Educational Evaluation: Functions, Essence and Applications in Primary Schools’ Teaching and Learning

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Research Note

Abstract
This paper discussed the functions, essence, and applications of educational evaluation in the teaching-learning processes; in primary schools. It outlined the definitions of evaluation, the stepwise diagram of an evaluation process, succinct explanation of the types of evaluation, and its essence and the steps in educational evaluation. Also, reflection and thoughts centered around the functions, essence, and how educational evaluation is applicable in improving and sustaining a robust teaching and learning strategy in primary schools. More so, the paper concluded that primary school teachers as well as learners; need regular evaluation and evaluation reports, for effective and efficient teaching-learning transactions. For the learners, educational evaluation increases their learning motivation, development of good study habits, feedback, and necessary corrective measures. Teachers require evaluation results to monitor the effectiveness of instruction as well as the instructional materials, choosing learning experiences, diagnosing learners learning difficulties in order to improve the instructional process. Accordingly, it was recommended that educational evaluation practices, strategies, and enlightenment be boosted among all primary school stakeholders.

Keywords: Applications, Educational Evaluation, Essence, Functions, Primary schools.

1. Introduction
Evaluation can be defined as a procedure that is adopted in gathering valid and valued information about a prior, ongoing, or a concluded program, event, or activity; aimed at making decision(s) regarding the effectiveness and efficiency of such programs, events or activities. Evaluation is the parent of measurement and assessment processes that require the making of valid judgment on whether to adjust, transform, continue, suspend, or discontinue a program. The character description of the evaluation process is that it: formulates objectives; collects
information; analyses information; reports information and takes decisions on the information collected. Evaluation can be executed with or without measurement and assessment (Ojetunde, 2019).

Many scholars had defined evaluation in various perspectives; evaluation is the systematic collection of evidence to determine whether an expected or desired change is taking place in the learners (Odinko, 2014); evaluation is the assignment of symbols to the phenomenon, in order to characterize the worth or value of such phenomenon, usually with reference to some social, cultural or scientific standards (Bradfield, 1957); evaluation is a systematic process of collecting, analyzing and interpreting information to determine the extent to which pupils are achieving instructional objectives (Gronlund, 1976) and Jahanian (2012) sees evaluation as the process by which an educational and training procedure is compared with its predetermined goals to find out their fulfillment.

Similarly, Alkin (1970) defined evaluation as the systematic collection of information about the activities, characteristics, and outcomes of programs, personnel, and products for use by specified people to reduce uncertainties, improve effectiveness and make decisions with regard to those programs, personnel or products (Patton, 1988); evaluation is the process of delineating, obtaining and providing useful information for judging decision alternatives (Strufflebean, 1971); evaluation is a continuous process which underlies all good teaching and learning process (Alonge, 2004); evaluation is a professional judgment or a process that allows one to make a judgment about the desirability or value of the measure (Akomolafe, 2017) and Seif (2008) defined it as a rule-governed process for gathering and analysis of data. The main objective of this paper is to showcase the definitions, types, steps in, and the essence of educational evaluation and how applicable it is in improving and sustaining a robust teaching and learning strategy in primary schools.

2. Types of Evaluation
(i) Placement Evaluation: Placement evaluation is designed to place the right learner in the right place, position, class, or group. It establishes the entry performance of the pupil. More so, it aims at evaluating the pupil’s entry behavior in a sequence of instruction. Examples of placement evaluation may include an aptitude test, self-reporting inventories, observational techniques, entrance exams into unitary and international schools.
(ii) Criterion-Referenced Evaluation: This is evaluation aimed at ascertaining the performance of a learner in terms of what he can do or the behavior he can exhibit. A criterion-referenced test is used to ascertain an individual’s status with respect to a defined achievement domain. As rightly termed, there is a reference to a criterion and does not depend on the performance of other individuals in the group.
(iii) Norm-Referenced Evaluation: Norm-referenced evaluation is the traditional class-based assignment of numerals to the attribute being measured. A norm-referenced test is used to ascertain an individual’s status with respect to the performance of other individuals in the group. It means that the measurement act relates to some norm, group, or a typical performance. It is an attempt to interpret the test results in terms of the performance of a certain group. This group is a norm group because it serves as a referent of the norm for making
judgments. In general, classroom tests, public examinations, and standardized tests are norm-referenced as they are interpreted in terms of a particular class/group, and judgments are formed with reference to the class. As asserted by Ojetunde (2019), evaluation can be classified based on the following: (a) Program’s Segment, and (b) Usage

