Innovations

Assessment Competency Required Of Classroom Teachers. The Differential Effect of Teacher's Characteristics in Public Secondary School

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Abstract

Problems: Teachers' competency in classroom assessment have been an issue of concern. Thus, the study sought to examine the level of teacher's assessment competency as well as the effect of differential effect of demographic variables on their classroom assessment competency. Method: The study adopted a cross-sectional survey research design with a total of 1762 teachers as a sample. ''The Teachers Classroom Assessment Competency Scale (TCACS)'', developed by the researchers and validated through experts' opinions, including content validity and reliability through Cronbach alpha, was used for the study. Means, standard deviations, independent t-tests, and one-way analysis of variance were used for data analysis.Findings: The findings of the study revealed that teacher's competency in assessment is only found in their ability to plan, assemble, score, and provide feedback, but not in the construction, administration, or analysis of items of the test. The result also showed that teachers with higher years of experience (above 20 years) and educational qualifications (M.Ed. or M.Sc.) are more competent in classroom assessment compared to others, and male teachers differ from female teachers in their classroom assessment administration and item analysis, but female teachers are more competent in scoring and providing feedback to the learners. Conclusion: The finding provides insight for policymakers and teacher trainers to enhance classroom assessment practices.

Key words: Assessment competency , gender, years of experience, educational qualification, planning, assembling , constructing , administering , item analysis and feedback provision

Introduction

The role of assessment in the classroom cannot be overemphasised. This is because assessment helps the teacher select, place, guide, determine the amount of trait present in a learner, and promote the learner. Similarly, assessment helps the teacher determine the efficacy of instructional strategies as well as the instructional facilities that are chosen for a particular lesson (Hattie & Timperley 2007). This implies that the teacher requires competency in utilising various assessment techniques to facilitate the attainment of the instructional objective, which is encompassing. The rationale is that the teacher, in their daily lives, utilises these assessment tools to make educational decisions, plan their lessons, and provide feedback to learners (Nyanjom, Yambo, & Ongunya, 2020). In a new environment with new students, teachers use assessment to determine the level of knowledge possessed by the learners and to decide how instructional content will be delivered. To give information about the learner to the community (parents, stakeholders, government, etc.), the teacher needs to utilise assessment tools. What if there is a learner who gets involved in class interaction and discussion but fails the test administered to them? The teacher needs adequate knowledge and competences in the classroom to construct, select, analyse, and evaluate various assessment tools that will serve different purposes (Baartman and Gulikers 2017; Kippers et al. 2018).

Therefore, many scholars have emphasised assessment competence as the bedrock for effective teaching and learning. There are different assessment practices and tools that the teacher is supposed to be vested with. These range from tests, interviews, observations, and quizzes, among others. However, the most commonly used is the classroom test. The rationale is that teachers perform three major assessments: early, instructional, and summative. Early assessment is more diagnostic; instructional assessment helps the teacher monitor the progress of the learner; and summative assessment involves the grading and placement of the learner. Teachers, therefore, require competence in classroom assessment that will facilitate what they do in class in the name of assessment. Competency is the accumulation of intellectual ability exhibited in the mastery of real-life situations (Edwin & Bharati, 2022). It is important that the teachers acquire skills and knowledge that will facilitate the selection of an appropriate assessment tool based on the objective of the assessment, construct quality assessment in the absence of standardised tools, assess specific traits in a systematic way, make good assessment choices, utilise the result of the assessment, , analyse the score of the learners to help them demonstrate what they have learned in an error-free instrument. According to Sanders and Vogel (1993), there are different measures for examining teachers' competencies in classroom assessment. However, summarised measures used in this study include planning assessment, constructing assessment, assembling classroom assessment, administering classroom assessment, scoring classroom assessment, item analysis for classroom assessment, and communicating assessment results (AFT, NCME, & NEA 1990).

Many researchers have examined factors that determine the competencies of teachers classroom assessments (Sawari & Sawari, 2013; Huba & Freed, 2000). It is not clear what the differential effects of demographics (educational qualification, marital status, age, gender, and years of experience) are.The purpose of the study is

    i.   To determine teacher's competency in classroom assessment in terms of planning assessment , constructing assessment , assembling classroom assessment ,

administering classroom assessment, scoring classroom assessment, item analysis for classroom assessment and communicating assessment result

ii. Examine the differences of teachers' competence on classroom assessment based on (a) gender (b) academic qualification, (c) years of teaching experience (d)marital status.

iii.

