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Assessing the Achievement Testing Practices of Teachers in Junior High Schools in the Sissala East Municipality of Ghana

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Abstract

The study sought to find out whether Junior High School teachers in the Sissala East Municipality of Ghana follow the basic prescribed principles in the construction, administration and scoring of classroom achievement tests. A descriptive survey design was adopted for the study. The study employed multistage sampling techniques (purposive, stratified, and simple random sampling procedures) to select a sample of 248 teachers from the Sissala East Municipality. A questionnaire was used for the data collection and its reliability was 0.8. Data were analysed using frequencies, means, and standard deviation. The results showed that generally, Junior High Schools teachers in the Sissala East Municipality adhere to most principles of test construction and test administration but had little knowledge of the principles in the scoring test. It was recommended that more workshops and in-service training should be organized for teachers in Junior High Schools concerning their testing practices (i.e., construction, administration and scoring of tests).

Keywords : Achievement test, test construction, test administration, test scoring

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Introduction

Assessment is as an umbrella term that includes the use of various strategies and methods to determine the extent to which students are achieving the predetermined learning objectives and outcomes of a lesson (Mussawy, 2009). There are different types of assessment that can be used to test students' knowledge and see their current levels in specific subjects. Two major types of assessment widely used are traditional types of assessment and performance-based assessment (Birenaum, & Feldman, 1998). Birenaum and Feldman, (1998) argued that traditional types of assessment tools are generally knowledge-based and include conventional types of tests such as multiple-choice questions, short answer essays or constructed responses and standardized tests whereas in performance-based assessments, students are required to perform a task rather than select from options provided; and students are assessed according to their performance outcomes and the extent to which those outcomes are about the rubrics or feedback tools. An achievement assessment test requires students to exhibit the status of their learning through a demonstration of mastery (Poikela, 2004).

Nobody can study in an entire educational system without being exposed to a wide range of educational and psychological assessment procedures. This is because constantly in an educational setting, decisions have to be made about students, curricula and programmes, and educational policies. According to Nitko (1996), decisions about students include managing classroom instruction, placing students into different types of programmes, assigning them to appropriate categories, guiding and counselling them, selecting them for educational opportunities, and credentialing and certifying their competence. Decisions about curricula and programmes include decisions about their effectiveness (summative assessment) and about ways to improve them (formative assessment). In Ghana, decisions about educational policies are made at the national level. It is worth knowing, however, that educational assessments, of which in the Ghanaian educational system, tests predominate, provide some of the needed information for these types of decisions (Ministry of Education, 2010).

According to the standard for Educational and Psychological testing, National Council on Measurement in Education (NCME, 2014) "a test is a device or procedure in which a sample of an examinees behaviour in a specified domain is obtained and subsequently evaluated and scored using a standardized process" (p. 2). However, it must be noted that the psychological attributes of an individual cannot be measured directly like the measurement of height or weight. The existence of such a psychological construct can never be confirmed. The degree to which any attribute characterises an individual can only be inferred from observation of his or her behaviour. It becomes more prudent if one can quantitatively relate the subjective judgments of individuals

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about the estimated amount of constructor trait that exists in a person by establishing standards for such measurement.

A test is an essential tool that helps to quantify such constructs which helps one to make a value judgment about the degree to which such constructs might probably exist in an individual. A large number of assessment techniques are ~~be~~ being used to collect information about students. These include formal and informal observation of students, paper-and-pencil tests, a student's performance on homework, laboratory work, and projects during oral questioning and analysis of students' records (NCME, 2014).

Teachers in the educational setting would want to estimate the degree to which their students are characterized by the knowledge they have imparted to them within a given period. All the domain of such construct might not be known by a single test. Nevertheless, a well-constructed test could sample to a large extent a reasonable amount of the construct on which value judgment could be made from. Educators and teachers must also be aware that a test itself is subject to errors that adversely could affect its use in deciding for students. Tom and Gary (2003) further asserted that test misuse and abuse can occur when users of test results are unaware of the factors that can influence the usefulness of the test scores.

