

ANALYSIS OF SCHOOL BASED ASSESSMENT SKILLS OF SENIOR SECONDARY SCHOOL TEACHERS' IN KATSINA ZONAL EDUCATION QUALITY ASSURANCE, KATSINA STATE, NIGERIA

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Abstract

This study analyzed the school-based assessment (SBA) skills of senior secondary school teachers within Katsina Zonal Education Quality Assurance, Katsina State, Nigeria. Specifically, it focused on understanding the profile of SBA skills exhibited, assessing teachers' competencies, and identifying their strengths and weaknesses in implementing SBA. The study employed a descriptive survey design. The population comprised 1,326 teachers, and a sample of 321 was selected using stratified random sampling. A validated structured questionnaire titled "Teachers School-Based Assessment Skills Questionnaire (TSBASQ)" was the main instrument for data collection. The reliability coefficient was 0.86. Data were analyzed using descriptive statistics and inferential methods such as t-test and ANOVA. Results showed that while teachers were competent in administrative aspects of SBA, they exhibited weaknesses in construction, interpretation, feedback, and remediation skills. No significant differences were found in SBA skills based on gender, qualification, or years of experience. Recommendations include professional training focused on SBA skill enhancement.

Keywords: School-based, Assessment, Skills, Teachers

Introduction

Assessment has become a cornerstone of modern educational practice. In both theoretical and practical terms, it is critical for monitoring student progress, guiding instructional decisions, and evaluating the effectiveness of educational programs (Nitko & Brookhart, 2007). Assessment plays a crucial role in the school system especially in teaching and learning process. Without assessment teachers cannot discover the areas of strengths and weaknesses of their students and the extent of which teaching objectives have been achieved (Olutola, Olatoye & Olatoye, 2016). Assessment encompasses all techniques used to collect information about student performance, ranging from traditional pen-and-paper tests to portfolios, oral presentations, and classroom observations. In recent years, emphasis has shifted toward School-Based Assessment (SBA), a form of internal assessment conducted by teachers during the course of instruction (OECD, 2005).

SBA integrates assessment with daily teaching, thus providing immediate feedback to learners and enabling teachers to adapt instruction accordingly. According to Black and Wiliam (2004), effective formative assessment significantly improves student learning. SBA also promotes continuous assessment, allowing educators to capture a fuller picture of student achievement, not just at the end of a term or academic year. This is particularly valuable in diverse classrooms, where students may progress at different rates (Crooks, 2003).

However, the successful implementation of SBA depends heavily on teachers' competencies in core assessment practices, such as test construction, administration, scoring, interpretation of results, and providing feedback and remediation. Despite the theoretical benefits of SBA, studies have revealed that many teachers lack the requisite knowledge and skills to apply assessment principles effectively (Stiggins,

2005; Orheruata & Oyakhirome, 2019). These deficiencies can result in assessments that are invalid, unreliable, and ultimately detrimental to student learning outcomes.

In the Nigerian context, several reforms have been initiated to improve the quality of education, with SBA forming a key component of internal quality assurance systems. Nevertheless, implementation remains uneven. Challenges such as inadequate teacher training, poor infrastructure, large class sizes, and limited access to resources hinder effective SBA practices (Afemikhe, 2015; Osunde, 2007). For instance, many teachers rely heavily on summative assessments due to time constraints and lack of technical knowledge. Others may not engage in meaningful interpretation of assessment data or provide constructive feedback.

In Katsina State, the problem is particularly acute. Reports from the Ministry of Education and the Zonal Quality Assurance teams indicate inconsistencies in assessment practices across schools. While some teachers excel in administrative aspects, they struggle with the more technical dimensions of SBA, such as developing valid test items, analyzing student performance data, and providing individualized support (Bashir, 2018). Given the importance of assessment in shaping teaching and learning, understanding the current state of teachers' SBA skills in the region is imperative.

