

## Utilization of Assessment Tools in Enhancing Teaching Effectiveness in Primary School Settings

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**Abstract.** *The use of assessment tools to improve instruction in elementary school settings was examined in this article. The sort of assessment tools used to improve teaching effectiveness in primary school settings, their purpose and function, and the effects of using assessment tools to improve teaching effectiveness in primary school settings were all covered in the study. According to the research, evaluation tools are essential for efficient instruction and learning. Many facets of education, including planning, implementation, and assessment, may be assessed and improved by the efficient use of these instruments. In addition to influencing the formulation of educational curricula by administrative authorities, assessment has a major impact on how schools organize and conduct instruction. The research comes to the conclusion that issues including insufficient teacher preparation, an excessive focus on summative evaluation, and restricted access to technology restrict the use of assessment tools in primary school settings.*

**Key words:** *Assessment Tools, Teaching Effectiveness, Formative Assessment, Summative Assessment.*

### Introduction

A key component of the teaching-learning process is assessment, and improving teaching efficacy requires its efficient use. Assessment methods are essential for gauging students' comprehension, pinpointing areas for development, and guiding instructional choices in elementary school settings. To guarantee efficient teaching and learning in primary schools, several governments, like many other educational sectors, have put in place a variety of evaluation rules and standards. Nonetheless, the study aims to ascertain the degree to which assessment instruments are used to improve the efficacy of instruction in elementary school environments, a topic that is still being researched.

Effective teacher evaluation at all levels in relation to students' learning outcomes has emerged as a key topic of debate in the United States. Compared to other socio-ethnic groups in the United States, low-income, Native American, African American, and Hispanic students have lower graduation rates (NCATE, 2010). To further coordinate the K–12 curriculum nationwide, 45 states are now adopting common core state standards, and several of these states are linking teacher evaluations to student progress. Higher education lacks consistent metrics to evaluate the quality of classroom teaching, in contrast to K–12 education. Common final examinations in big multi-section introductory courses in departments at postsecondary institutions are advocated by certain assessment proponents (Chingos, 2013). However, because there are no universal evaluation tools at the college level, we must concentrate on elements of instruction that have a positive correlation with teaching effectiveness and evaluate that efficacy using student feedback and program standards.

In order to evaluate students' learning, enhance instructional methods, and improve teaching effectiveness, assessment tools are crucial in today's classroom. Effective assessment techniques may help find learning gaps, direct pedagogical changes, and enhance academic results in elementary school settings. This study examines how assessment tools are used in Nigerian primary schools, with an emphasis on how they might be used to improve the efficacy of instruction. Additionally, it looks at the difficulties in using evaluation tools and suggests ways to maximize their effectiveness in this situation.

Inadequate funding, a lack of teacher professional development, and socioeconomic limitations are only a few of the issues facing the educational system. These elements often make it more difficult to apply evaluation procedures effectively. The purpose of this study is to evaluate how primary schools now employ assessment tools, pinpoint obstacles to their efficient use, and provide solutions for enhancing teaching results via improved assessment procedures.

There are worries that primary school instructors may not be making the most of assessment tools to improve their instruction, despite the fact that assessment is crucial to both teaching and learning. Teachers may not have gotten sufficient training on creating and using assessment tools to inform teaching, which is one of the issues that might be impeding the effective use of assessment tools. It's possible that elementary schools don't have the technology and assessment materials needed to enable efficient assessment procedures. Instead of formative assessments, which provide continuous feedback and guide teaching, teachers could concentrate more on summative evaluations, like final examinations. In order to identify areas of strength and weakness and provide suggestions for development, this research intends to examine the use of evaluation tools in improving teaching effectiveness in primary school settings.

Beyond only assessing student achievement, evaluation also helps teachers make better judgments and enhance their methods (Black & Wiliam, 2018). It has been shown that formative assessment, which offers feedback during the learning process, greatly improves learning by assisting instructors in identifying students' areas of strength and weakness and modifying their instruction appropriately (Hattie & Timperley, 2007). Conversely, summative evaluation provides information on the overall efficacy of the teaching strategy by evaluating students' learning at the conclusion of a class time (Brookhart, 2017).