Among the major factors are the technical adequacy of a test and its validity and reliability. The technical inadequacies might emerge from factors such as test appropriateness for testing, the content validity evidence, the appropriateness of the reading level, language proficiency and cultural characteristics of students and teachers, and pupils' factors that may have affected administration procedure and scoring of the test, among others. It must also be noted that even when a test is technically adequate, misuse and abuse can occur because technical adequacy does not ensure that test scores are accurate or meaningful. When students' achievement levels are not properly measured and interpreted, the teachers and school administrators are not able to provide the right educational opportunities and support each student needs.

Testing provides feedback on which educational decisions are made. These decisions may be the ones that require information about the success of learning programmes or about students who have reached particular levels of skill and knowledge (Izard, 2005). Accurate and valid information about student achievement is widely understood to be essential for effective instruction, as it enables teachers to give appropriate feedback and adapt their instruction to match student needs.

The importance of tests cannot be underestimated; first tests are used for the assignment of grades to students. The grades or symbols (e.g., A, B, C) that the classroom teacher reports, represent his /her formal evaluation or judgment of the quality or worth of his/her students 'achievement of the

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important learning objectives (Amedahe & Gyimah, 2003; AERA/NCME, 2014). Again, it is used for selection decisions, sometimes, an institution decides whether some persons are acceptable for specific programmes while others are not. Those not acceptable are rejected and are no longer the concern of the institution (Cronbach, 1960; Nitko, 2001; Amedahe & Gyimah, 2003). An educational institution often uses test results to provide part of the information on which selection decisions are based. Tests are indispensable tools in every educational system. Tests and teaching are interwoven. Quaigrain (1992) has stated that tests provide needed information for evaluation. Without evaluation, there cannot be feedback and knowledge of results. Without knowledge of results, there cannot be any systematic improvement in learning.

The basic principles for the construction of teacher-made tests have been developed over the years by several educational measurement experts (Amedahe, 2000). While some of the test construction principles are general and apply to any type of test, others are specific and apply solely to the particular type of test under construction. From the available literature, the test construction principles that the researcher judged as most comprehensive and practicable in the classroom testing situation were those postulated by Tamakloe and Amedahe (1996) and Etsey (2004). These are in eight steps. The steps are: define the purpose of the test, determine the item format to use, determine what is to be tested, write the individual items, review the items, prepare the scoring key, write directions, and evaluate the test. It believed that a good test must follow these steps to improve its validity and reliability

According to Mehrens and Lehmann, noise and distraction in the testing environment should be kept at the barest minimum if not eliminated. Interruptions within and outside the testing room tended to affect student's performance. Etsey (2004) also affirmed that it is helpful to hang a – "Do Not Disturb Testing in Progress" sign at the door of the testing room to warn people to keep off. The distractions from outside can divert the attention of test-takers which could contribute to the low performance of students. Amedahe and Asamoah-Gyimah (2003) and Etsey (2004) found that tests must not be given immediately before or just after a long vacation, holidays or other important events where students are involved in either physically or psychologically activities. Amedahe and Asamoah-Gyimah (2003), opined that tests must also not be given when students would normally be doing something pleasant such as having lunch, athletics, or other sporting activities as this will hamper students' concentration.

On test scoring, Amedahe and Gyimah (2003); and Etsey (2004), who agreeably asserted that responses of the item should be scored item by item rather than script by script. This principle is to minimise the carryover effect on the scores and thereby ensuring consistency. A study by Amedahe (1989),

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recounted that teachers in the schools used mainly the analytic method in scoring their essay-type tests. He further asserted that teachers in the schools scored their essay-type tests either item by item or script by script. On the part of Quaigrain (1992), he found that majority of teachers in the schools used the analytic method in scoring their essay-type tests. Amedahe and Gyimah (2003) and Etsey (2004), indicated that the mechanics of expressions such as correct grammar usage, the flow of expression, quality of handwriting, orderly presentation of material, and spelling should be judged separately from subject matter correctness. This was because when teachers are influenced by factors other than the subject matter, the marks awarded would represent construct irrelevant or construct mis-representativeness. This simply meant that higher scores on tests might not reflect the ability of students on the subject matter but rather discriminate students in proficiencies they have over other students.