Therefore, this study investigates the SBA competencies of senior secondary school teachers in Katsina Zonal Education Quality Assurance Zone. By examining specific assessment domains such as test construction, administration, scoring, interpretation, feedback, and remediation, the research aims to identify both strengths and gaps in teachers' practices. The findings are expected to inform policy decisions, teacher professional development programs, and strategies for improving instructional quality across the state.

Statement of the Problem

Effective assessment is central to achieving educational goals. It enables educators to identify students' learning needs, adapt instruction, and measure educational outcomes (McMillan, 2001). Yet, despite its importance, a growing body of literature reveals persistent problems in teachers' classroom assessment practices (Stiggins, 2005; Campbell & Evans, 2000). These issues include limited knowledge of measurement principles, inadequate training, and lack of adherence to standard assessment guidelines. The situation is particularly troubling in regions like Katsina State, where educational quality is often compromised by systemic and infrastructural challenges.

One key issue is the inadequate competency of teachers in School-Based Assessment (SBA). Teachers are expected to possess a wide range of assessment skills, including constructing quality test items, scoring and interpreting results, and offering feedback. However, studies indicate that many teachers in Nigeria struggle with these tasks (Ololube, 2008; Omo-Egbekuse et al., 2008). This results in unreliable and invalid assessments that fail to reflect students' true abilities. For example, poor test construction may produce questions that are either too difficult or too easy, while weak scoring practices can lead to inconsistent grading. Without proper interpretation of results, teachers are unable to provide meaningful feedback or remediation.

In Katsina State, anecdotal evidence and preliminary surveys reveal a pattern of ineffective SBA implementation. Many teachers appear to prioritize administrative compliance over meaningful assessment. While they may administer tests regularly, there is limited engagement with deeper assessment practices such as analyzing student performance trends, identifying learning gaps, or designing interventions (Sani & Aminu, 2007). Factors such as lack of in-service training, heavy workloads, and inadequate support from educational authorities further compound the problem.

The role of assessment in educational accountability adds another layer of complexity. Student assessment results are increasingly used to make high-stakes decisions such as student promotion, school funding, and teacher evaluation (Newton, 2007). In such a context, poor assessment practices not only disadvantage students but also undermine public confidence in the education system. Yet, few empirical studies have been conducted in Katsina to evaluate teachers' SBA skills and identify areas needing improvement.

Given these challenges, it is imperative to analyze the SBA skills of senior secondary school teachers in

Katsina Zonal Education Quality Assurance Zone. This study will fill an existing gap in the literature by providing data-driven insights into teachers' assessment competencies. The ultimate goal is to inform policy, improve classroom practice, and enhance educational outcomes for students in the region.

Objectives of the Study

The main objective of this study is to analyze the school based-Assessment skills of senior secondary school teachers in Katsina Education Quality Assurance Zone, Katsina State, Nigeria. Specifically the study seeks to:

1. find out the profile of SBA Skills exhibit by Senior Secondary School Teachers in KatsinaZonal Education Quality Assurance, Katsina State Nigeria;
2. determines teachers' competency in School Based-Assessment in Katsina Zonal Education Quality Assurance, Katsina State Nigeria;
3. determine steachers' strength and weakness in School-Based Assessment SBA in Katsina Zonal Education Quality Assurance,Katsina State Nigeria;

Research Questions

The following research questions raised will be answered:

1. What is the mean rating profile of School-Based Assessment (SBA) skills showed by Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria?
2. How competent are the Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria in their use of SBA skills?
3. In what SBA skills do Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria show strengths and weaknesses?

Hypotheses

The following null hypotheses formulated will be tested at 0.05 level of significance:

Ho₁: There is no significant difference in School-Based Assessment (SBA) skills of male and female Senior Secondary School Teachers' in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria.

Ho₂: There is no significant difference in the School-Based Assessment (SBA) skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching qualifications.

Ho₃: There is no significant difference in the School-Based Assessment (SBA) skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching experience.

