



## **An assessment of physical and health education curriculum as sustainable development programme in Nigeria**

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### **Abstract**

The aim of the review of this study is to evaluate curriculum of Physical and Health Education as a sustainable development Programme in Nigeria, where evaluation is looked upon as an important component of Physical and Health Education curriculum. Also highlighted are the strategies and content involve in a good curriculum. Also discussed was the concept of assessment and judgment of performance and the curriculum. The work also looked at outcome of curriculum in line with purpose of assessment to determine the relative effectiveness of the programme in terms of students behavioural output. Also highlighted are criteria that can be used to determine effective evaluation and therefore concluded that the formative and summative should be adopted for sustainable environment.

**Keywords:** physical health education, Nigeria

### **Introduction**

The sustainability of Physical Education curriculum can be viewed on the structure of Brown's Anatomy in line the psychomotor domain to enhance social and mutual learning process through physical activities (Ogunleye, 2016) <sup>[10]</sup>. These physical activities when developed will enhance the physical, mental/ social and psychological development of the individual through a well sound Physical Education curriculum.

Therefore, the conceptual view of evaluation may be referred to as the process of appraising an individual objects, process or system in accordance with the type of process or system that is capable of putting within a period of time (Okoro and Ogunleye, 2016) <sup>[12]</sup>.

Physical Education Curriculum Evaluation could be carried out to rate, value or estimate students' competency in any domain of learning. Thinking of learning as a relative permanent change in behaviour of a learner due to constant practice, evaluation comes in when one tries to ascertain whether there is any change in behaviour, as it is the only determinant of whether learning has taken place, more so the degree of learning, if any may suit the teacher or not as the case may be, because he knows better what he is trying to develop or bring out from the learner, the bid of the teacher the same as evaluation (Ogunleye, 2016) <sup>[10]</sup>.

Assessment enables one to determine to what extent, the objectives of a programme have been realized. For instance, a teacher evaluates in order to compare the outcome with the expected outcomes. The information gathered usually affects the nature of teaching and/or the curriculum. Evaluation is most often used as the measure to the extent to which is known and specified clearly. It is only when the learning experiences and activities and the resulting behaviour patterns expected are clearly laid down, then administered by the teacher or self-assessment by the pupils themselves. However,

when objectives are not stated, or if the teacher is concerned with expressive outcome (Igwe, 2000; Agwubike & Momoh, 1985; Gonsi, 2017) <sup>[8, 1, 7]</sup>.

Okoro (2009) said the process of evaluation is essentially the process of determining to what extent the educational objectives are actually being realized by the programme of curriculum and instruction. With this definition, evaluation is intricately woven to the statement of the desired educational outcomes i.e. objectives. In the same vein, Scriven (1967) stated that evaluation may be defined as a broad and continuous effort to inquire into the effects of utilizing educational content and progress according to clearly defined goals. While Dike (1995) <sup>[4]</sup> views evaluation as being more than looking at objectives of an educational programme are being realized, it involves making decisions. Therefore he said: evolution is the collection and use of information to make decisions about educational programme. From this stand point, Emeruwa (1981) <sup>[5]</sup> believes that evaluation is more than comparing expected outcome with the educational product and he puts it succinctly when he offered a more comprehensive definition of evaluation as consisting of not only the process of determining what educational outcomes are and of comparing them with expected outcomes; but it also involves judgements about the nature and desirability of any demonstrated change. Ogunniyi (1990) <sup>[11]</sup> referred to a thing, process or programme. It is also a form of ascertaining the worth of an endeavour in terms of set objectives.

After reviewing the various definitions in the open literature, Dike (1995) <sup>[4]</sup> concluded that the heart of each definition involves an assessment of worth or in other words, a determination of merit. Therefore, while "evaluating we should seek for information on:

- Antecedent
- Transaction
- Outcome

**Antecedent:** this covers the aspect of the situation in which curriculum is implemented. We will look at those things that exist before introducing a new curriculum. This will include books, time available, existing facilities and other resources or learning materials. We should take note of how adequate, relevant or functional they are.

