

EDUCATIONAL PSYCHOLOGY: THE BASIS OF CURRICULUM ORGANIZATION AND DEVELOPMENT

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Abstract

This paper is titled “Educational Psychology: The Basis of Curriculum Organization and Development.” The paper has discussed concepts of curriculum organisation and development processes that have direct bearing to educational psychology under the following subheadings; introduction, relationship between educational psychology and curriculum, the concept of educational psychology intrinsic in curriculum, influence of educational psychology in curriculum organisation, the role of educational psychology in curriculum development, the roles of theories of learning enshrined in curriculum organisation and development. Lastly, a conclusion was drawn.

Keywords: Education, Psychology, Curriculum, Organisation, Development

Introduction

It is a universal consensus that curriculum is the fulcrum upon which everything in the education system revolves around. It is the curriculum that put in place all that is required in terms of policies, concepts and theories of education as a plan of action which when successfully implemented and adhered to will lead to growth, development and prosperity of people, society and the nation as a whole. Curriculum is a comprehensive process of facilitating students learning. This embraces the ways of teaching the subject matter, school organisation, students’ attitudes, personal relations within the school and all that is involve in the teaching-learning process (Kumar, 2020, Selvi, 2021 & Ashraf, 2022).

A curriculum developer is at every stage involved in a series of decision making based on a number of vital issues and areas of concern in education. Curriculum development has to focus on these areas of concern for a meaningful teaching-learning process; one of which is educational psychology. In developing a curriculum, considerations must be given to the knowledge of educational psychology (Ashraf, 2022). This is because; all learning experiences are geared towards influencing a desired behavior. In this vein, curriculum must take into consideration the aspects of educational psychology including social forces of human development, the nature of learning and the nature of knowledge. Babu (2022) maintained that, educational psychology as the scientific study of the mind and how behavior can be reshaped as a result of interaction with learning experiences can perfectly serve as the basis of effective curriculum organisation and development.

One may begin to inquire the rationale behind curriculum development being designed on the basis of the knowledge of educational psychology. Constructive response to this inquiry cannot be far from the

fact that, educational psychology contributes to appropriate decision making in curriculum regarding selection and organisation of relevant objectives, learning experiences and methods of evaluation as well as decisions regarding the scope of the curriculum. In addition, educational psychology intimate curriculum developer with the concepts and theories of learning, why the learners respond in some ways, what impact does the school and environment have on students learning, how should a curriculum be organized to enhance learning as well as providing principles and direction for effective curriculum development.

In developing a curriculum (Hewitt, 2022) maintained that, through a careful study of the behavior of an individual right from early childhood, it is possible to pattern out structure upon which the individual can be taught effectively. Therefore, the understanding gained from psychological study of individual and which has direct bearings on learning process such as how they learn, the effect of pattern of growth of the individual on learning as well as the way in which emotion promotes or confuses the learning process can never be dispensed with in curriculum organisation and development.

Relationship between Educational Psychology and Curriculum

The relationship between educational psychology and curriculum can never be overemphasized. Psychology plays an important role in curriculum organisation and development. First of all, it provides conceptual models to curriculum planning and methodology which helps in the selection of appropriate learning experiences through the theories of learning, theories of cognitive and emotional developments, individual differences in ability and personality, modes of attitude formation and changes selection process and use of knowledge (Bransford, 2021). It is worthy to state that psychological theory is an idea, belief or claim about something that affects the mind. It is one of the basic sciences that form the foundation of curriculum and indeed of education without which curriculum as an educational blueprint cannot be complete. Any curriculum developer that has no knowledge of human development and how they learn tend to treat all individuals alike irrespective of their chronological age. Such curriculum developer does not realize that individual learners have different inborn quality and uniqueness. Each learner is unique and learns in ways different from others. An effective curriculum developer will come to terms with all these through experiences of educational psychology and its learning theories (Piwuna, 2002 in Mujahi, 2018).

It is pertinent to state that, learning is built upon readiness. Readiness is the capacity and willingness to learn. Students should be emotionally, physically and intellectually ready to learn. Some kinds of defects in development, physical, mental and social that affects readiness must be known and addressed before actual curriculum organisation and development. Being conscious of the concept of readiness enable curriculum developer to while stating the behavioural objectives, address the three domains of cognitive, affective and psychomotor. By considering these domains, a curriculum developer can define the intended learning outcome clearly and comprehensively (Khan, 2022 & Deivam, 2023).

