curriculum. It has been referred to as a classical model because it is believed that other models drew inspiration from it. Tyler outlined four major questions which must be answered when developing a curriculum and plan for instructions. These questions are;

- i. What educational purposes should the school seek to attain?

- ii. What education/learning experiences can be provided that are likely to help attain these purposes?
- iii. How can these educational experiences be effectively organized?
- iv. How can we determine whether these purposes are being attained?

Tyler, encourages the instructional designers to determine basic educational issues such as purpose of education, the content needed for achieving the set or determined purposes, activities and actions that would lead to their exploration and achievement, the best way to arrange and organize them to best accomplish objectives as well as to determine whether desired outcomes have been achieved or not. Tyler seems to have believed that the educationalist must be a sound person and a very alert one too. In addition, he recommends that such an educationalist assesses the learning experiences himself to determine which activities needed to be revised and improved upon for future instructions.

Tyler's four fundamental questions represent the four-step sequence of curriculum development.

1. Selection of curriculum goals and objectives
2. Selection of learning experiences for the achievement of identified aims, goals and objectives.
3. The organization of learning experiences.
4. Evaluation of the effectiveness of all aspects of steps 2 and 3 in achieving step 1.

Ralph Tyler considers the steps as linear and logical activities. He shows an inclination towards Skinner's behaviourism (1957) and John Dewy's progressive education (1963) as he says, "Since the real purpose of education is not to have the instructor perform

certain activities but to bring about significant change in the students' pattern of behaviour" (P.44). Tyler's model is also labelled "product model". The model has very significant benefits.

Strengths of Tyler's Planning Model

One may accept Tyler's sequential steps on the basis of time and other operations involved in the processes. Each step is taken at a specific time, that is, one step follows the other. For example, selection of objectives comes first while evaluation comes last.

This model is a strong supporter of the student-centred approach to learning. Overall, Tyler's model is designed to measure the degree to which pre-defined objectives and goals have been attained however, there were still some misgivings to the model.

There are several criticisms leveled against Tyler's objective centred model. The first criticism is that, Tyler's model relies mainly on behavioural objectives and it is difficult and time consuming to construct these objectives. The objectives in this model come from three sources (students, the society, and the subject matter) and all the three sources have to agree on what objectives needs to be addressed. This is a cumbersome process. Thus, it is difficult to arrive at a consensus easily among the various stakeholders. This situation is clearly perceived by the Nigerian educator who, working under a national ethnical multiplicity of interest would face untold confusion. Would they easily agree on whose ideals?

Secondly, Tyler's model is too restrictive and covers a small range of students' skills and knowledge. It's been criticized because it portrays curriculum development process as involving rigidly four sequential steps with evaluation coming at the last step. Critical answer to this criticism however would relate to decisions bothering on what the child is

desired to become within. His society. A jack of all trades and master of none, or a child who possesses a skill that he can prove and push to very high levels?

This model is also criticized because it made no distinction between content and learning experiences. These two components of the curriculum process were regarded as two separate educational experiences. What implication does this hold for the present hue and cry about people who possess theoretical knowledge without the ability to demonstrate the skills accompanying such knowledge? The African educator must be alert to these issues.

Tyler's model is too dependent on behavioural objectives and it is difficult to declare plainly in these objectives, the one that covers non specific skills such as those for critical thinking, problem solving, and the objective related to value acquiring processes (Prideaux, 2003). The question is, are these separable in real life situations? Over fragmentation of educational thoughts and issues may need to be revisited by African curriculumists.

This model is also said to be too student-centred and therefore does not give teachers the opportunity to manipulate the learning experiences as they see fit to evoke the kind of learning outcome desired. What level of self dependency does the primary school learner possess to determine what they really want and how to follow it in the African environment?

Finally, Tyler's model failed to show the necessary inter-dependence of the four problem areas emerging from the four fundamental questions. At the least, result of the evaluation may be used to modify the process of planning. There is therefore, the need

for a model that will accommodate these criticisms. Should the african think about this seriously? To our views, yes!