Primary schools employ a variety of evaluation instruments, such as written exams, quizzes, performance activities, and observation checklists. With the use of these resources, educators may collect information on student learning and modify their lesson plans to accommodate a range of learning requirements (Stiggins, 2017). However, issues including inadequate teacher preparation, a lack of resources, and big class sizes may make it difficult to deploy these technologies effectively in places like Katsina State (Akinbode, 2019).

To make sure that student evaluation is not reliant just on final examinations, the Nigerian educational system requires continual assessment as a component of the curriculum. Making learning more thorough and diagnostic is the goal of implementing continuous evaluation (Alausa, 2017). Despite its significance, logistical and infrastructure issues make it difficult to implement continuous evaluation in many elementary schools.

## **Tools for Assessment**

According to Anastasi (2003), an assessment tool is a methodology or way of analyzing information to ascertain an individual's level of knowledge and whether or not that knowledge is consistent with a theory or framework. Depending on the context and goal, several assessment techniques are used. A fundamental component of the teaching and learning process is the use of sound evaluation procedures. The literature on higher education has long acknowledged that assessment has a greater influence on students' learning, thinking, and behaviors than any other aspect of their education. Students get signals from assessments regarding the priorities of their teachers, and they adjust their learning behaviors appropriately. As a result, it's critical that assessment assignments accurately

reflect the types of learning we want students to exhibit. Assessment must be seen as an essential part of teaching and learning, not as an adjunct to instruction. The purpose of an educational evaluation tool is to evaluate students' performance and level of subject-matter knowledge. Tools for educational evaluation may be employed continuously or throughout the learning process. The following traits are present in assessment instruments.

### Characteristics of Assessment Tools

**1. Dependability:** The same outcomes are obtained throughout time with the appropriate evaluation instrument. Thus, the outcomes are accurate or consistent. Every time the test is utilized, it must be verified that the findings can be replicated. For instance, an evaluation is deemed dependable if the students complete the same activities at the same time.

**2. Veracity:** How effectively an assessment assesses the many criteria under test is referred to as its validity. The exam should ideally measure what it is supposed to measure. This suggests that the evaluation technique must be appropriate for the particular situation. For instance, a written examination won't be required if physical strength is being assessed. Instead, physical workouts like weightlifting and pushups should be included of the testing.

**3. Fair:** An effective evaluation instrument is equitable, meaning that no participant is favored or disadvantaged. It is implied by fair evaluations that students are evaluated using the techniques and protocols that are most suitable for them. In order to perform well, each participant has to be aware of the test's background.

**4. Standardization:** Applying uniformity to your testing procedures is known as standardization. For instance, while distributing a questionnaire, each participant should get the same set of questions, and each response should be evaluated according to the same standards (Singh, 2005).

### The Purposes of Assessment

According to Hersen, M. (2004), they are as follows:

**1. Self-Understanding:** The main goal of doing an assessment is to get knowledge that will help the client better understand themselves, including their strengths and shortcomings as well as what they can and cannot achieve.

**2. To Diagnose Students' Issues:** Another function that assessment data serves is to diagnose the client's issue. We can determine causative elements by appropriately using the data. It also aids in identifying a number of factors, including academic achievement, physical health, and family history.

**3. To Aid in Education and Career Planning:** Assessments conducted using a variety of psychological techniques assist students in choosing their courses and careers.

**4. To Help anticipate Future Performance:** Counselors utilize assessment data to evaluate an individual's attitude, aptitude, personality, etc., which have implications for success and adjustment and help anticipate the individual's future performance. Additionally, the counselor has the ability to inspire the client in a way that will lead to greater achievement.

**5. To Assess the Results of Counseling:** Both before and after counseling, assessments are conducted. This provides the counselor with useful information for further intervention and to get the desired result (Singh, 2005).