Review of literature

Previous studies have looked at teacher classroom competencies (Wolterinck et al., 2019; Frerejean et al., 2021). In Kenya, Michael and Abraham (2022) study on teachers' competencies in assessment of competency-based curriculum found that the majority of teachers do not have adequate knowledge of carrying out assessment and evaluation of children in school in line with the new curriculum. More so, teachers do not have adequate knowledge in utilising formative assessment techniques, and this impedes students' acquisition of anticipated knowledge. The study of Osman and Adnan (2009) found teachers awareness of assessment methods is high, but their level of utilisation is low. The study also showed that teachers prefer traditional methods of assessment to modern computer assessment practices. In Tanzania, Lukindo's (2016) result revealed that the level of classroom assessment practices is low. Similarly, the study revealed that assessment practices in Kenya are rarely implemented in schools due to a lack of trained teachers and a low level of competency for such exercises.

In another study, Orheruata (2021) found that teachers are competent at implementing SBA. Also, the results revealed no significant difference between male and female teachers, while differences exist among the teachers with respect to teaching qualifications and experience. Christel et al. (2021) supported the claim in a study that revealed that the 4C/ID model can provide the learning-psychological basis for the design of TPD programmes for the acquisition of complex teacher skills that require the integration of skills, knowledge, and attitudes. Norfarahin and Hamzah (2019) noted that teacher's mastery of instructional content, which is different from mastery of assessment practices, is necessary for effective delivery of school lessons.

Bakuru's (2013) study further showed that teacher's competency in planning assessment, constructing classroom assessment, assembling, administering, scoring, and item analysis is very high. The study result also showed that teachers differ in their competence in classroom assessment based on educational qualifications. However, gender and age were found to be insignificant. The review of literature showed that extensive work has been done in examining teachers' competencies in classroom assessment. However, most of these studies are based basically on perception, knowledge, and even the competencies of the teacher. Only one single study has been able to examine the demographic variables of the teachers in terms of their competencies in handling assessment from a multidimensional perspective. This single study shows clearly that a gap exists in the literature that should be improved to provide empirical evidence that will guide policy and educational decisions. In a related study on gender differences and between teachers' assessment and test-based assessment by Adodo (2014), the findings showed that teachers assessment practices favour more females than male teachers. This is an indication that a gender gap exists across different levels of a student's own ability and their peers' ability.

Alnahdi and Schwab (2023) also found a non-significant gender difference in teachers teaching practices, styles, and majors. Other studies that are directly related to years of teaching experience and educational qualifications in assessing the competency of teachers are rare. It is not to the knowledge of the researchers if such studies exist and have been carried out where this study was situated. The one existing study is not enough for a scientific decision to be made. The existing study on gender and teachers' assessment competency has inconsistent findings, so it will be vital to have another study that will provide a direction for alignment or disagreement with the existing study for policy making. This scarcity of studies and the inconsistencies in existing ones have provided the impetus for this study to be conducted.

Methodology

A quantitative method with a cross-sectional survey research design as an option was adopted for this study. The total population of the study is schoolteachers in 246 public secondary schools in Cross River State. The study population is 4,234 teachers. The cluster sampling technique was applied to select a total of 1762 teachers in the state, with males as 876 and females as 886. The demographic characteristics of the respondents were that 921 (52.27%) were male and 841 (47.72%) were female. For educational qualifications, 662 (37.57%) hold NCE/ND, 862 (48.92%) hold B.Ed/B.Sc/H.ND, and 238 (13.51%) are holders of M.Ed/B.Sc-above. 533 (30.25%) were single, 1085 (61.57%) were married, and 144 (8.17%) were divorced or in other categories. More so, 673 (38.20%) were teachers below 10yrs years of experience, 876 (49.72%) were within 10–20 years, and 213 (12.08%) were above 20 years of experience.