HILDA TABA’S INTERACTIVE MODEL (1962)

Hilda Taba presented a model, also known as the “interactive model” or “instructional strategies model” which mainly focuses on the planning of instructional strategies and considers it the basis of the curriculum design. Her model includes seven mutually interactive elements of the teaching and learning system:

1. Diagnosis of needs,
2. formation of objectives
3. Contents and
4. Learning experiences,
5. organization of learning experiences,
6. Teaching strategies, and
7. Evaluative measures

Strengths of Hilda Taba’s Model

Some of the innovative aspects of Taba’s model include determining required objectives and related content, selection and organization of learning experiences in accordance with specific criteria; selection of a variety of teaching strategies and evaluation procedures and measures.

Her model gives due consideration to external factors that may affect various components of a curriculum including the vicinity and community of school’s location, the school area educational policies, the goals, resources, and administrative strategies

of the school, teachers' personal styles and characteristics, the nature of the student population among others. The present focus on global demands about educational practices and needs casts aspersions on these identified strengths.

Taba's model of curriculum process has been criticized for its application difficulty in heterogeneous classrooms. Again, Taba's inductive model restricted the development of curriculum or planning to only the teachers rather than to the higher authorities. It is a rigid model. The nature of teaching-learning, being unpredictable, one cannot be sure of the learning outcomes. It becomes pertinent at this point to query. As well as consider critically, the educational status of those authorities who are required to make inputs aside the teacher. What are their interests? Whose opinions would they reflect? What would be their major considerations as they draw their decisions, overall good or personal and selfish goals? African education can be better positioned for a more lasting legacy than is evident if the Nigerian situation can be used as a case in point.

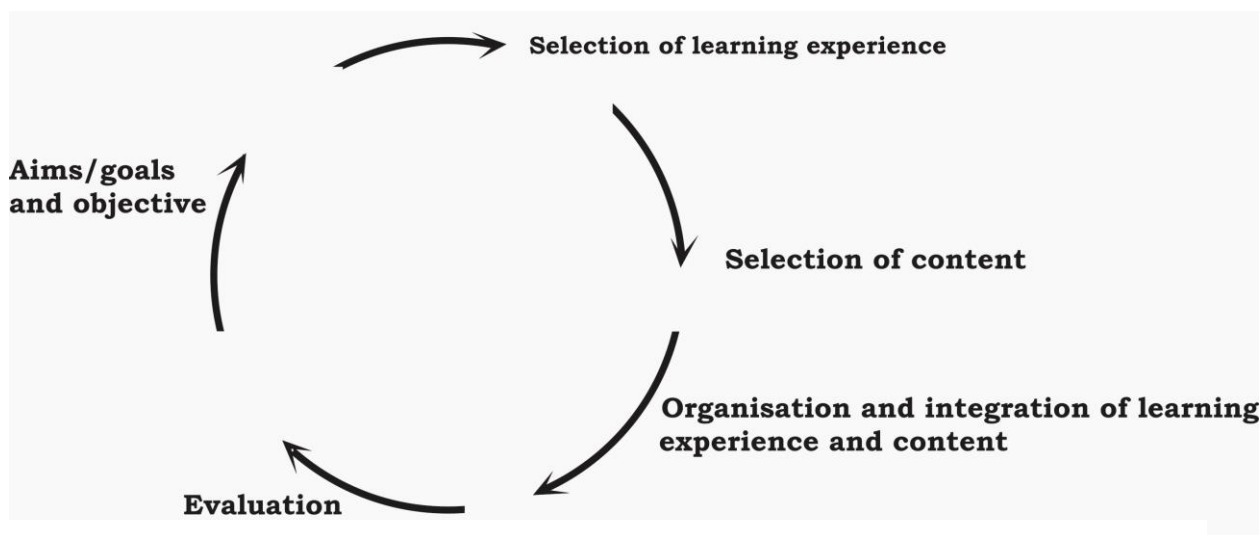
WHEELER'S (1971) CYCLICAL MODEL

Wheeler developed a five-phased cyclical model of curriculum development which seemingly took care of the criticism of Tyler's model. His cyclical model has many similarities with the linear and Taba's interactive models. The key elements of Wheeler's model include:

1. Selection of aims, goals and objectives
2. Selection of learning experiences
3. Selection of content (subject matter) through which certain types of experiences may be offered.

4. The organization and integration of learning experiences and content with respect to the teaching learning process within school and classroom.
5. Evaluation of the effectiveness of all aspects of all other phases in attaining the objectives.