In addition, Carless (2007) opined that assessment has multiple purposes.

**1. Learning Measurement (Learning Assessment):** This is the most widely accepted interpretation of the assessment's goal, and it will always be important. Assessment assignments are thought of as a way to evaluate how well students have met course learning objectives.

**2. Certification of Learning (Assessment of Learning):** This is the use of assessment to verify that

specified learning has been accomplished; it is closely related to the evaluating and measuring components of assessment. We utilize assessment findings to proclaim students' appropriateness and readiness for occupations, employment, and other courses of study, as well as to show that they have reached certain levels of proficiency in certain areas. Assessment findings are often used by educators and educational institutions to show various stakeholders that they are competent and credible.

**3. Learning Diagnosis:** Before starting a course of study, instructors might use diagnostic assessments to learn about their students' past knowledge and proficiency. Through diagnostic assessment, educators may get a picture of students' past knowledge, conceptual understanding of the fundamentals of a topic, misunderstandings, and methods of thinking about the field. Diagnostic assessments are a highly useful teaching technique that works with students' existing knowledge and areas of uncertainty. They measure what students bring to a course. In order to create a learning experience that takes into consideration the needs and feelings of the students, diagnostic assessments may also be used to delve into the students' feelings, anxieties, and doubts about a certain subject.

**4. Assessment as a Crucial Instrument for Instruction and Learning (Assessment FOR Learning):** An essential component of both teaching and learning is assessment. Throughout a course, it may be used to advise students and assist them in creating learning objectives. The proportion of marks allotted might be low when the main objective is to assist students in practicing fundamental abilities and skills, but it is beneficial to include some marks. Allowing students to choose a certain number of assignments for formative reasons only and others for grades is one method to do this.

**5. Assessment for Learning (Longer Term Assessment):** Assessments conducted during the course of study must not only measure short-term learning but also, in form and substance, genuinely prepare students for how they will have to perform and be evaluated after completing their formal studies. This is crucial if institutions are to use the results of these tests as proof of students' preparedness for participation in the workforce or for further education. Higher education assessments must be created in a manner that makes them a reliable indicator of students' achievement after formal coursework.

**6. Assessment for Feedback:** Learning assessment activities gave teachers and students insight into how well students were learning. Students may improve their learning via their performance on assessments and the feedback that goes along with it. Assessment gives professors insight into how well their students understand the fundamentals of the course, and they may modify their teaching methods accordingly.

### **Types of Assessment Tools in Enhancing Teaching Effectiveness in Primary School Settings**

Assessments are often divided into two categories: formative and summative, according to Hersen (2004). Although they have distinct functions and take place at various periods, both types of evaluation are crucial for assessing and assisting students. Teachers may better assist students by planning and implementing assessments that are in line with their teaching objectives when they are aware of the distinctions between the two.

**Formative Assessment:** In order to give feedback for development, formative assessment entails continuous review throughout the learning process (Xiao, 2019). Teachers may use it to track students' progress, pinpoint problem areas, and modify their teaching strategies appropriately. Teachers may actively include students in the learning process and encourage ongoing development by using formative assessment strategies including quizzes, peer evaluations, and class discussions. Conversely, summative evaluation focuses on assessing student learning outcomes at the conclusion of a particular teaching session (Liu, 2020). This kind of evaluation is often used to compare students' overall performance to particular learning goals.

According to Bloom (1969), formative assessment was meant "... to provide feedback and correctives at each stage in the teaching-learning process." Summative assessments were used to assess students' performance at the conclusion of a course or program. Similarly, defining formative assessment as a process is oversimplified since even the most meticulously planned procedure is unlikely to succeed if the "instrumentation," or technique, used is not appropriate for its intended function. Unsuitable instrumentation cannot be saved by "process," and an inappropriate process cannot be saved by instrumentation. Each component must be carefully considered in a robust conceptualization, as must the way the two components interact to provide insightful feedback. As of yet, the phrase "formative assessment" does not refer to a well-defined collection of artifacts techniques. A theory of action and one or more actual instantiations are necessary for a valid definition. When those elements are present, we have something practical to utilize and research. One formative assessment category has such a definition provided by the KLT Program (ETS 2010). To advance the discipline, further work of such kind is required.