Methodology

This study adopted a descriptive survey research design, which is appropriate for assessing the current status of phenomena without manipulating variables. The population comprised 1,326 teachers from 22 public senior secondary schools within the Katsina Zonal Education Quality Assurance Zone. Stratified random sampling was used to ensure representativeness across schools, genders, and qualifications. From this population, a sample of 321 teachers was selected. Data were collected using a structured questionnaire titled "Teachers School-Based Assessment Skills Questionnaire (TSBASQ)," developed by the researcher. The instrument was subjected to both face and content validity by two experts in Educational Psychology and Counseling at Federal University Dutsin-Ma. A pilot test was conducted on a group of teachers outside the study area, and the reliability coefficient of the instrument was found to be 0.86, indicating high internal consistency.

The questionnaire consisted of items covering various SBA skill domains, including test construction, administration, scoring, interpretation, feedback, and remediation. Respondents were asked to rate their competencies on a 5-point Likert scale ranging from "Very Low" to "Very High." The procedure for data collection involved personal distribution and retrieval of the questionnaires by the researcher and trained

research assistants. Ethical considerations, including informed consent and confidentiality, were observed throughout the study. Data were analyzed using descriptive statistics (mean, standard deviation, frequency, and percentage) and inferential statistics such as independent samples t-test and Analysis of Variance (ANOVA), all conducted at a 0.05 level of significance using SPSS software.

Results

Answers to Research Questions

Research Question One: What is the mean rating profile of School-Based Assessment (SBA) skills showed by Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria?

Table 1: Details of the Mean Analysis on SBA skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria.

SBA Skills	N	Range	Minimum Scores	Maximum Scores	Mean	Std. Deviation
Construction	306	11.00	9.00	20.00	15.2876	2.31084
Administration	306	34.00	23.00	57.00	37.4444	5.35542
Scoring	306	18.00	7.00	25.00	20.0686	2.97507
Interpretation	306	13.00	5.00	18.00	14.6144	2.88609
Feedback	306	14.00	5.00	19.00	14.3922	2.66793
Remediation	306	14.00	5.00	19.00	14.4641	2.88586
Grand Mean					19.37	

From Table 1, shows that, Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria had high SBA skills in Administration with mean of (37.4444), followed by Scoring and with mean of (20.0686), followed by Construction, Interpretation and Remediation with the means of (15.2876), (14.6144) and (14.4641) respectively, while a least skill with a mean of (14.3922) was demonstrated in feedback.

Research Question Two: How competent are the Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria in their use of SBA skills?

The means of the identified SBA skills revealed in Table 1 above indicated that the respondents had competency in administration skill with the mean of (37.44) which is greater than the average mean of (26.67) i.e. (40 items x 4 points scale /6 SBA skills = 26.67). In addition, the respondents were poor in their (construction, scoring, interpretation, feedback & remediation) SBA skills because the means are below the average mean of 26.67.

Research Question Three: In what SBA skills do Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria show strengths and weaknesses?

Table 1 revealed that the respondents showed strengths in the areas of test administration (37.4444) and scoring (20.0686) while they showed weaknesses in the areas of test construction (15.2876), interpretation (14.6144), feedback (14.3922) and remediation (14.4641).

Testing of Hypotheses

In this study, three (3) hypotheses were formulated and tested at 0.05 alpha level of significance. The researcher used t-test and analysis of variance (ANOVA) statistical tools to analyze the hypotheses formulated for the study.

Hypothesis One: There is no significant difference in School-Based Assessment (SBA) skills of male and female Senior Secondary School Teachers' in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria.

The t-test analysis was used to determine the difference in the School-Based Assessment (SBA) skills of

male and female Senior Secondary School Teachers' in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria.

Table 2: t-test summary Table showing the difference in the SBA skills of male and female Senior Secondary School Teachers' in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria.

Variable	Gender	N	Mean	SD	DF	t-cal.	Sig. t-value
SBA Skills	Male	207	116.5680	13.7682	304	0.231	0.818 (NS)
	Female	99	116.1818	13.5099			

NS: Not significant at 0.05 alpha level of significance.