Wheeler's model is represented thus:



This model shows a cyclic and continuous process, which indicates that the curriculum development should always be from one step to another; it should be in motion and never stop. Wheeler's model is regarded as dynamic rather than a static one which involves the curriculum planner and the teacher in a series of continuous decision taking processes about a whole range of factors. Wheeler suggests that this process should be used in all curriculum development at any level, because of its wide applicability. This model possesses several benefits.

The Strengths of Wheeler's Cyclical Models

The cyclic model is responsive to needs, which are on-going necessitating constant updating of the curriculum process. They are flexible and relevant to learners in

particular situations. The dynamic nature makes it possible for adoptions and adaptations, when and where necessary; provided that there is a useful purpose to be served by the actions.

This model view elements of the curriculum as interrelated and interdependent. It accepts a degree of interaction between the various curriculum elements. In Cyclical model, D.K. Wheeler extended the ideas forwarded by Tyler it did not necessarily upturn it. At present, in Nigeria, there is an argument concerning the scrapping of post university matriculation examination(post UME), why? What kind of Dynamism is the African trying to adopt and preserve? The positive, progressive and problem resolving dynamism or the retrogressive, negative and problem generating dynamism? Every situation must be critically analyzed to find a worthwhile and suitable solution that matches it. No model is actually perfect.

Wheeler's model is different from others in the sense that the "selection of learning experience" comes before the "selection of content" creating confusion possibly as to whether the selected learning experiences would suit the content or not. Again, it is not always practical to use because of time constraints. Much as revisions can be made where discrepancies exist between content and learning experiences selected to infuse them, where would anyone find time for these trials and errors bearing in mind that school programs are highly chronologized? It is highly in Undertaking detailed situational analysis that wheeler advocated a time consuming process that could be difficult to practice in the hectic conditions of modern educational practice; especially when the curriculum is suffering a heavy overload! This overload is becoming even heavier with arguments, pressures and propositions that continue to mount for additional content to be added into the bulge.

NICHOLLS and NICHOLLS MODEL (1972)

This model formulated by Nicholls and Nicholls shows, like Tyler's and Wheeler's models, that, the curriculum development process begins with the objectives. He believes that the main sources of the objectives should come from the study of the local environment including the pupils' homes which might give the teacher further ideas for possible objectives. Nicholls described content as the knowledge, skills attitudes and values to be learned. The method aspect of the learning opportunity involves the relationship between pupils, teachers and materials, the organization of the content, its manner of presentation to pupils and the activities the pupils and teachers carry out. In evaluation, Nicholls suggested that the teachers are concerned about their pupils' progress towards a wide range of objectives, but the result of this is that assessment should be as wide in its scope as is the range of objectives.

"Situation" is very much emphasized in this Nicholls' model which is the overall environment which includes pupils, teachers, schools and localities.

Nicholls and Nicholls also developed a mode with five phases like Wheeler's, starting with situation and ending with evaluation.

- i. Situation
- ii. Objectives
- iii. Content
- iv. Methods
- v. Evaluation

The above model shows a cyclic and continuous process like Wheeler's with an addition of situational analysis. The african educational curriculum must bear this situational

analysis dimension in mind! are all global conditions identified perfectly suited to African needs and growth processes?

Strengths of Nicholls and Nicholls (1972) Cyclic model.

Nicholls model shows curriculum development as a continuous process and therefore as something that should not be static. He also provided teachers with a wide range of objectives which are very well expressed. The proponents of the model suggested that objectives should be used to plan the learning opportunities of the pupils and to devise means of assessing the extent to which the pupils have achieved the objectives. In this model, situation analysis is much emphasized because it is this situational analysis that gives the lead to objectives that should be focussed on.

WALKER'S (1972) MODEL

Walker presented a descriptive model, referred to as “naturalistic” by some scholars and also known as “process model” by others. His model includes three important elements:

1. Platform that provides the benefits or principles, ideas to guide the curriculum developers
2. Deliberation process which is the process making decision from available alternatives between stakeholders.
3. Design that is the organization and structure of the curriculum.

Walker, felt that the objective or rational models were unsuccessful and devised this model.