Etsey (2004) also indicated that scripts must be scored anonymously. He suggested scripts should be identified by code numbers or any other means instead of the names of students. This principle is to reduce the halo effect. Halo-effect happens when a scorer's general impression of a person influences how the paper is scored.

The theories that underpinned this study were the Constructivist Learning Theory and Classical True Score Theory. Constructivist learning theory says that all knowledge is constructed from a base of prior knowledge (Davis, 2000). According to Vygotsky (as cited in Davis 2000), children are not a blank slate and knowledge cannot be imparted without the child making sense of it according to their current conceptions; therefore, children learn best when they are allowed to construct a personal understanding based on experiencing things and reflecting on those experiences. Classical true score theory is a simple, model that describes how errors of measurement can influence the observed score. Classical true score theory states that an observed score (X) is equal to the sum of a true score, or true underlying ability (T), and the measurement error (E) associated with estimating observed scores, or $X = T + E$. These two theories are relevant because first, students must make meaning of the test items set by teachers and teachers must also be aware of the errors associated with test score so that teachers can make an informed judgement about the test scores.

In the study of Amedahe (2000), it was evident that most Ghanaian teachers had limited skills for constructing achievement tests, the objective and essay type tests, which are the most frequently used instruments in schools in Ghana. According to Amedahe teachers' limited skills in test construction were the result of lack of training in assessment techniques, large class size and lack of a particular school's policy in assessment standards with implications on validity and reliability of the assessment results" (p. 112-113). Given the extent of prevalence of classroom achievement tests in Ghanaian

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schools and the variety of uses to which the results from these tests are put, there is the need for research into the achievement testing practices of teachers. Again, careful observation of the Junior High Schools teachers in the Sissala East Municipality easily reveals that the achievement test practices of the teachers were with a lot of flaws which may include poor construction of test items, poor administration, poor scoring that one begins to wonder whether training contributes to competence at all. It is based on the above problem this study sought to examine the achievement testing practices of teachers in Junior High School in the Sissala East Municipality of Ghana.

Purpose of the study

The purpose of this study was to assess the achievement test practices of teachers in Junior High in the Sissala East Municipality of Ghana.

To achieve the purpose of this study, the following research questions were posed to guide the study:

i. How do Junior High Schools teachers in the Sissala East Municipality adhere to the principles of test construction, administration and scoring?
ii. What kinds of achievement test strategies do Junior High Schools teachers in the Sissala East Municipality use to assess their students' learning outcomes?

Methodology

The research design chosen for the study was the descriptive survey. Amedahe, (2000) stated that descriptive research involves the collection of data to test hypotheses or answer research questions concerning the current status of the subjects of the study. This design was chosen because the study involved the collection of data to test hypotheses or answer research questions concerning the current status of the subjects on achievement test practices of teachers in Junior High Schools in the Sissala East Municipality of Ghana. The population of 700 for this study comprised all Junior High School teachers in the Sissala East Municipality, Sissala. There are five regions in the Northern part of Ghana. Namely, Savana, Upper East, Northern, North East, and Upper West. Upper West is situated in the northwest segment of Ghana. The Capital of the Upper West Region is Wa. Covering an area of 18,476 square kilometres and home to a populace of 702,110 residents, the region has the most modest number of inhabitants among all regions of Ghana. Additionally, it has 11 districts under it. The primary occupation of residence in Sissala East District is farming.