Measures

The study utilised a scale titled 'Teachers Classroom Assessment Competency The study utilized a scale titled "Teachers Classroom Assessment Competency Scale" (TCACS). The scale was developed after extensive literature and focus group discussions with experts. The scale has a total of 35 items, with five items measuring each component of the TCACS. That is, planning assessment (n = 5), constructing assessment (n = 5), assembling classroom assessment (n = 5), administering classroom assessment (n = 5), scoring classroom assessment (n = 5), item analysis for classroom assessment (n = 5), and communicating the assessment result (n = 5). The response pattern is in the form of a 5-point Likert type scale with assignments as: Always-6, Very Often=5 Sometimes = 4, Rarely = 2, and Never = 1. The variables of gender, educational qualification, marital status, and years of teaching experience were measured in Section A of the instrument and were basically categorical as described in the study.

Validation process

The content and construct validity of the scale were established using a quantitative approach. The Teachers Classroom Assessment Competency Scale (TCACS) was subjected first to face and content validation. The validation was done using five experts drawn from two professional areas: curriculum and instruction (n = 3) and measurement and evaluation (n = 2). Each of the experts was a specialist who had spent more than 10 years as a professor in his/her field. The quantitative approach to content validity was carried out using the item-content validity indices (I-CVI) and scale content validity indices (S-CVI) as recommended by different scholars (see Yusoff, 2019). Three criteria for this exercise were relevance,

suitability, and clarity. For the Teachers Classroom Assessment Competency Scale (TCACS), the I-CVI for planning assessment ranged from 0.78 to 0.89; for constructing assessment, it ranged from 0.75-0.90; for assembling classroom assessment, it ranged from 0.79 to 0.95; for administering classroom assessment, it ranged from 0.81-0.87; for scoring classroom assessment, it ranged from 0.79-0.88; for item analysis for classroom assessment, it ranged from 0.83-0.91; and for providing feedback, 0.88-0.93. Similarly, the scale-content validity indices (S-CVI) ranged from 0.88 to 0.95. The average proportion of items considered relevant for the six subscales is 0.89. This implies that, on aggregate, 89.0% of the validators considered that the items in the TCAS were relevant, suitable, and clear for the study. This range of values obtained was sufficient to establish content validity for both instruments. A pilot study was further carried out to determine the reliability of the scale (TCAS) using Cronbach's alpha reliability techniques. The result showed that for planning assessment (= 0.76), constructing assessment (= 0.80), assembling classroom assessment (= 0.82), administering classroom assessment (= 0.71), scoring classroom assessment (= 0.78), item analysis for classroom assessment (= 0.70), and communicating assessment result (= 0.76),

Procedure for data collection

The data collection was carried out by the researchers in the various schools selected for the study, following global best practices in research. This was done by getting approval from the Institutional Review Committee, Academic Research Department, University of Calabar (see IRC/UNICAL/0762). The purpose of the study was explained to the teachers, and they were promised that the information provided would be treated with confidentiality, but the result would be published in a notable journal. 165 teachers withdrew their consent, and they were not in any way coerced into the study. Thus, 1597 teachers provided their consent, and they were used for the study. The administered instruments were collected and arranged serially for coding and analysis. All the instruments were assigned numbers to avoid double-coding. Out of the 1597 teachers that provided their consent, only 1565 returned their instruments. Other items were either left blank or a few items were ticked in a systematic manner. An independent t-test and one-way analysis of variance (ANOVA) were used for the analysis based on theoretical and statistical conditions, and the result was presented appropriately.

Findings

What is teacher's competency in classroom assessment in terms of planning assessment, constructing assessment, assembling classroom assessment, administering classroom assessment, scoring classroom assessment, item analysis for classroom assessment, and communicating assessment results? This research question was answered using means and standard deviation, and the result is presented in Table 1. The result showed that, on aggregate, teachers' competency in planning classroom assessment is high, with an average mean value of (M = 2.913, SD = 0.045). This implies that teachers are competent in determining instructional content, providing for a testing environment, determining the class capacity to know what materials to produce, informing students of assessment, and providing instructional materials to the learners. The average mean value of a teacher's competency in constructing classroom assessments is (M = 2.4479, SD = 0.5280), which is an indication that a teacher's competency in constructing assessments is low. This is shown in the individual items that teachers do not have the skills to develop large pools of items, develop a table of specifications for multiple choice tests, or seek expert opinion in some areas before