Table 2 reveals the calculated t-value of 0.231 which is not significant at 0.05 alpha level ($t = 0.231$; $df = 304$; $p > 0.05$). This implies that, there is no significant difference in School-Based Assessment (SBA) skills of male and female Senior Secondary School Teachers' in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria. Thus, Gender of Senior Secondary School Teachers' in Katsina Zonal Education Quality Assurance have no significant difference on their School-Based Assessment (SBA) skills. Therefore, hypothesis one is accepted.

Hypothesis Two: There is no significant difference in the School-Based Assessment (SBA) skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching qualifications

Table 3: ANOVA Summary Table Showing the difference in the SBA skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching qualifications.

Source	Sum of Squares	DF	Mean Square	F- Value	Sig. F-value
Between Group	1214.818	5	242.964	1.308	.260
Within Group	55542.428	299	185.761		
Total	56757.246	304			

Table 3 revealed an F-value of 1.308 which is not significant at 0.05 alpha level ($F_{(5, 299)} = 1.308$; $p > 0.05$). The null hypothesis two was accepted since Sig. of F-value (P-value) of 0.260 is greater than 0.05 alpha level. This indicates that, there is no significant difference in the School-Based Assessment (SBA) skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching qualifications. This also implies that, teaching qualifications of senior secondary school teachers in Katsina Zonal Education Quality Assurance have no significant difference on their School-Based Assessment (SBA). Therefore, hypothesis two is accepted.

Hypothesis Three: There is no significant difference in the School-Based Assessment (SBA) skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching experience.

Table 4: ANOVA Summary Table Showing the difference in the SBA skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching experience.

Source	Sum of Squares	DF	Mean Square	F- Value	Sig. F-value
Between Group	1317.321	3	439.107	2.384	.069
Within Group	55439.925	301	184.186		
Total	56757.246	304			

Table 4 revealed an F-value of 2.384 which is not significant at 0.05 alpha level ($F_{(3, 299)} = 2.384$; $p > 0.05$). The null hypothesis three was accepted because the Sig. of F-value (P-value) of 0.069 is greater than 0.05 alpha level. This shows that, there is no significant difference in the School-Based Assessment (SBA)

skills of Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance on the basis of teaching experience. It also implies that, teaching experience of senior secondary school teachers in Dutsin-Ma Zonal Education Quality Assurance have no significant difference on their School-Based Assessment (SBA). Therefore, hypothesis three is accepted.

Discussion

The result from research question one which asked about the mean rating profile of School-Based Assessment (SBA) skills showed by Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria indicated that the Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria had high SBA skills in Administration and Scoring but medium Construction, Interpretation and Remediation skills, while a least skill of feedback was demonstrated according to the findings. This is a clear indication that Katsina state secondary school teachers have low competency in testConstruction, Interpretation and Remediation which supposed to be an area of concern to Katsina state education policy makers to do the needful in equipping their teachers with knowledge of construction, Interpretation and Remediation for effective assessment of students' performance and to discovered the extent of negligence in feedback because most of the times teachers are not committing themselves and work to expectation in this area deliberately not because of inexperience. This finding is supported by Daramola, Olutola and Owolabi (2016) on administration and feedbackand contrary on construction, interpretation, scoring, feedback and remediation where teachers are found to have weakness in the area of test construction, interpretation, scoring , feedback and remediation it equally supported by another finding from Romy, Okoye and felistaci (2021) whose investigation revealed that students' classwork and homework exercises were frequently marked and scored but not frequently corrected. It equally supported by the finding of Afemikihe and Omo-Egbekuse (2017) who found that homework assignments were hardly marked and predominant comment being seen. However so many researchers found almost the same with this finding like that of Faleye and Adefisoye (2016) whose findings shows frequency of continuous assessment practices of most of the teachers fall short of being comprehensive and guidance-oriented in nature is in line with the finding of this work which revealed that teachers' mean of feedback is seen to be very low.