**Transaction:** the process of interaction while implementing curriculum. That is, what teacher and pupils do with materials provided, and how they relate with one another? Here, we will look at conditions under which outcomes are achieved. The use of time and the social climate in the class room will be considered. Looking at the process of interaction was what Fajana (1982) <sup>[6]</sup> referred to as process of evaluation.

**Outcomes:** this is very important source of information for evaluation i.e. the pupils change in behaviour with regard to his achievement and change in attitudes, and teacher's feeling about teaching. To achieve this, we can use paper and pencil test -to find out knowledge which students have; observations - appraisal of personal/social adjustment, habits interest and operational skills; interview and questionnaire - for changes in attitudes, interest, opinion and appreciation. In other words, we will like to see the extent to which curriculum objectives have been achieved. There are four types of outcomes which should be considered in curriculum evaluation. These are achievement of students/attitudes of students, effects on teachers and effects on community.

To some extent, evaluation can be likened to research; however, the main difference is that of purpose. The purpose of research is to contribute to knowledge generally, while evaluation provides information particular decisions. Evaluation is essentially the process of determining to what extent educational objectives are actually being realized by the programme of curriculum and instruction. It investigates so as to see how far the learning experiences as developed and organized are actually producing the desired results and it also involves identifying the strength and weakness of the plan (Tyler, 1949) <sup>[18]</sup>. Through evaluation, we could see in which respects the curriculum is effective and in what respects it needs improvement. Evaluation should therefore be done using more than one appraisal method.

The concept of evaluation is very limited, because the word "evaluation" encompasses "assessment" and "measurement". These concepts are synonymous with evaluation but "evaluation" is a broader concept (Igwe, 2000) <sup>[8]</sup>.

Although the term "measurement" is often interchanged with the term "evaluation", there is a subtle distinction between the two. In one sense, evaluation is a form of measurement: either the performance of a student or a programme. In other words, evaluation is judgmental in nature; that is, it attempts to find out the worth of an experience, a process or system.

Measurement is basically concerned with quantitative description of student's performance. It does not imply judgment as to whether a process or programme is worth all the effort, time and energy being expended on it. Thus measurement is more specific than evaluation (Ogunniyi, 1990) <sup>[11]</sup>.

Evaluation therefore could be seen as the process of making judgment, the judgment to be based on the information

collected. Measurement and evaluation commend each other; in fact measurement is useless unless it is evaluated. Therefore evaluation can be a form of assessment of values after you must have collected data.

The meaning and purpose of evaluation reflect the central concern of this topic. As already mentioned, evaluation deals with the appraisal of value or the estimation of worth of a thing, process or programme in order to reach meaningful decisions about the thing, process or programme. It is also a form of ascertaining the worth of an endeavor in terms of a set of objective.

### **Purpose of Physical Education Evaluation**

Physical Education evaluation is carried out from time to time for the following purposes as stated by Ogunniyi, (1990) <sup>[11]</sup> and modified by Ogunleye, (2016) <sup>[10]</sup>.

- To determine the relative effectiveness of the programme in terms of student's behavioural output through sports and physical activities.
- To make reliable decisions about Physical Educational planning.
- To ascertain the worth of time, energy and resources invested in a Physical Education Programme.
- To identify students growth or lack of growth in acquiring desirable knowledge, skills, attitude, and societal values through sporting activities.
- To help Physical Education teachers determine the effectiveness of their teaching techniques and learning materials.
- To help motivate students to want to learn more as they discover their skills, techniques and ability as in terms of progress or lack of progress in given sporting tasks.
- To encourage students to develop a sense of discipline and systematic study habits through social interaction.
- To provide sports administrators and Human Kinetics experts with adequate information about teachers effectiveness and school sporting needs.
- To acquaint parents and guardians with their children's performances.
- To identify problems that might hinder or prevent the achievement of set goals.
- To predict the general trend on the development of the teaching learning process skills in Physical Education Programme.
- To ensure an economical and efficient management of scarce resource.
- To provide an objective basis for determining the promotion of students from one class to another as well as the award of certificates.
- To provide a just basis for determining at what level of education the possessor of certificate should enter a career basic skill.