constructing a test. More so, the average mean value of a teacher's competency in assembling classroom assessments is (M = 2.987, SD =.02419), which indicates that a teacher's competency is high for this segment of assessment. Similarly, the average mean value of teachers for competency in administering classroom assessments (M = 2.493, SD = 0.1967) is an indication that teachers competency is low for administering assessments. This is further shown in weaknesses such as not keeping to instructions during the test, engagement in gist with the testee, and inability to minimise malpractice of any form, among others. Teachers' competency in terms of scoring assessments is shown to be high, as found in the average mean value (M = 2.6443, SD = 0.0849). More so, the average mean value of teachers competency in item analysis is (M = 2.2899, S.D = 0.0351), which indicates that teachers are not competent in item analysis in classroom assessment. Finally, the average mean value of teachers competency in feedback provision is (M = 2.880, S.D = 0.2290), which is an indication that teachers are competent in the provision of feedback as an assessment mechanism. Summarily, teachers are competent in planning, assembling, preparing a scoring guide, and providing feedback to students.

Research question two

What is the differential effect of demographic factors on teachers classroom assessment competency in secondary schools? The result of one-way analysis of variance (ANOVA) as presented in Table 2 showed that for years of experience on planning of classroom assessment (F = 433.725*, p =.000), for experience and construction of assessment tools (F = 641.239*, p =.000), for experience and assembling of assessment tools (F = 485.323*, p =.000), for years of teaching experience and administering of assessment (F = 790.295*, p =.000), for years of teaching experience and scoring of classroom assessment (F = 26.623*, p =.000), for years of teaching experience and item analysis (F = 2822.403*, p =.000), and years of teaching experience and provision of feedback (F = 433.500*, p =.000). Since p (.000) is less than p (.05) for years of teaching experience and all seven dimensions of teacher assessment competency identified in this study, it implies that there is a significant mean difference in teachers' assessment competency based on years of experience. The result further showed that for the planning of classroom assessment, teachers above 20yrs with mean value (M = 21.5324, S.D = 1.611), which is greater than the mean value (M = 20.9860, S.D = 1.42019) of those between 10-20yrs and 20 years old and the mean value (M = 18.1304, S.D = 2.65315) of those below 10 years old. For the construction of classroom assessment, teachers above 20 years had a mean value (M = 21.0162, S.D = 1.43126) greater than the mean value (M = 20.0156, S.D = 1.15054) of those between 10-20yrs and 20 years and the mean value (M = 18.2174, S.D = 1.14146) of those below 10 years. For the assembly of classroom assessments, teachers above 20yrs had a mean value (M = 22.7919, S.D =.71563) greater than the mean value (M = 21.3095, S.D = 1.33338) of those between 10-20yrs and 20 years and the mean value (M = 18.0000, S.D = 2.83099) of those below 10 years. For the administration of classroom assessment, teachers above 20 years had a mean value (M = 22.7919, S.D =.71563) greater than the mean value (M = 21.3095, S.D = 1.33338) of those between 10-20yrs and 20 years and the mean value (M = 18.0000, S.D = 2.83099) of those below10yrs. For scoring of classroom assessments, teachers above 20 years old had a mean value (M = 18.3189, SD = 2.50006) greater than the mean value (M = 17.3033, SD = 2.45516) of those between 10-20yrs and 20 years old and the mean value (M = 17.7826, SD = 1.38301) of those below 10 years old. For item analysis of classroom assessment, teachers above 20 years had a mean value (M = 22.4324, S.D =.51221) greater than the mean value (M = 20.6314, S.D =.48280) of those between 10-20yrs and 20 years and the mean value (M = 17.7391, S.D = 1.48216) of those below 10 years. For the provision of

feedback, teachers above 20 years had a mean value (M = 21.5297, SD = 1.60974) greater than the mean value (M = 20.9860, SD = 1.42019) of those between 10-20yrs and 20 years and the mean value (M = 18.1304, SD = 2.65315) of those below 10 years. This implies that teachers above 20yrs and those between 10-20yrs and 20 years of experience are more competent in classroom assessment.