Based on the program’s segments, we could have different types of evaluations ranging from the process to the impact. Evaluation of the process segment of a program is known as process evaluation. Evaluation by the process would mean analyzing the relation, connection, coherence, and correspondence between and among activities in a program, while evaluation of the outcome segment span from output/product to impact evaluation. Outcome evaluation takes into account all the possible transactions in the program to successfully measure its outcome. Impact evaluation reflects the strength of a program and the extent to which beneficiaries were able to sustain the effect of the program. Impacts are positive and negative, intended and unintended, direct and indirect, and have primary and secondary effects produced by an intervention. Impacts are usually understood to occur later and as a result of intermediate outcomes.

Based on Usage, this could be formative evaluation in which case the evaluation result is used to improve the status of the ongoing program or summative evaluation where the result obtained from the evaluation exercise is used to make decisions about a program. Formative evaluation of learners learning outcomes is useful in coordinating and controlling the quality of instruction to be delivered. It uses tests, take-home assignments, projects, and questions during the instructional process and the feedback obtained can be used for remediation (Odinko, 2014). Its major function is to assist teachers in ascertaining the areas of weaknesses or strengths of learners. The procedures that can be used by teachers in getting this information may include; observation, references to teachers’ years of experience with the learner and their individual differences, consulting with experts, policymakers and peers and teachers’ personal research about teaching strategies and learners’ psychology.

Formative evaluation when conducted appropriately could assist the teacher in improving his/her teaching methodologies and fostering the academic performance of learners. The major functions of formative evaluation include: for diagnosis of the strengths and weaknesses in the teaching-learning processes; proper placement of learners and monitoring of the day-to-day learning processes. It could take the form of needs assessment, process evaluation, implementation evaluation, and structured conceptualization. Okpala, Onocha and Oyedeji (1993) outlined the purposes of a formative evaluation to include: identifying and defining program goals; pacing student learning; quality control of an educational product; monitoring progress during instruction, and trial-testing of curriculum materials.