The Strengths of this model

In walker's model of curriculum development, the curriculum elements are seen as flexible, interactive, and modifiable. Changes can be initiated from any point in the process unlike the objectives model where the beginning is always the setting of objectives. This is dynamism that can suit modernity where confusions are instituted often in an effort to resolve crisis in ad hoc forms. The persistence of Africa's perennial 'developing' status is underlaid by her ad hoc approaches to resolving crises with few long term efforts far in between. Does it mean that this model by Walker presents a panacea to her problems? Educationist of Africa and in Africa must think deeply before offering an answer to the question.

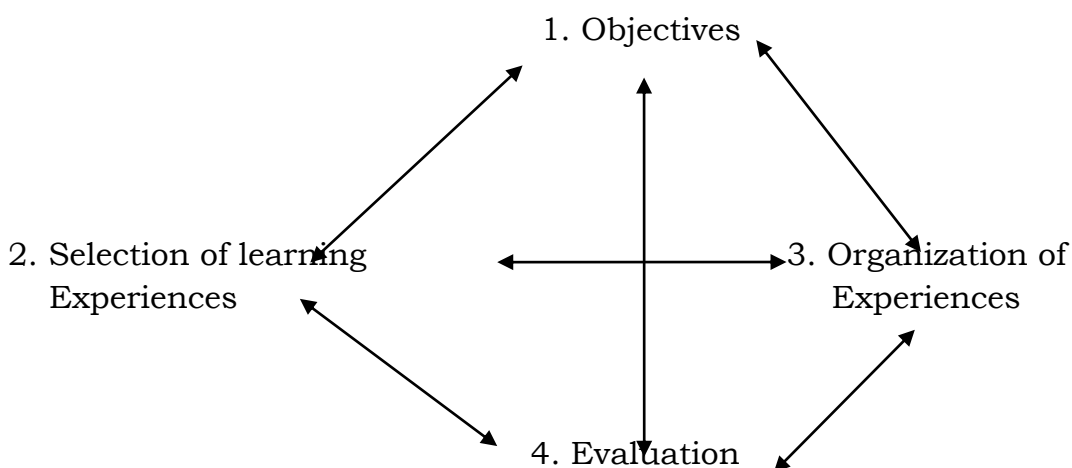
This model like Tyler's, failed to recognize the situational analysis in curriculum development. Again, in this model, curriculum is not considered as linear or sequenced; it can start with any element and proceed in any order. This may bring confusion later as different planners can start and end with whatever element they want. People seem to be claiming rationality even in this that they do not even understand. African politicians claim that they can fit into whatever portfolios they are called into for service whether they are professionally qualified for it or not. Criteria and standards are slaughtered on the platform of political parties. A critical look at the Nigerian Federal executive council as presently constituted lends credence to this concern. Another basic question to this concern is in the african type of democracy in which most times, the winner takes all; and the nature of the loser is completely forgotten in an unprogressive competitiveness, whose real role is nothing other than discriminatory nepotism. Unfortunately, the trend is being currently accepted as the ideal in Nigeria and known as the nigerian factor. This is very unacceptable as it kills true efforts of education, cutting it off from the roots.!

GILE'S Model

Giles, Mc Cutchen, and Zechiel, his associates, developed a four-step model to curriculum development. Their model portrays inter-dependence of functions in curriculum development process rather than the linear sequential steps of Tyler. The steps are:-

1. Selection of aims, goals and objectives;
2. Selection of learning experiences and content,
3. Organization of experiences.
4. Evaluation of learning outcomes.

The model of curriculum planning as presented by Giles



The above model shows the inter-relationship of the steps in curriculum development. The double headed arrows illustrate this idea of linkage. The arrow from objective to evaluation shows that the objective may be modified based on the result of evaluation.

The objectives begin the model as in Tyler's and others. The objectives are selected and then learning experiences and content are selected based on the nature of those objectives. Based on the content also, the objectives can be stated as is done by a classroom teacher.

The Strength of Giles model

Giles' inter-relationship model shows that the objectives are linked, interdependent, interwoven and inter-related to the content, learning experiences and evaluation which means that all other steps in the process are directed towards achieving these aims and objectives.

However, Giles' model did not show the differences between content and learning experiences; he referred to the two terms as the same. It also placed learning experiences before content. There is need to rethink all african and nigerian education issues with a view to reversing or overhauling the system or parts of its components!