### **Criteria for Characteristics of Curriculum Evaluation**

The criteria of curriculum evaluation were view and stated by Orukotan (1999). Includes the following:

**Valuing:** Evaluation in any respect is mainly judgment; therefore a curriculum evaluation must hold some values. These values serve as an essential ingredient i.e. the very

essence of the evaluation process. When evaluating something, it means you have placed value on it. The criteria we use for any evaluation is an evaluative decision. The evaluation will reflect what the evaluation thinks is worth evaluating.

**Goal Oriented:** Goals are intended outcomes of an educational endeavor and it is the seamen that will indicate the nature of progress or achievement. Thus, we can only assess the effects of learning experiences by referring to such stated goals.

**Comprehensive:** Learning outcome are often variant the evaluation should therefore be broad enough to cover as many goals (learning outcome) as possible. The teacher may use standardized instruments to achieve this, but in some cases he has to develop his instruments.

Furthermore, this criterion emphasizes the need to evaluate all the objectives. Most of the time, evaluation is concerned with the assessment of objectives in the cognitive domain. This type of evaluation oftentimes involves the lower cognitive level which tests recall of facts. This type of evaluation has also brought a lot of criticisms because less effort is made in examining other forms of objectives *visa-a-vie* effective domain and the psychomotor domain. The effective domain deals with attitudes and relationships between and among movement and practical aspect of life. Totality of these objectives should form the content of evaluation.

Generally evaluation refers to the determination of the extent to which the set educational objectives or enterprises have been met. While Igwe (2000) <sup>[8]</sup> said that evaluation goes beyond classroom, it relates to other aspect of life such as:

- a) Administrative and general aspects of an educational system. For instance trying to find out how relevant the school programmes are, its personnel etc.
- b) Assessment for course improvement especially with instructional methods and material.
- c) Identification of individual's needs, and also to help the students plan his/her learning better.

### **Diagnostic Validity**

Curriculum evaluation that wishes to be thorough should diagnose specific activities which are within such curriculum or programme. In addition evaluation instruments which are employed should address what they ought to (Orukotan, 1999).

Validity provides an agreement what evaluation instrument (an examination or tests) measure and what it is indented to measure (Igwe, 2000) <sup>[8]</sup>.

### **Continuity**

Evaluation should not be left till the end of curriculum implementation; it should not also be limited to a few stages. It should be at every stage of the curriculum or programme, it has to be frequent, recurrent and continuous (Orukota, 1999). Evaluation should be a continuous and learning. It is a very integral part of both teaching and learning. It is very important that teachers undertake a diagnosis of the readiness of the pupils/students before teaching. Also/ it is very crucial that teachers ascertain the pupil's particular abilities prior to

implementing the curriculum. The result from these exercises will modify the purposes of teaching and to provide feedback for students.

Within the classroom, regular feedback is important to provide the students with some information about his/her progress, thus maintaining his incentive to do well. Feedback is also very essential in curriculum development There is the need to evaluate all the processes of development as one proceeds. This provides information on the failure or success of the project. This type of evaluation is directional and failure to do this can cause extensive changes at the end of the process, thereby resulting in the waste of time and effort (Igwe, 2000) <sup>[8]</sup>.

### **Diagnostic Reliability**

It should accurately measure the effects of educational experience on repeated occasions. It has to be consistent in what it is being evaluated (Orukotan, 1999). This implies that an instrument (e.g. test measures what it set out to measure. Again an assessment is reliable if the expected result is gotten. Reliability refers to the consistency with which the students are on a test. This means that the evaluation instrument should give the same results when administered at different times. For example, if the test was given to a group of students today and again the next day, a similar performance should be expected in terms of score and how each student is ranked in relation to his peers. However, it takes a teacher several months or years to retest the students, there may be discrepancies but not enough to consider the test reliable because students may have benefitted from instruction (Igwe, 2000) <sup>[8]</sup>.