The essence of evaluation is to meet the following needs: offers assistance for teachers in knowing the details of their pupils, in setting, refining and clarifying teaching and learning objectives, in determining and improving instructional techniques and in understanding the psychology and learning behavior of learners; supporting school owners/administrators in educational planning, decision making, classifications, and placement; assisting parents in
<table>
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<th>Areas of Comparison</th>
<th>Formative Evaluation</th>
<th>Summative Evaluation</th>
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<tr>
<td>Use</td>
<td>To improve the program</td>
<td>To make decisions about the program future or adoption</td>
</tr>
<tr>
<td>Audience</td>
<td>Program managers and staff</td>
<td>Administrators, policymakers, and/or potential consumers of funding agencies</td>
</tr>
<tr>
<td>By whom</td>
<td>Often internal evaluators supported by external evaluators</td>
<td>Often external evaluators, supported by internal evaluators</td>
</tr>
<tr>
<td>Major characteristics</td>
<td>Provides feedback so program personnel can improve it</td>
<td>Provides information to enable decision-makers to decide whether to continue it, or consumers to adopt it</td>
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<td>Design constraints</td>
<td>What information is needed? When?</td>
<td>What standards or criteria will be used to make decisions?</td>
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<tr>
<td>Purpose of Data Collection</td>
<td>Diagnostic</td>
<td>Judgmental</td>
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<td>Frequency of Data Collection</td>
<td>Frequent</td>
<td>Infrequent</td>
</tr>
<tr>
<td>Sample Size</td>
<td>Often small</td>
<td>Usually large</td>
</tr>
<tr>
<td>Timing</td>
<td>Comes up at the beginning of the educational program</td>
<td>Conducted at the end of a program e.g. end of term</td>
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<td>Duration</td>
<td>Usually for a short period</td>
<td>Take a long period</td>
</tr>
<tr>
<td>Content</td>
<td>Based on a unit of instruction</td>
<td>Based on all course content</td>
</tr>
<tr>
<td>Frequency of administration</td>
<td>Most frequently administered</td>
<td>Not regularly carried out</td>
</tr>
<tr>
<td>Variables under consideration</td>
<td>Teaching-learning materials, curriculum, teaching methods, the objective of the unit and topic treated</td>
<td>Product or learning outcomes</td>
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<tr>
<td>Purpose</td>
<td>Improves an on-going educational program, feedback to implementers and learners, centers on the cognitive domain, quality control, monitoring learners’ progress, and pre-testing of teaching materials allows for remediation.</td>
<td>Appraises the entire effectiveness of an educational program, forecasting/prediction purposes (e.g. Common Entrance Examination), feedback for modification, certification, promotion, action-oriented, does not allow for remediation.</td>
</tr>
<tr>
<td>Measures/Methods</td>
<td>Has low Objectivity</td>
<td>High objectivity as it used valid and reliable instruments</td>
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monitoring and in knowing the educational progress and standing of their wards in time; assisting education policymakers and education ministries in determining the extent to which the set instructional objectives has been achieved and for educational planning and forecasting; for appropriate guidance and counseling services and in boosting learners motivation to learn, study habit, skills, and abilities, learning progress and feedback on their general performance. Educational evaluation is a major predictor and enhancer of qualitative education. It is for determining teachers’ and learners’ general learning behaviors, quality, effectiveness, educational outcomes as well as factors that encourages or discourages the appropriate teaching and learning processes. According to Jahanian (2012), Educational evaluation is a valuable tool for teachers, schools, and education managers in making decisions on issues affecting educational syllabus, curriculum, and policies. It is clearly a decision-oriented process as it is intended to lead to better policies and practices in education. Its main aspects include teaching and learning objectives; experiences in teaching and learning; teaching and learning appraisal and a tie among the aforementioned. It is characterized by the systematic but casual observation of learners, teacher and other stakeholders in education; it is continuous; it is simultaneously implemented in the course of teaching and learning; entails both personality and educational variables; explicitly define educational programs and objectives; it is variety-oriented in terms of procedures, testing, and techniques (it can be heuristic, experimental, analytic-synthetic, essay type, objective type, socio-metric, controlled-observation techniques, etc.); emphasizes more on learning than teaching; aimed at directing pupils towards attaining educational goals and it tends to blend performance with objectives.

3. Steps in Educational Evaluation
(i) Identifying and defining general objectives: This is the foremost step in the evaluation of educational programs/objectives. The objective for both the teaching and learning should be outlined as this directs the purpose for evaluation. It could begin with the subject content or the curriculum in general. 
(ii) Identifying and defining specific objectives: What the teacher should teach over time as stipulated by the subject content and that which learners are to learn within the time frame should be identified. 
(iii) Selecting teaching/learning points: The next step in the process of evaluation is to select teaching points through which the objectives can be realized. Once the objectives are set up, the next step is to decide the content (curriculum, syllabus, and subject) to help in the realization of objectives. For the teachers, the objectives and courses of school subjects are readily available. His job is to analyze the content of the subject matter into teaching points and to find out what specific objectives can be adequately realized through the introduction of those teaching points and ensuring that learners learn these points. 
(iv) Planning suitable learning activities: Here, the teacher plans the learning activities in tandem with the objectives and teaching points. The teacher gets the objectives and content handy, ensuring that the processes: objectives, teaching points, and learning activities are well coordinated. 
(v) Evaluating: In this step, the teacher observes and measures the changes in the behavior of the learners by testing (this could take the form of diagnostic, prognostic, formative, or summative). The teacher constructs a test by making the maximum use of the teaching points already introduced in the
class and the learning experiences already acquired by learners. The test may be oral, written, objective, or essay type; or could be a practical test.

(vi) Using the Results as Feedback: The last, but not the least important step in the evaluation process is using the results of the outcome from the evaluating process, as feedback. This will expose weak and grey areas on the part of the teachers and learners for remediation, adjustment, or improvement purposes.