An estimated sample size of 248 teachers was selected for the study using Krejcie and Morgan sampling table. Fraenkel and Wallen (2009) have also indicated that for descriptive studies, a larger sample size of 248 for this

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study produces desirable results to generalise over the population. The study employed multistage sampling techniques (purposive, stratified, and simple random sampling procedure). Purposive sampling was used to select only Junior High School teachers teaching the four core subjects (English Language, Mathematics, Integrated Science, and Social Studies) in the nine educational circuits. Stratified sampling was used to classify teachers according to their academic and professional qualifications this was to enable the researchers to compare the teachers in terms of their knowledge and practice of achievement test. Lastly, the researchers used simple random (lottery method) to select the teachers in the nine (9) educational circuits in the Sissala East Municipality. The simple random technique was used to give teachers an equal chance of being selected and it helped to avoid biases in selecting the respondents. This is to help improve the representativeness of the sample. The researchers used three weeks for the data collection.

A questionnaire was the main source of data collection for the study. The instrument was developed by the researchers based on the research questions and literature. The questionnaire was developed using four-point Likert-type scale ranging from "Strongly Disagree, Disagree, Strongly Agree and Agree". The research instrument consisted of 60 items and was organised into five sections (A, B, C, D, and E). Section 'A' comprised the background information of the students. Section, 'B', constituted items on teachers' knowledge of test construction "Section C" constituted items on teachers' knowledge of test administration. "Section D" was made up of item on teachers' knowledge in test scoring.

Finally, "Section E" was based on the kinds of achievementtest strategies Junior High Schools teachers in the Sissala East Municipality use to assess their students' learning outcomes.

The questionnaire was a four-point Likert type scale that requires participants to indicate their level of agreement or disagreement to the items using strongly agree, agree, disagree or strongly disagree. The responses were scored as follows: Strongly Agree = 4; Agree = 3; Disagree = 2; Strongly Disagree =1. The reliability of the questionnaire was 0.8. Data were analysed using frequencies, means, and standard deviation.

The respondents were given draft copies of the questionnaire. The respondents were told to discuss verbally and frankly with the researchers any ambiguity, incoherence, or incomprehension that they would experience about any aspect of the draft questionnaire. The necessary corrections were done after the trial testing. The questionnaires were administered by the researchers to two-hundred and forty-three teachers in the Sissala East Municipality. The researchers had also established the necessary contacts with the headteachers of the selected schools to seek permission to administer the questionnaire. A brief self-introduction was made by the researchers to explain the purpose of

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the study to the respondents before the questionnaires were distributed to them. The researchers stayed with them and had interactions with them. The researchers appealed to all the respondents to take their time to read the questionnaire and respond to it appropriately. The response rate was 90%.

Results and Discussions

Table 1: *Results on the Demographics of the Respondents*

Demographics Variables	Sub-scales	Freq. (No)	Percent. (%)
Gender	Male	146	58.8
	Female	102	41.2
Number of years in teaching service	Under 5 years	92	37.1
	5 – 10 years	109	43.9
	Above 10 years	47	18.9
Academic/Professional Qualification	Teachers' Certificate A	02	0.81
	Diploma with Education	06	2.41
	Bachelors with Education	185	74.5
	Masters with Education	48	19.4
	Masters without Education	07	2.82
	Others	00	0.00

Source: Field Data, 2019 n=248

From Table 1, 146 representing 58.8% of teachers were males while 102 of them representing 41.2% were females. For the number of years in teaching service, the results showed that most of the teachers that is (109) representing 43. 9% had taught for 5-10 years. Few of them representing 18.9% had taught above 10 years. On the last aspect of the demographic characteristics of the teachers, the results indicated that most of the teachers (n=185, 74.5%) hold Bachelors with Education. Those with Masters with Education followed (n=48, 19.4%).

Research Question One

This research question sought to find out the kind of principles that Junior High School teachers use in the construction of their achievement tests. In addressing these research questions (Q1abc-Q4), means and standard deviations were used for the analysis. The teachers were given four-point Likert scale item on teachers' use in the construction of their achievement tests to respond to. The scoring of items was based on the four-point Likert scale of measurement ranging from "Strongly Agree" (scored 4) to "Strongly Disagree" (scored 1). In the analysis, means provides the summary of the responses from teachers and the standard deviation indicates whether teachers' responses were clustered to the mean score or dispersed. Standard deviation ranges from 0 to 1.97. Where the standard deviation was relatively small, the