The finding in research question two shows that the means of the identified SBA skills indicated that the respondents had competency in administration skill with the mean of (37.44) which is greater than the average mean of (26.67) i.e. (40 items x 4 points scale /6 SBA skills = 26.67). In addition, the respondents were poor in their (construction, scoring, interpretation, feedback & remediation) SBA skills because the means are below the average mean of 26.67. This finding indicated failure of teachers in carrying out their major responsibilities on assessment which is the backbone in teaching and learning because without proper assessment realization of goal accomplishment cannot be possible, and teachers are deliberately not doing so due to their negligible nature of committing themselves to duty as said by Stobart and Gipps, (2010)) whose finding revealed that the construction of instruments is a very heavy workload and gives pressure on teachers. It equally got backing from the findings of Obilor, Ozim and Ezeala (2018) whose finding revealed the needs of giving feedback knowledge to River state teachers in carrying out school-based assessment. This indicates the importance of having feedback skills to teachers because effective feedback impacted directly on students' relationships with their teachers. When teacher student relationship is enhanced, effective learning takes place as said by Burnet, (2006) who investigated students' perceptions of the frequency of teachers' feedback and praise as reinforcement strategies in New South Wales and discovered that, effective feedback impacted directly on students' relationships with their teachers.

The finding of research question three that the respondents showed strengths in the areas of test administration (37.4444) and scoring (20.0686) while they showed weaknesses in the areas of test construction (15.2876), interpretation (14.6144), feedback (14.3922) and remediation (14.4641). This implies that teachers in Katsina zonal Education quality assurance have competency in test administration

and scoring going by the indices above from the data analysis result, this finding is contrary with the findings of Daramola, Olutola and Owolabi (2016) The result revealed that, the respondents have strength on the area of test administration and feedback while they showed weakness in the area of test construction, interpretation, scoring, feedback and remediation. Hence, these are the major areas that every classroom teacher should understand thoroughly, Because test construction does not only limits in proven teachers' mastery in testing but its proven mastery of subject area as whole, the finding of this study is in line with another finding discovered by Oduro-Kyireh (2008) explored teachers' skills in test item construction in which he found, that the participants in the study were reported to have limited skills in the business of test construction. But contrary result have been discovered from other researchers like Koloi-Keaikitse's (2017) whom his study reported to perceived high test construction skills among teachers in Botswana. Adamu (2015) similarly assessed teachers' competencies in constructing assessment instruments and reported that teachers were competent in constructing test items. And also similar to this Kenneh (2022) investigated the participants' test construction skills. Findings showed that participants' skills in test construction were high.

Therefore in the light of the above, we understand that there is need of adequate training to public senior secondary school teachers in Katsina zonal education quality assurance to acquire knowledge and skills of test construction, interpretation, feedback, and remediation for effective school based assessment.

Conclusion

Based on the findings of this study, the following conclusions were made:

Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria had high SBA skills in administration, and scoring, with low profile in construction, interpretation, remediation and the least profile in feedback skill. Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria had competency in administration skill and were poor in their construction, scoring, interpretation, feedback and remediation SBA skills. Senior Secondary School Teachers in Katsina Zonal Education Quality Assurance, Katsina State, Nigeria showed strengths in the areas of test administration and scoring while they showed weaknesses in the areas of test construction, interpretation, feedback, and remediation.

Conclusively, Quality Teachers in Katsina Zonal Education Quality Assurance have low skills in school-based assessment skills since they proved to have poor profile, competency in construction, interpretation, remediation and feedback. And it has been found no difference in school-based assessment on the basis of gender, school location, teaching experience and qualification.

Recommendations

Based on the findings of this study, the following recommendations were made:

1. Katsina State government should organize seminar and conferences to refresh teachers' on the knowledge of school based assessment skills for quality assessment practice.
2. Katsina State Government through the ministry of Education should create an avenue of retraining secondary school teachers on area of test construction, interpretation, feedback, and remediation for quality students' assessment in the state.
3. Katsina State government should enforce to every secondary school principal to be inviting expert from the recognized institution to be given refresher course to teachers for speedy makeup of the lapses in relation to assessment skills practice.

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