In addition, apart from readiness, educational psychology provides terminologies such as, measurement, transfer of learning, motivation, interest, stimulus and so on which give meaning to the activities engaging a curriculum developer. It also offers to curriculum planners a form of measures to guide teachers on how to teach and how learning takes place. The different psychological theories such as behaviorism, cognitivism, humanism and so on are ideal to any curriculum development. Each of these theories provides a code of how learner's behavior can be modified and which cannot be undervalued in any meaningful curriculum development.

The Concept of Educational Psychology Intrinsic in Curriculum

It is worthy to state that the only known and authentic document of plan of action that contains and enshrined all that education entails is the curriculum. Curriculum plans, designs, organizes, develops, promotes and evaluate issues that has direct bearing to education. It contains the objectives, contents, methods and evaluation procedure (Akuma, 2019 & Okam, 2019). Curriculum and education are therefore intertwined, integrated and inseparable with the former complementing the latter. The concept of “curriculum” in education plays a leading role in pointing to the direction of progressive change that reflect the emerging social issues, challenges and educational reforms (Kabir, Tahir & Zakari, 2023). It has to do with philosophizing, conjecturing and understanding of the complexities of issues and paradigms for proper planning and development. These progressive changes that the curriculum is pointing at are expected to be reflected in form of changes in the behavior of individual learners. There are no two ways about it; one needs to come to terms with the knowledge of educational psychology to get to comprehend individual behavior.

In education, it is the curriculum that determines what happens, how it happens, with what it happens and how to be sure that it has happened (Amadi, 2020). To this end, developing and sustaining any idea means to look extensively on it thereby bringing out all issues at stake which can be: relevance, effects, problems, challenges and providing way forward as solutions. Wiles (2020) expatiated that curriculum document in education provides a framework that helps prepare academics and teachers. It helps them to develop and support the focus for understanding the learners and the society. Curriculum establishes practical experiences that are consistent and thoughtful. Dike (2019) maintained that curriculum is an embodiment of all the knowledge, skills and attitudes which a nation, through her schools, imparts to citizens. By ‘knowledge’ it means, all facts, theories, principles/generalizations and rules needed to be acquired for a student to be certified as competent in a field.

Curriculum represents the distilled thinking of society on what it wants to achieve through education. It tends to mirror society itself, reflecting the knowledge society consider important and useful. It identifies those physical and mental skills that society prizes and adopts those methods, which it approves. It includes the complete experience of the student while under the guidance and direction of the school. It includes activities, which are academic, vocational, emotional and recreational. Curriculum include everything that is currently the input to the system of education, involving what is planned to take pace both inside and outside of the classroom under the direction of the school (Mujahi, 2018).

This explains why no meaningful progress can be made in any nation if issues and activities in education are not adequately and appropriately planned, designed, organized and developed in the curriculum. All these plans are geared towards meaningful learning in an attempt to positively influence behavior. In this dimension, it is the theories of learning in the field of educational psychology that updates curriculum developers on how best learning can occur at each stage, environment, mood and time. With the knowledge of educational psychology in place, effective curriculum organization and development become an easy task.

Influence of Educational Psychology in Curriculum Organisation

Curriculum organisation is a stage in curriculum development which attempt to integrate information regarding experiences, including developmental sequences from all the stages (objectives, content, method and evaluation). Tukur (2022) added that, curriculum organisation is concerned with

educational sequences of selected experiences with content planned to produce certain behaviors within the general areas of understanding, feelings, attitudes, values and skills. By organizing learning experiences to produce the desired behaviors and attitudes, technically implies the application of the knowledge of educational psychology. It is through the experiences gained from educational psychology that human behaviors and attitudes were dissected and highlighted. Curriculum organisation therefore employs these experiences in addressing the subject matter and activities so that they can make sense and provide continuity.

Criteria for Effective Curriculum Organisation

A curriculum developer ought to take into consideration the following criteria in organizing a meaningful curriculum. Akuma (2019) maintained that these criteria must be followed in order to determine how to put together for instructional purposes, the facts, principles, concepts and learning experiences that have been selected. These criteria include:

Continuity: - this refers to a situation where major curriculum elements within any field of study occur repeatedly. This is because in curriculum, learning experiences have a profound influence on the learner in terms of effecting changes in his/her ways of thinking, understanding of concepts and shaping attitudes over time. This implies that, if the same kinds of experiences are brought in to continuing operation, it will likely produce a summative effect which will bring about profound changes in the learner. For example, if an objective in the curriculum is to develop mastery and fluency in speaking, continuity requires that the concept of phonology (speech sounds) be dealt with repeatedly in the various parts of the language course. In short, continuity requires that major curriculum elements, concepts and topics be repeated again and again in order to produce a cumulative effect.