The result of the analysis of variance in Table 3 also showed that for educational qualification and planning of classroom assessment (F = 574.560*, p =.000), for educational qualification and construction of assessment tools (F = 295.694*, p =.000), for educational qualification and assembling of assessment tools (F = 108.915*, p =.000), for educational qualification and administering of assessment (F = 1708.242*, p =.000), for educational qualification and scoring of classroom assessment (F = 3.025*, p =.000), for educational qualification and item analysis (F = 670.757*, p =.000), and educational qualification and provision of feedback (F =574.691*, p =.000). Since p (.000) is less than p (.05) for educational qualification and all seven dimensions of teacher's assessment competency identified in this study, it implies that there is a significant mean difference in teachers' assessment competency based on educational qualification. The result further showed that for planning classroom assessment, teachers with M.Ed. or M.Sc. or above had mean value (M = 22.0609, S.D. = 1.50246) greater than the mean value (M = 20.8588, S.D. = 1.51024) of those with B.Ed. or B.Sc. and a mean value (M = 18.1224, S.D. = 2.36354) of those with NCE/ND. For the construction of classroom assessment, teachers with M.Ed/M.Sc-above had mean value (M = 20.3906, S.D. = 1.41021) greater than the mean value (M = 20.2224, S.D. = 1.42019) of those with B.Ed/B.Sc and the mean value (M = 18.5102, S.D. = 1.48756) of those with NCE/ND. For assembling of classroom assessments, teachers with M.Ed/M.Sc-above had mean value (M = 20.7258, 1.54906) greater than the mean value (M = 19.8782, S.D. = 1.76224) of those with B.Ed/B.Sc and mean value(M=18.7551, S.D. = 2.55393) of those with NCE/ND. For the administration of classroom assessment, teachers with M.Ed/M.Sc-above had mean value (M = 23.2410, S.D. =.42828) greater than the mean value (M = 21.5341, S.D. =.49924) of those with B.Ed/B.Sc and the mean value (M = 17.7143, S.D. = 2.40952) of those with NCE/ND. For scoring classroom assessments, teachers with M.Ed/M.Sc-above had mean value (M = 17.4765, S.D. = 2.63315) greater than the mean value (M = 17.8295, S.D. = 2.34195) of those with B.Ed/B.Sc and the mean value (M = 17.7347, S.D. = 1.63990) of those with NCE/ND. For item analysis of classroom assessment, teachers with M.Ed/M.Sc-above had mean value (M = 21.9058, S.D. =.94104) greater than the mean value (M = 20.5552, S.D. = 1.26242) of those with B.Ed/B.Sc and the mean value (M = 18.3469, S.D. = 1.98685) of those with NCE/ND. For the provision of feedback, teachers with M.Ed/M.Sc-above had mean value (M = 22.0609, S.D. = 1.50246) greater than the mean value (M = 20.8571, S.D. = 1.50847) of those with B.Ed/B.Sc and a mean value (M = 18.1224, S.D. = 2.36354) of those with NCE/ND. This implies that teachers with higher levels of education (M.Ed and B.Ed.) are more competent in classroom assessment compared to teachers with NCE /ND.

The result of independent t-test analysis as presented in Table 4 showed that for gender differences in the planning of classroom assessment (t = 2.185, p =.070), for gender differences in the construction of assessment tools (t = -1.513, p =.132), for gender differences in the assembling of assessment tools (t = 1.877, p =.321), for gender differences in the administering of assessment (t = -9.347 *, p =.000), for gender differences in the scoring of classroom assessment (t = -2.706 *, p =.000), for gender differences in item analysis (t = -17.604 *, p =.000), and gender differences in the provision of feedback (t = -32.672 *, p =.000). Since p (.000) is less than p (.05) for gender difference on administration, scoring, item analysis, and provision of, it implies that, absolutely, there is a significant mean

difference in teachers' assessment competency based on gender but a non-significant difference between male and female teachers based on planning, constructing, and assembling classroom assessment. The result further showed that for the planning of classroom assessment, male teachers mean value (M = 21.7542, S.D = 2.26198) is relatively equal to the mean value (M = 21.9354, S.D = 2.26861) of female teachers. For the construction of classroom assessment, male teachers mean value (M = 18.8721, SD = 1.43775) is relatively equal to the mean value (M = 18.6246, SD = 1.34341) of female teachers. For the assembly of classroom assessments, male teachers mean value (M = 18.1112, S.D =.74681) is greater than the mean value (M = 18.7312, S.D = 1.54332) of female teachers. For the administration of classroom assessment, male teachers mean value (M = 21.2192, SD = 1.78801) is greater than the mean value (M = 19.9544, SD = 3.13454) of female teachers. For scoring classroom assessments, male teachers mean value (M = 17.5840, SD = 2.32264) is less than the mean value (M = 19.8859, SD = 1.97630) of female teachers. For item analysis of classroom assessment, male teachers mean value (M = 21.3115, SD = 1.19150) is greater than the mean value (M = 19.0165, SD = 1.19150) of female teachers. For the provision of feedback, male teachers are less than the mean value (M = 12.7542, SD = 2.26793) and less than the mean value (M = 18.9339, SD = 1.26198) of female teachers. The result implies that male teachers are more competent than female teachers in classroom assessment administration and item analysis but not in feedback provision and scoring of assessments.