### **Consistency**

The essence of evaluation is to measure the objective of a course or programme. For instance, if the objective of any programme, is to develop a particular attitude of the student, evaluative procedure is geared towards that motive. Often times, teachers in the school will set another objective and measure another. Exercise meant to achieve the desired objectives should be directed to that end, so also are projects or exercises designed to test affective and psychomotor domains. (Okoro & Ogunleye, 2016) <sup>[12]</sup>.

### **Compatibility**

Evaluation should be compatible with the stated objectives. One of the foremost functions of evaluation is to make sure that it reflects the relative emphasis on particular objectives. In a particular project or teaching, the weight of the objectives varies, some objectives may be primary and as such, the weight is higher, whereas others may be secondary and as much, the weight is lesser. At times, if the objectives are not well and adequately formulated, incompatibility may occur.

### **Objectivity**

All evaluation tests should be objective, valid and reliable. Dike (1995) <sup>[4]</sup>, reiterates the need for objectivity. He posits that subjectivity is a continuum and that evaluation involves elements of both. In student's evaluation measures, there exists a correlation between intellectual outcomes and objective measures and between affective outcomes and subjective

measures. This is so because it is easy to evaluate particularly in a quantitative way the feelings, attitudes and values of students.

### Participation

It is also advised that students participation in the selection of methods for teaching and learning. Teachers should consider the merits of involving the students on the ways and means of evaluating their programme. This is important in as much as evaluation is one of the various processes of teaching and learning. This does not mean students determining the nature of evaluation. As remarked by Broadfoot (1977) <sup>[3]</sup> "the working party in Scotland is revising the method of evaluation of its workers adopted the principle of including employers and representative from the community to ensure the relevance of evaluation for students, teachers, parents and employers".

### Integration of Findings

A profuse and un integrated data will be completely unless if employed in any decision making process, such data therefore has to be organized. It is this type of well-organized and synthesized data that can make interpretation easy. This will also bring out meaning with relative ease.

### Process towards Goals

On the basis of the goal stated to guide the curriculum, we can ask various questions and solutions to those questions like - is there any progress? When is the progress occurring? How much progress? Or what is the direction of the progress? Beyer (1995) <sup>[2]</sup> posits that the curriculum in any given school is adequate if it accomplishes the following three basic outcomes all of which are interrelated, none of which is easy to assess. One requirement is that the curriculum advances the educational goals from which it emanates in the first place. A second is that the curriculum converts functionally to instruction. A third is that students find it a functionally instrument of learning. Unfortunately, the variables that intervene between the acts of curriculum development and implementation make assessment a difficult and frustrating task. Yet the task cannot be neglected for this reason. The compromise is for schools, while employing both objective and subjective method, to be satisfied with judicious approximations, with tentative rather than absolute conclusion.

### Types of Evaluation

Basically, two major types of evaluation exist. These are:

1. Formative evaluation or no-ongoing evaluation which is usually undertaken why the programme/project is going on. The evaluator uses the following from this type of evaluation to assess the workability of the programme, and at the same time redress some of the issues that are ambiguous and irrelevant. In other words, the feedback information gotten helps the evaluator to improve the programme before it is finally adopted by the users.
2. The second one is the summative evaluation referred to by some authors as the end of course evaluation

### Conclusion

Based on the review, it is concluded that a critical appraisal

and security of decisions about element, that obtains data on the decision points which include the curriculum planning process, the relevance of education goals, appropriateness of content for the attainment of goals, sequencing and efficiency in planning which states that formative evaluation is concerned mainly with efficiency and improved processing of data input. It is an inward looking process oriented and it can be described as the feedback loop in curriculum planning while it deals with evaluation of total curriculum plan. It means summary conclusion to the extent at which students attain the goals for a course, segment, or set of opportunities. It is the assessment of merits after completing the instructional programme. In summative evaluation, we can gather information and adjudge the merits of an overall instructional sequence which makes us decide on whether to retain or discard it. It is concerned with the ultimate worth of a curriculum package.