4. Functions of Educational Evaluation
Educational evaluation plays a vital role in the teaching-learning experiences. It is an integral part of the instructional programs. It provides information on the basis of which many educational decisions are taken. Its functions with respect to teaching and learning can be in the following categories:

(i) Placement Functions: Educational evaluation studies and pinpoints the entry behavior of learners in all learning endeavors, gives room for specialized learners' instruction, and enhances individualization of instruction.
(ii) Instructional Functions: assists teachers in planning, developing teaching techniques to adopt; improve teachers’ instructional delivery and classroom interaction for effective teaching-learning transactions; and in the long run, the curriculum is improved upon.

(iii) Diagnostic Functions: In diagnosing the weakness in a class teacher, school programs, syllabus/curriculum, and learners; recommending remedial/intervention programs for weak learners; in guidance and counseling of learners so as to keep them on the right track for better performance and learning output.

(iv) Predictive functions: For identifying the latent aptitudes and capabilities of learners and teachers; foretell the chances of success available to learners as well as the teacher; facilitates learners choice of career as evident from their general academic performance.

(v) Administrative Functions: selection and adoption of the right/better policies and judgment; assigning learners in their classes/convenient groups, determining the criteria for learners appraisal and promotion, deciding the best tests and testing procedure for learners at one time or the other, for teachers’ appraisal, promotion and training programs, efficient school planning, management, and policies implementation.

(vi) Guidance Functions: Assists parents, teachers, and school administrators in noting learners' learning pace, lapses, and how these can be rectified; prepares the teachers with the needed tools and information vital for learners' personal, vocational and educational advancement.

(vii) Motivation Functions: Educational evaluation tends to motivate all players in the education/school setting.

(viii) Development Functions: Educational evaluation pilots and enhances teaching and learning processes, teaching styles/methodologies, attainment of set educational and school goals as well as the general development of the sector.

(ix) Research Functions: data/vital information is provided through educational evaluation. This spurs all stakeholders in the education setting to go into further research (mainly action research) aimed at strengthening the sector.

(x) Communication Functions: Educational evaluation allows for smooth communication among learners, their peers, teachers, school owners and administrators, education boards and ministries, etc.

5. Applications of Educational Evaluation

Educational evaluation portends a lot of applicability: Yarmohamadian (2007) reaffirmed that it can be applied in helping the teacher in diagnosing learners having learning challenges and proffering solutions to them, helpful in syllabus design and revision, comparison of the syllabus, teaching strategies, and management characteristics and analyses learners’ needs over time. Similarly, Bazargan (2006) outlined the applications of educational evaluation to include: monitoring the educational goals to be achieved, restructuring the syllabus, and eradicating any flaw inherent in it. Similarly, Adeleke (2010) asserted that educational evaluation provides information to learners in practice situations, informs the learner on what and how hard to study, provides information about learners' future educational success/careers, and helps managers of education and policymakers in curriculum development. Consequently, in order to
achieve a robust and successful primary education system, the various educational evaluation strategies, and ethics, should be entwined into the system. These strategies could be analytical in nature where samples of behavior is collated as a subset of a more complex idea or concept, e.g. the results from an objective test or the synthetic strategy in which the collated samples of behavior are large and complex, e.g. simulation tests.

6. Conclusion
The primary school teachers, as well as learners, need a regular evaluation and evaluation reports for the effectiveness and efficiency of the teaching-learning transactions. The functions, essence, and applications of educational evaluation cannot be overemphasized as it supplies evidence for the justification of teachers'/learners' successes, failures, outcomes, or inputs. For the learners, educational evaluation increases their learning motivation, development of good study habits, feedback, and necessary corrective measures. Teachers require evaluation results to monitor the effectiveness of instruction as well as the instructional materials, choosing learning experiences, diagnose learners learning difficulties, and pilot learning in order to improve the instructional process. For a positive change in behavior to occur in learners, teachers are to play a great role in exposing them to contents and activities using appropriate methods to attain instructional goals. In effect, educational evaluation provides feedback that enables teachers to improve or simplify learning objectives, choosing new and effective teaching methods, reorganizing teaching and learning activities, and review the evaluation instrument and processes.

Conflict of interest: The author declares no conflict of interest.

REFERENCES