Discussion of findings

The result of the study has shown that teacher's competency in the seven areas of assessment competency evaluated is very important. That is, teachers are competent in planning classroom assessment, constructing, assembling, administering, scoring, item analysis, and providing feedback in the school system. It is imperative, therefore, that teachers in Cross River State School develop adequate competencies that will facilitate the utilisation of effective assessment practices and principles in the measurement of the learner. The implication of the study findings is that teacher's knowledge, skills, and techniques for the assessment of the teaching and learning process are required since the outcome of the score is used in determining the quantity of traits possessed by the learner, which is used to determine his future chances (Mangope et al., 2012). The findings collaborate with those of Villamero (2014), whose findings showed that teachers need improvement in their assessment competency to handle assessment very effectively.

The findings of the study also revealed that teachers' years of teaching experience are an important determinant of their competency in classroom assessment. That is, teachers with more years of experience are more competent than those with fewer years in the profession. The explanation of these findings could be that teachers with many years in teaching may have been exposed to different training that exposed them to the techniques of assessment construction, administration, and analysis. This may have provided them with ample chances of following the required standard in assessment construction, rather than those who may not have gotten those grips in classroom assessment. The findings could also be because teaching experience provides the teachers with the skills and knowledge that they have been exposed to and can provide them with the opportunity to do better in terms of classroom assessments. The findings aligned with previous studies (Osta, 2020; Jacobs et al., 2020).

The findings of the study also revealed that teachers' educational qualifications are an important determinant of teacher's competency in classroom assessment. That is, teachers

with a higher level of educational qualification are more competent than those with a low level of education. Specifically, teachers with an M.Ed/M.Sc. are more competent in classroom assessment. The explanation for these findings could be that teachers with a higher level of education have acquired the skills, knowledge, and competency that are required to maintain standard teaching and learning. The finding of the study is in line with that of George (2005), whose study showed that differentiated instruction in the classroom is a function of the teacher's level of education, which inversely influences the assessment practices that are carried out with the learners. Where the teacher is trained according to the level of education, they are equipped to transfer skills, knowledge, and values, which will be evaluated with sound psychometric instruments that are developed following laid-down principles.

The findings of the study also showed that male teachers are more competent than female teachers in classroom assessment in administration and item analysis but not in feedback provision and scoring of assessments. The explanation for these differences in competency based on gender could be that male teachers could be more knowledgeable in the areas of planning, construction, and item analysis, which literature has already established. Most of the female teachers may consider some activities laborious and time-consuming and may not have the ability to do them as well as the male teachers. Contrary to popular belief, female teachers are more competent in terms of providing feedback and scoring assessments. The explanation for this finding could be that women naturally listen, especially to students that they feel for. When this happens, they provide the necessary feedback that can help the learner identify areas of importance.

Limitation and future implication

The major limitation of this study is the use of only public teachers in secondary schools in the area. This may pose a challenge in generalising the findings to other schools that are not public. Thus, conducting such studies in private schools is imperative to see if these findings can be applied to such settings. Secondly, the study looked at only the teacher's competency in assessment but neglected their perception of assessment practices in schools, which determine what they do with assessment. This is because competent teachers may not do the right thing if they have a negative perception of classroom assessment. It is also imperative that similar studies be conducted, focusing more on the perception of teachers about this multi-level dimension of classroom assessment. Thirdly, the study was carried out to define geographical space in Nigeria. It may be impossible to apply this finding to other regions given their peculiar characteristics and educational systems. Future researchers can expand the scope of this study to a wider audience to ascertain whether the findings can hold true in those areas. This limitation does not mean that the study is worthless. First, the study was able to provide empirical evidence on factors such as educational qualification and years of experience in teacher assessment competencies.