THE SAYLOR, ALEXANDER, AND LEWIS MODEL (1981)

The model conceptualized by Saylor, Alexander and Lewis indicates that the curriculum planners begin by specifying the major educational goals and specific objectives they wish to accomplish. Saylor, Alexander and Lewis classified sets of broad goals into four domains under which many learning experiences take place to include:

- Personal development
- Social competence,
- Continued learning skills, and

-Specialization.

Once the goals, objectives, and domains have been established, the planners move into the process of designing the curriculum. The curriculum workers decide on the appropriate learning opportunities for each domain and how and when these opportunities will be provided. After the designs have been created, they select the methods through which the curriculum will be related to the learners. Finally, the curriculum planners and teachers engage in evaluation. They must choose from a wide variety of evaluation techniques. Is the issue of a wide range of evaluation measures, not the present contention between nigerian universities, which are supposedly legally autonomous, and the Joint Admission and Matriculation Board(JAMB)?

Strengths of this Model

Saylor, Alexander and Lewis proposed a design that would permit:

- (a) Evaluation of the total educational program, as well as
- (b) Evaluation of the evaluation program itself.

The evaluation process allows curriculum planners to determine whether or not, the goals of the school and objectives of instruction have been met. Saylor, Alexander and Lewis supplemented their model of the curriculum planning process with companion models depicting the elements of the curriculum system, the process of defining the goals and objectives of educational institutions and curriculum evaluation became focal points.

The essence of this work is neither to condemn and jettisson existing models nor to necessarily advocate for the the express selection of one over the other but to examine

them all and draw their strengths into an inspiration that probes linkages and diversions that can be explored to the advantage of the african educational heritage and history. Let us carefully draw important scenarios.

INSIGHTS FROM THE MODELS

The models discussed in this work reveal both similarities and differences. All the curriculum models have components of process, planning, implementation and also evaluation. They all have “beginning” and “ending” points. There is always a beginning to everything. The rewriting of the african educational heritage can begin with the development of good african curriculum development processes to guide the future curriculum, which must be well articulated and documented. Educationists in Africa must take this as a worthwhile challenge!

The curriculum models are all named after the educators or theorists who developed them - Tyler, Hilda Taba, Wheelers etc. Which of these are african names? Some of the models have multiple designers. Are Africans afraid of working together to develop sound and formidable models?

The intent of all these models is to serve educational purposes with the structure of curriculum. Africa can develop a structure that can be adapted to her multiple ethnic, religious, sociological, economic, political and physiological conditions.

While these models have the same intent, they still pursue or approach education from different premises. While Tyler’s model is objective, Taba is interactive, Wheeler is cyclical, Walker is naturalistic or descriptive model etc. Africans can even start by proposing as many models as possible.

Tyler's is deductive and works from a basis of scientific management with a preference for educational administrators developing the curriculum and having teachers implement it, while Taba's model is inductive, encouraging significant amounts of input from teachers in creating the curriculum because they are the ones interacting on daily basis with students. African teachers should be better appreciated and trusted. The implication is that the system should make provisions for developing a crop of teachers that can effectively be entrusted with the responsibilities. Who can set thoughts on this if not the educationists?

Tyler and Giles presented four steps while Wheeler, Nicholls and Nicholls, presented five-steps and Taba presented seven steps. African curriculumists can even start with any number of steps they consider suitable or adequate enough for a structure that takes root and is explicable satisfactorily enough within the african milieu.

Tyler and Giles made no distinction between content and learning experience, that is, they considered them as one, but Taba, Wheeler and Nicholls and Nicholls separated them. It would therefore, constitute no news if african thinkers lump, separate or alter the different perspectives.

Others laid emphasis on the organization of learning experiences while Nicholls and Nicholls emphasized the situation. Any issues that appeals to an african curriculumist could become the primary focus!

CONCLUSION:

The curriculum development process is a continuous one, it is not a one-time affair, because the curriculum is serving a dynamic society. It cannot effectively help the society meet her needs if it does not move with the society. This is why it is continuously

reviewed to ensure that it contains those elements that can help achieve the educational goals of the society. The African society is a distinct one. Whether termed developing or recessive. None of the terms is to be dwelt on forever. African educational processes is capable of carving a distinguishing niche for the African heritage and history. If only there is the will, the zeal and the commitment among African educationists, even in an area that is as new and as open for inputs as curriculum developmental process and structure, an opening exists for a possible repositioning of the African identity.

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