Sequence: - this simply means organisation of learning experiences in hierarchy. It is important in organizing a curriculum to arrange the content and the materials in a kind of order of succession and not in a haphazard manner. In other words, successive learning experiences should be built upon the proceeding ones. Curriculum experiences must therefore be planned so that there is an increasing complexity of materials, concepts and topics to deal with. In addition, there should be an enlargement of the concepts or skills from the previous experiences to be accompanied by more mature mental reactions on the part of the learner. The guiding principles in sequence are therefore going from the known to the unknown, moving from the simple to the complex, use of description followed by analysis, moving from development of abstract concepts to generalization.

Integration: - integration in terms of organisation of curriculum experiences refers to the utilization of curriculum elements from one subject area to other subject areas so as to buttress one another. Integration help students to get a unified view of the elements, concepts and topics treated within the various areas of the curriculum. This covers values, attitudes, skills and knowledge which are being developed in more than one area in the curriculum. For example, if an objective is to develop the skill of handling quantitative problems in students, the curriculum should be organized in such a way that students are well groomed with experiences of quantitative problems in arithmetic. This can be improved upon by extending the skills to solve problems in science and or economics. This will help the learner to see the skill is not simply on isolated behavior to be used in a single course, but can also be used in diverse situations of courses and of daily life. The integration centers could be topics, problems or unit of work that is appropriate to a class and relevant to the integrating elements of the curriculum.

The Role of Educational Psychology in Curriculum Development

The concept of curriculum development should be seen in terms of changes or revisions needed to ensure that a curriculum plan or an educational programme remain relevant to the changing needs of the learner and the society. This involves the process of evaluating the objectives for appropriateness and adjusting the content, materials, instructional strategies and learning experiences to meet the changing needs and time (Nasib, 2021). At this stage, educational psychology acquaints a curriculum developer with the best applicable strategies to adopt that will satisfy the current and future needs of the learner and the society in the teaching-learning process. There are two common approaches to curriculum development as identified by Amadi (2020). They are: the crisis approach and the systematic approach.

1. The Crisis Approach

The crisis approach usually occurs from a sudden realization that a particular crisis in educational system of a country is due to some inadequacies in the curriculum. For example, banditry and kidnapping for ransom, corruption, child abuse, graduate unemployment, rural urban migration, inability of primary and secondary school students to read and write and so on. In such situations, urgent remedies are usually applied by enriching the content of the curriculum of a particular level (primary, secondary or tertiary). The major drawback of the crisis approach to curriculum development is that it is usually carried out in a piecemeal manner. That is, one aspect of the curriculum problems is tackled without giving any thought to other related problems. It is worthy to note that; tackling just one aspect of the problem does not solve the problem but rather creates more problems for the schools. The consequence here is that, there will be no coordination between one aspect of curriculum development and another.

2. The Systematic Approach

The systematic curriculum development on the other hand is a deliberate and planned effort to bring about a change. In this situation, curriculum developers are dissatisfied with the existing curriculum and feel that a change is desirable and necessary. They then determine the nature and extent of the desired change, how best to carry out the change, and the most appropriate methods of determining the success or failure of the change that is to take place. These necessary steps of carrying out the change include: situational analysis/needs analysis, objectives, contents, methods and evaluation.

The Role of Theories of Learning Enshrined in Curriculum Organisation and Development

How human beings learn and the conditions under which they learn are essential to curriculum organisation and development. A number of psychological theories have different perspectives on learning and how to facilitate it. To develop a meaningful curriculum therefore, these learning theories must be taken into consideration (Maarofi, 2020). There are a number of theories of learning in the field of educational psychology which are geared towards assessing the modalities of how learning takes place, factors that constitute effective learning, variables that motivate or reinforce learning and or the opposites of the upper mentioned modalities. In any attempt to organize and develop a curriculum, these learning theories are immensely required and utilized. Among these theories are:

The behaviorist theories of learning: - the behaviorists look at learning as series of experiences which influence behavior (Masoud, 2021). Thus, each learning experience is a stimulus that produces a behavioral response. In this approach, a curriculum developer is required to assume the function of the teacher and studies the learners to ascertain their patterns of behavior and structured specific learning experiences that will encourage desirable pattern of behavior and discourage undesirable behavioral

patterns on the part of the learner. The behaviorists stress the importance of examples by the curriculum and the teacher to achieve the objectives. This entails using instruments as conditioning (repetitive response), reinforcement (strengthening behavior through supportive action) extinction (withdrawing reinforcement) and transfer (connecting behavior to one stimulus or situation) (Shunck, 2020).