Conclusions

The findings of the study revealed that teacher's competency in assessment is only found in their ability to plan, assemble, score, and provide feedback but not in constructing, administering, or analysing items of the test. The result also showed that teachers with higher years of experience (above 20 years) and educational qualifications (M.Ed/M.Sc)are more competent in classroom assessment compared to others, and male teachers differ from female teachers in their classroom assessment administration and item analysis, but female teachers

are more competent in scoring and providing feedback to the learners. It is expedient that the experience of the teachers as well as their academic qualifications be taken into consideration in the engagement of teachers in the educational sectors. Similarly, where the need arises for a high-stakes assessment, these factors also need to be put in place for sound psychometric instruments that will be used in the classroom. The government must also ensure that teachers are periodically trained on the best assessment methods that will not only help the students achieve maximally but also facilitate effective instruction delivery. Teacher professional training institutions should ensure that teachers are vested with the skills, knowledge, and competencies required to develop sound instruments that will be used for classroom assessments.

Conflict of interest
No conflict of interest to declare.

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Contributions

All authors contributed adequately to the study.

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Table 1: Analysis of teacher's competence in classroom assessment

S/N	Items : Planning competency	N	Mean	Std Dev.	Remarks
1	I determine the content in every classroom assessment	1565	3.1277	.97973	Competent
2	I ensure that testing environment is arranged for in every assessment I carry out	1565	2.9981	.92412	Competent
3	Class capacity is examined before carrying out assessment	1565	2.9180	.95325	Competent
4	The students are always informed before assessment is done	1565	2.7934	.95769	Competent
5	Instructional content is delivered before assessment is done	1565	2.7270	1.04323	Competent
	Aggregate scores	1565	2.9128	0.0446	Competent
	Construction competency	1565			
6	Large pools of items are always developed to select the best	1565	2.1196	.84669	Not competent
7	Items are frequently required to eliminate duplicates in the assessment sheets	1565	3.0495	.87898	Competent
8	Table of specification is used for multiple choice test	1565	2.1515	.88787	Not competent
9	Select few items for a test	1565	2.9875	.86049	Competent
10	Sought expert opinion in some areas	1565	1.9317	.89958	Not competent

	before constructing a test				
	Aggregate scores	1565	2.4479	0.5280	Not competent
	Assembling competency	1565			
11	Ensures that items selected are clear	1565	2.8366	.93670	Competent
12	Ensures that items are placed in order of difficulty	1565	2.9286	.98289	Competent
13	Drop all ambiguous items that have no specific answer	1565	2.9781	.93062	Competent
14	Ensures that items are in a clean and legible paper	1565	3.1259	.92233	Competent
15	Avoid items that are bias	1565	3.0673	.95585	Competent
	Aggregate scores	1565	2.9873	.02419	Competent
	Administration competency	1565			
16	Students are sited in a satisfactory condition	1565	2.9224	.95591	Competent
17	Keep instructions during the test	1565	2.1044	.93376	Not Competent
18	Avoid gist with testee	1565	2.2209	.70400	Not Competent
19	Minimize malpractice of any form	1565	2.9261	.53232	Competent
20	Ensure that noise is limited in the testing environment	1565	2.2961	.98508	Not Competent
	Aggregate scores	1565	2.4939	0.1967	Not competent
	Scoring competency	1565			
21	Prepare a scoring guide	1565	2.6881	1.06398	Competent
22	Adequate score assigned to questions	1565	3.3037	.87348	Competent
23	Follow scoring guides for all students	1565	2.0971	.93319	Not Competent
24	Provide comment for any adjustment and additional score	1565	2.0601	.90422	Not Competent
25	Decides on how to handle irrelevant points	1565	3.0726	.84500	Competent
	Aggregate score	1565	2.6443	0.0849	Competent
	Item analysis competency	1565			
26	Ability to determine the item mean	1565	3.0764	.81445	Competent
27	Determine which item is ineffective	1565	2.0232	.85112	Not Competent
28	Ability to appraise why an item distract some and not all	1565	2.0382	.90205	Not Competent
29	Ability to uncover why an item functions well to a group of learners	1565	2.1820	.89002	Not Competent
30	Ability to use item coefficients to decide on the general class performance	1565	2.1296	.84818	Competent
	Aggregate score	1565	2.2899	0.0351	Not competent
	Feedback competency	1565			
31	Provide students with their script	1565	3.0539	.83747	Competent
32	Use performance to determine instructional strategy	1565	2.9555	.90593	Competent
33	Provide answers to student's questions immediately in class	1565	3.1115	.82039	Competent
34	Correct students answer to questions at every instance	1565	2.9430	.85173	Competent
35	Send students score to their emails	1565	2.3804	.74058	Not Competent
	Aggregate score	1565	2.880	0.2290	Competent