A theory of action and a specific instantiation are necessary for a valid definition of formative evaluation. The theory of action, among other things: (1) identifies the traits and elements of the entity we are claiming is "formative assessment," along with the justification for each of those traits and elements; and (2) postulates how these traits and elements interact to produce some desired set of outcomes (Bennett 2010). The tangible example demonstrates how formative assessment included into the theory appears and how it may function in an actual environment.

### **Reasons for Using Formative Evaluation**

Formative assessment classroom methods, or FACTs, are used in classrooms for a variety of purposes. FACTs have been shown to:

- a. Stimulate students' thinking and interest in their studies.
- b. Make students' thoughts clear to both the instructor and themselves.
- c. Promotes involvement from all students by boosting confidence in sharing thoughts, especially from more reserved students who would not normally participate in class.
- d. Serve as a catalyst for debate and rational scientific reasoning.
- e. Assess students' ability to apply scientific concepts to novel contexts. Feedback should be given and used by students, teachers, and other students. Keeley 2008, p. 6; adapted.

### **Formative Assessment Examples**

**1. Think-Pair-Share:** This method blends communication and thought. After receiving an open-ended question, students are given time to "think" and, if needed, write down their answers. After that, they are matched with someone to talk about and elucidate their thoughts. Students are invited to present their thoughts to the class or a wider audience. This will enable you to see any errors in your students' reasoning and fix them right away. Additionally, the class discussion gives the instructor and students a chance to comment on each other's views.

**2. Answer the question correctly:** Students may first collaborate in pairs to answer a question by passing the question, which gives them five to ten minutes to partly complete a response. When the allotted time has passed, they trade their half-finished written answer with another pair to complete, edit, or add to as needed. Pairs may disagree on answers, which might spark arguments in the scientific community. You may learn a lot about a student's character and level of comprehension by listening to their conversations. In addition to spoken data, written replies may be gathered and analyzed to see how students' perspectives vary. It should be noted that in order for this to be advantageous, creating a good question that will stimulate replies from the students is essential to this FACT functioning well.

**3. The muddiest location:** At the conclusion of a class, the student is asked to write down the aspect of the lesson that they are most unsure about. This approach is known as the "muddiest point." This gives students a chance to reflect on their own learning and what they find simple or challenging to comprehend.

**4. Multiple-choice questions with two tiers:** One kind of objective exam is the two-tier multiple-choice questions. This indicates that they often just have one right response, therefore marking requires no further judgment. They are an effective way to determine if students are understanding the material being covered. Since the alternative responses are predicated on common misunderstandings held by students, they also seek to discover student preconceptions (O'Reilly, T., and K.M. Sheehan, 2009).

**5. Test questions created by students:** The degree to which a student comprehends a subject may be determined by their ability to create insightful questions about it. Particularly when they are required to create questions that need more than just recollection (Keeley 2008). Before the students are able to differentiate between higher and lower level inquiry, this FACT may need to be given many times.

**6. Why and what are you doing?** This FACT encourages students to think critically about an action they are participating in, which is beneficial for practical-based teaching. At some point during a practical session, the students are asked, "What are you doing and why?" to explain the task they have been working on. This seeks to increase students' comprehension of the learning objective and purpose of a practical session.

**7. Mapping Concept Cards:** A variant of the well-known idea mapping technique is concept card mapping. Students are provided cards with the ideas printed on them rather of starting from beginning to create their own concept map. They reorganize the cards to create a network of interconnected information (Keeley 2008). Students get the chance to investigate and consider various connections by moving the cards. Students' connections demonstrate the depth and breadth of their thinking, the complexity of their concepts, and the correctness of their topic knowledge. (Sheehan, K.M., and T. O'Reilly, 2009).