The behaviorist approach to curriculum is concerned with a cause-effect programming of observable behavior which involves four step techniques, thus:

Identifying a problem: - this suggest coming into contact with an observable behavior and the need to address it in education. It also calls for diagnosis of the situation covering all issues involve ranging from national educational goals, philosophies, policies and principles; to the needs, interests and aspirations of the leaners and the society.

Recording a base line data: - this involves recording of the identified problems and the needs for a curriculum development based on the situational analysis.

Installing a system to change the behavior:- this entails mapping out appropriate learning objectives, contents, activities and methods to address the identified problems. It also caters for the successful implementation of the provisions developed in the curriculum to meet and satisfy the needs, interests and aspirations of all the stakeholders involved in the curriculum development process.

Evaluating the new condition:- this deals with assessment. Assessment in curriculum organisation and development comprises the elements of both formative and summative evaluation. After identification of the problem to be addressed in the curriculum and the subsequent diagnosis of all the issues involved in the process, a curriculum developer has to apply formative evaluation to determine the appropriateness and comprehensiveness of the identified issues. The process will only proceed after satisfying that all relevant issues are met accordingly. In the same vein, summative evaluation will also be used after implementation to determine the extent to which developed curriculum materials have achieved its objectives.

To the behaviorist, any behavior that is rewarded will almost certainly continue; while, any behavior that is not rewarded, will stop and may disappear over time. Proponents of this theory according to Shunck (2020) and Mujahi (2021) believed that, if learning is to take place, teachers must reward responses made by learners. The reward has to be such that can satisfy the learners needs at a particular time. There is no doubt, curriculum developers encourages aspects of reward and motivation as driving forces in learning. This idea of reinforcing desirable behavior was supported by the behaviorists.

The cognitivist theories of learning: - the cognitivists are of the view that, learning should be organized in a hierarchical structures, thus, the learners previous experiences determines the new learning capability. Piaget, Brunner, and Dewey in Willis (2020) are the advocates of this position. To the cognitivists, learning is achieved by mental processes such as reasoning, remembering and recall which help in problem solving, development of new idea and evaluation. Learning in this perspective is a process that progresses in stages.

Piaget holds the view that all behaviors represent interaction between the organisation and the environment. He provided a substantial evidence to suggest that thinking is proportional to the age relative at each stage. However, the stages vary with exposure to the immediate socio-cultural and educational background, the degree of intellectual stimulation and heredity. Through this perspective, a number of curriculum concepts were developed especially, looking at the current curriculum document in Nigeria which was characterized by age grade and programme duration in terms, semesters and sessions.

The prior knowledge theory of learning: - this theory distinguishes between ‘rote’ and ‘meaningful learning’ on the one hand; and how prior experiences affects the learning process on the other hand. Ausubel (1960) in Bruer (2019) was the major proponent of this theory. He believed that meaningful learning occurs when there is interaction between the learner’s appropriate elements in the knowledge that already exists, and the new material to be learned. However, where such interaction does not take place, rote learning occurs. In this process, the part of learner’s cognitive structure which provide for the interaction necessary for meaningful learning is called ‘subsumers’. Subsumers are principles of generalization of body of knowledge that the learner already acquires that can provide association for the various components of the new knowledge (Bruer, 2019). This is why meaningful curriculum document supports previous experiences as the basis upon which new concepts and ideas are developed.

The discovery process theory of learning: - this theory of learning prefers to promote the acquisition of knowledge through discovery. Discovery is used in this theory as all forms of obtaining knowledge by the use of mental processes. In this theory, two forms of discovery exist. In one form, a learner spontaneously recognizes a new situation that is familiar to one of the elements in his/her existing structure of knowledge and therefore assimilates it easily. In the second form, the new situation is incompatible to the existing structure of the learner’s knowledge. In this situation, the learner has to restructure his/her cognitive framework so that the new learning materials can be accommodated (Snowman, 2020). This is why; a number of innovations were made in the curriculum that supports hands on learning which in turn promotes discovery of both existing and new ideas in learners.

Conclusion

In conclusion, based on the foregoing perspectives and discussions, the relevance of educational psychology in curriculum organisation and development cannot be undervalued. Curriculum and educational psychology are therefore two sides of the same coin in the teaching-learning process as both complement each other. While curriculum effectively organize and develop learning experiences and provide appropriate instructional methods and strategies to achieve the intended learning outcome; educational psychology on its part provide the mechanism for knowledge, learning and attitudinal components that guide curriculum development process. Educational psychology is indeed the basis of meaningful curriculum organisation and development.

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