### Recommendations

Based on the conclusion, it is recommended that summative evaluation gather evidence that will equip in helping us to decide on which anatomy textbook (for example) should be adopted for use in our universities. The evidence collected will assist an evaluator in his decision to choose the anatomy textbook (as produced by the publisher) that will perform the job in the best possible. It is the judgment of an instructional endeavor. In any educational system, we are often faced with many decisions like - which types of science should be taught in our school? Should we teach integrated subject or subject centered one? Should we extend the recreational programme of the general student's programme? These are decisions that come under summative evaluation. Summative evaluation provides information about the finished products which could be used by funding agencies and future users of the curriculum. Skillbeck (1976) <sup>[17]</sup> refers to formative evaluation as an evaluation for decision making - proactive, while summative evaluation is evaluation for accountability - proactive.

### References

1. Agwubike EO, Momoh SO. An Introduction to test, Measurement and Evaluation in Education and Psychology, Benin City. Jodah, 1995.
2. Beyer BK. How to Conduct Formative Evaluation, London Longman, 1995.
3. Broadfoot PC. innovations and Issues in Education planning for Competence. New York: macmdian, 1977.
4. Dike HI. Curriculum Improvement and Supervision, *Port Harcourt*: CAPIIC publishers, 1995.
5. Emeruwa HN. Three Components of Curriculum Qnuwuka (Ed.). African Fep Publishers Ltd, 1981.
6. Fajana A. Education in Nigeria. 1842 - 1951. A Historical Analysis. Ibadan Longman Nigeria, 1982.
7. Gonsi MS. Obesity and Exercise Prescription Education *Journal of Multi-Disciplinary Studies (EJMUDIS)* University of Port Harcourt. 2017; 6:101-112.
8. Igwe RO. Fundamentals of Curriculum and Instruction. Hiwit Press, Lagos, Nigeria, 2000.
9. Inlow GM. The Emergent in Curriculum, John Wiley and Sons, Inc. Canada, 1973.

10. Ogunleye AV. Sports Science for Community Development and Environmental Sustainability. A book on Adult education and the environment in the Department of Adult and Non Formal Education, University of Port Harcourt. Edited by Adekola G. and Oyebaniyi M.A. Chapter. 2016; 20:220-226.
11. Ogunniyi MB. Educational Measurement and Evaluation. Longman Singapore Pte Ltd, Singapore, 1990.
12. Okoro CO, Ogunleye AV. Curriculum Evaluation for Sustainable Developmental Programme. Department of Adult and Non Formal Education, University of Port Harcourt. Edited by Adekola G. and Oyebaniyi M.A. Chapter. 2016; 20:220-226.
13. Okoro CO, Ogunleye AV. Curriculum Evaluation for sustainable Environment. A book on Adult education and the environment in the Department of Adult and Non Formal Education, University of Port Harcourt. Edited by Adekola G, and Oyebaniyi M.A. Chapter. 2016; 10:127-134.
14. Okoro CO. The relevance of Curriculum Content to National Building. Nigeria Journal of Curriculum and Instruction. 2001; 10(3):136-139.
15. Orukota AF. Basic Issues in Curriculum Development Olu-Akin Printing Press, Ibadan, Nigeria, 1999.
16. Scrien M. The Methodology of Evaluation in Ralph Tyler, Roger M. Gbne Perspectives of curriculum Evaluation, 1967.
17. Stillbeck M. The Curriculum Development Process: a model for school use in styles of Curriculum Design and Development, Open University Press, 1976.
18. Tyler AW. Basic principles of Curriculum and Instruction. Chicago: University of Chicago Press, 1949.