For formative assessments, instructors also use a range of resources and techniques, from fast, easy exercises to more methodical methods. Formative assessment examples include:

**1. Classroom Discussions:** By encouraging students to think critically, classroom discussions provide a forum for them to express what they understand, challenge ideas, and gain knowledge from their peers.

**2. Polls and Quizzes:** Short polls and quizzes are quick ways to assess understanding. An atmosphere of active learning is promoted by the real-time nature of polls and quizzes.

**3. One-Minute Papers:** These assignments require students to provide a succinct written summary of important ideas. In addition to assessing understanding, this practice pushes students to reduce material to its most basic form.

**4. Peer Feedback:** Students assess their colleagues' work and provide helpful criticism. In addition to fostering critical thinking abilities, this emphasizes group learning and provides a variety of viewpoints on a certain subject.

## Summative Evaluation

Summative assessments, which provide a whole picture of students' accomplishments, might be final examinations, projects, or standardized tests. Teachers may develop a thorough assessment approach to assist students' learning and guarantee academic success by combining formative tests to direct teaching and summative exams to gauge overall accomplishment. Summative assessment may be defined simply as an evaluation of students' learning, knowledge, and skill at the conclusion of a

course or learning program. It is easier to comprehend the concept of summative assessment if one also knows what formative assessments are. The likelihood of success is increased when both strategies are used. Summative tests assist determines if the course's stated goals are being reached and are evaluative rather than diagnostic. They aid in comparing the learner's performance to a preset standard. Such evaluations often have high value points and very high risks. These provide detailed instructions and a grading rubric to assess the student's comprehension and retention. A rubric is a tool that outlines the performance standards set by the teacher for an assignment. Materials that assist teachers in analyzing outcomes and making better decisions for strategic learning may be used in conjunction with summative exams. Many e-learning programs now use this tactic as well. Summative assessments serve as a thorough gauge of a student's comprehension and proficiency of a topic and signal the end of a particular learning session. Summative tests are usually high-stakes and take place at the conclusion of a term or course, in contrast to formative tests, which are continuous and low-stakes. This kind of evaluation provides a record of what a student has learnt so far, acting as a snapshot.

### **The Goal of Summative Evaluation**

Summative evaluations are meant to improve learning. The curriculum's planned, standardized tests don't allow for much creativity or originality. Summative evaluations may, however, be made very engaging in other ways. In the virtual age, there are several online learning platforms available to students. Students may be re-engaged and distracted from traditional classroom forms with the aid of digital literacy.

1. Students' Drive: Summative evaluation is crucial because it keeps students inspired to learn all year long. Students that get good marks may profit and be motivated to work more. For instance, a higher-than-average point rise is often linked to SAT preparation exams.

2. Putting Learning to Use: There is more to summative examinations and evaluations than just learning multiplication tables by heart. Students may use these abilities in the actual world with the aid of well-designed exams. Multiple-choice questions on tests assist students in applying and critically analyzing what they have learned.

3. Determining Learning Gaps: The use of summative exams to pinpoint and fix learning gaps is another benefit. To find out how much the students have recalled, most instructors administer unit examinations at the conclusion of each chapter before moving on to the next one. To help them catch up with the rest of the class, students who fall behind might get additional coaching or encouragement.

4. Finding Gaps in Instruction: Summative evaluations also have the significant advantage of identifying areas in which instruction is lacking. Teachers don't always have the best teaching methods, and sometimes they fall short. Making the learning program more learner-friendly may be one of the goals of summative evaluation. Grading is most likely unrelated to study time if all students are doing badly. Including visual aids in the program and excluding or including word problems are two strategies to close educational gaps.