M=Mean score , S.D=standard deviations

Table 2: One way analysis of variance (ANOVA) result on influence of years of teaching experience on teachers' assessment competency in terms of planning , construction, assembling , administering , scoring , item analysis and provision of feedback

Assessment competency Source of variation		SS	df	MS	F	Sig.
Planning	Between Groups	3405.157	2	1702.578	433.725*	.000
	Within Groups	6131.594	1562	3.925		
	Total	9536.750	1564			
Construction	Between Groups	1907.839	2	953.919	641.239*	.000
	Within Groups	2323.660	1562	1.488		
	Total	4231.499	1564			
Assembling	Between Groups	2883.296	2	1441.648	485.323*	.000
	Within Groups	4639.911	1562	2.970		
	Total	7523.208	1564			
Administering	Between Groups	5814.778	2	2907.389	790.295*	.000
	Within Groups	5746.388	1562	3.679		
	Total	11561.165	1564			
Scoring	Between Groups	246.463	2	123.232	26.623*	.000
	Within Groups	7230.144	1562	4.629		
	Total	7476.607	1564			
Item analysis	Between Groups	5264.959	2	2632.480	2822.403*	.000
	Within Groups	1456.891	1562	.933		
	Total	6721.850	1564			
Feedback	Between Groups	3402.310	2	1701.155	433.500*	.000
	Within Groups	6129.656	1562	3.924		
	Total	9531.965	1564			

=significant at .05 level

Tabl3 3; One way analysis of variance (ANOVA) result on influence of educational qualification on teachers' assessment competency in terms of planning , construction, assembling , administering , scoring , item analysis and provision of feedback.

Assessment competency Source of variation		SS	df	MS	F	Sig.
Planning	Between Groups	4042.195	2	2021.097	574.560*	.000
	Within Groups	5494.556	1562	3.518		
	Total	9536.750	1564			
Construction	Between Groups	1162.101	2	581.051	295.694*	.000
	Within Groups	3069.398	1562	1.965		
	Total	4231.499	1564			
Assembling	Between Groups	920.754	2	460.377	108.915*	.000
	Within Groups	6602.454	1562	4.227		
	Total	7523.208	1564			
Administering	Between Groups	7933.848	2	3966.924	1708.242*	.000

	Within Groups	3627.317	1562	2.322		
	Total	11561.165	1564			
Scoring	Between Groups	28.843	2	14.421	3.025*	.049
	Within Groups	7447.764	1562	4.768		
	Total	7476.607	1564			
Item analysis	Between Groups	3105.705	2	1552.852	670.757*	.000
	Within Groups	3616.146	1562	2.315		
	Total	6721.850	1564			
Feedback	Between Groups	4040.694	2	2020.347	574.691*	.000
	Within Groups	5491.272	1562	3.516		
	Total	9531.965	1564			

*=significant at ,05 level

Table 4: Independent t-test analysis of influence of gender teachers' assessment competency in terms of planning , construction, assembling , administering , scoring , item analysis and provision of feedback.

Measures	Gender	N	Mean	Std. Deviation	t-cal	df	Sig
Planning	Male	899	21.7542	2.26198	2.185	1563	.070
	Female	666	21.9354	2.26861			
Construction	Male	899	18.8721	1.43775	-1.513	1563	.132
	Female	666	18.6246	1.34341			
Assembling	Male	899	18.1112	1.54332	1.877	1563	.321
	Female	666	18.7312	.74681			
Administering	Male	899	21.2192	1.78801	-9.347*	1563	.000
	Female	666	19.9544	3.13454			
Scoring	Male	899	17.8859	1.97630	-2.706*	1563	.007
	Female	666	19.5840	2.32264			
Item analysis	Male	899	21.3115	1.19150	-17.604*	1563	.000
	Female	666	19.0165	2.39646			
Feedback	Male	899	12.9339	2.26793	-32.672*	1563	.000
	Female	666	18.7542	1.26198			

*=significant at.05 level