5. Using Engaging and Creative Teaching Methods to Promote Better Student Assessment.

6. Providing insightful information: Giving evaluators the essential information and comments on students' performance and development is another advantage of summative examinations. It might draw attention to what did and did not work. The management is capable of making well-informed and thoughtful choices about which curricular elements need modification. Both students and assessors find it simpler as a result. It is impossible to undervalue the significance of summative evaluations. Some summative tests are so well-designed that they provide scholars both domestically and internationally with useful information. If necessary, the whole curriculum may be revised. A school's overall rating is influenced by its average test results. This also establishes whether the school will continue to be eligible for more funds or attract students of the same quality.

## Examples of Summative Assessment

Summative assessments come in a variety of forms that may be used in the classroom. Among them are:

Exams prepared by the instructor are intended to evaluate students' comprehension and understanding of the subject matter. They could consist of a combination of essay, short answer, and multiple choice questions.

- 1. Final Essays:** Students must examine a subject, show that they can do research, and present their results in these essays. They evaluate writing skills, critical thinking, and information synthesis.
- 2. Final Presentations:** Using slides or posters, students give oral presentations that demonstrate their comprehension of the subject matter.
- 3. Final Reports:** These evaluate students' proficiency in information organization, research methodology, and effective communication.
- 4. Final Projects:** Students must use the knowledge they have gained during the course to complete these assignments. They might include actual application, artistic effort, or research.
- 5. Portfolios:** A portfolio is an assortment of pieces that demonstrate a student's growth and accomplishments throughout time. It provides a thorough overview of their development.
- 6. State Standardized Tests:** These evaluations measure how effectively students fulfill academic requirements set by the state. They provide information on both individual and collective performance and are often used to inform policy choices.
- 7. National Standardized Tests:** These well-known exams, such as the ACT and SAT, evaluate students' preparedness for college or the workforce. They assess proficiency in subjects including arithmetic, reading, and writing.

Here are a few instances of summative assessments:

- 1. Exams** Comprehensive evaluations carried out at the end of a term are known as end-of-term assessments. They examine students' ability to apply ideas, synthesize information, and show a thorough mastery of the subject matter. They cover the content taught during the semester. In a similar vein, midterm exams evaluate students' knowledge and comprehension. These tests, which are given halfway through a term, provide information on a student's development and show how well they understand the subject matter before the course ends.
- 2. Standardized Admission Tests:** These summative evaluations of a student's intellectual preparedness are often used for admission to educational institutions. By offering a standardized assessment of knowledge and abilities, these exams enable organizations to evaluate applicants in a consistent manner.
- 3. Practical tasks:** Summative evaluations may include practical tasks in addition to academic ones. These assignments provide a comprehensive grasp of the subject matter by assessing a student's capacity to apply theoretical knowledge in practical situations.

## Conclusion

For teaching and learning to be successful, assessment tools are essential. Many facets of education, including planning, implementation, and assessment, may be assessed and improved by the efficient use of these instruments. In addition to influencing educational curriculum creation by administrative authorities, assessment has a major impact on organizational structures and teaching methods in schools. The study comes to the conclusion that issues like poor teacher preparation, an excessive focus on summative evaluation, and restricted access to technology limit the use of assessment tools in primary school settings. Nonetheless, the research also emphasizes the possible advantages of good evaluation procedures, such as enhanced student learning results. It is advised that schools emphasize formative assessment, use technology to assist assessment and education, and provide instructors with training on a variety of assessment techniques in order to improve the quality of their instruction. Primary schools may boost teaching effectiveness, improve assessment procedures, and eventually improve student learning results by tackling these issues.

## Way Forward

- i. To improve their abilities to create and use a variety of assessment tools, educators should take use of professional development opportunities.
- ii. To enhance student learning outcomes and influence teaching, teachers should aim for a balance between formative and summative evaluations.
- iii. To facilitate efficient assessment procedures, school officials should provide instructors the tools they need, such as technology and assessment materials.
- iv. Lawmakers should create and put into effect policies that encourage efficient assessment procedures, such as the use of a variety of technology and assessment tools, as well as training and assistance for educators to improve their assessment abilities and efficiently use assessment results to guide instruction.

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