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respondents' responses were believed to be homogeneous (similar responses). On the other hand, where the standard deviation was relatively large, the students' responses are believed to be heterogeneous (dissimilar responses). A criterion value (CV) of 2.50 was established for the scale. To obtain the criterion value (CV=2.50), the scores were added together and divided by the number of the scale (4+3+2+1= 10/4=2.50). To understand and interpret the mean scores, any items/statements that scored a mean of 2.50 and above indicated respondents' positive perception of the variables under study while a mean of 2.49 and below indicated a negative perception towards variables under study. The findings are presented as below:

Research Question 1a: How do Junior High School teachers in Sissala East Municipality adhere to test construction principles?

In the quest of achieving the purpose of the study, we assessed how Junior High Schools teachers in the Sissala East Municipality adhere to test construction principles? In achieving this, the responses from the teachers were computed using Means and Standard Deviations. The results are presented in Table 2.

Table 2: *Results on how Junior High Schools Teachers in the Sissala East Municipality Adhere to Test Construction Principles*

When constructing a test, I…….	Mean	SD
Evaluate items given to the students	3.87	1.13
Set questions from past questions	3.57	1.02
Consider the time individual will spend on a question	3.53	1.09
Provide clear and simple instructions on how the test is to be answered	3.45	1.35
Consider students' language proficiency	3.34	1.82
Follow the principles of test construction for each format	3.25	1.92
Write items at least two weeks before the time	2.98	1.17
Consider the meaning of wording against a different ethnic background	2.92	1.26
Prepare marking scheme after students have answered the question	2.13	1.52
Use a test specification table	2.22	1.46
Consider a variation of students concerning physical disability	2.23	1.43
Match learning outcomes to the items	2.45	1.97
Construct test when it is time to assess	2.35	1.14
Write more items than needed	2.32	1.96
Specify the construct to be measured	2.23	1.19
Ask any other colleagues to help me construct items	2.15	1.14
Use questions directly from textbooks	2.12	1.76
State the purpose of the test	2.11	1.28

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Try solving the questions myself to determine the time required	2.02	1.13
Mean of Means/SD	2.46	1.44

Source: Field Data, 2019 Cut-off Mean value=2.50

Table 2 presents results on how Junior High Schools teachers in the Sissala East Municipality adhered to the principles of construction of test items. The results showed that Junior High Schools teachers in the Sissala East Municipality did not adhere to most principles of test construction (MM=2.46, SD=1.44). Some of the test construction principles Junior High School teachers in the Sissala East Municipality adhere to include the following:

a. The teachers confirmed that they evaluate test items given to their students (M=3.87, SD=1.13, n=248)
b. They further indicated that they consider the time individual will spend on a question (M=3.53, SD=1.09, n=248)
c. They agreed that they provide clear and simple instructions on the test paper as to how the test should be answered (M=3.45, SD=1.35, n=248)
d. Another construction principle Junior High Schools teachers in the Sissala East Municipality adhered to was that they consider their students' language proficiency (M=3.34, SD=1.82).
e. The fifth construction principle Junior High Schools teachers in the Sissala East Municipality adhered to, was that they followed the principles of test constructions for each format (M=3.25, SD=1.92, n=248).
f. Junior High School teachers in the Sissala East Municipality confirmed that they write test items at least two weeks before time (M=2.98, SD=1.17, n=248).
g. Junior High School teachers in the Sissala East Municipality also considered the meaning of wording against the different ethnic backgrounds when constructing test items (M=2.92, SD=1.26, n=248).
h. It was confirmed that few Junior High Schools teachers in the Sissala East Municipality averagely prepared to mark scheme after students have answered questions (M=2.13, SD=1.52, n=248)

Some of the test constructions principles Junior High Schools teachers in the Sissala East Municipality did not adhere to are the following;

a. Most Junior High Schools teachers in the Sissala East Municipality were below average in their use of the test specification table (M=2.22, SD=1.46, n=248).

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b. Again, below the average of the Junior High Schools teachers in the Sissala East Municipality were considering the variation of students concerning physical disability (M=2.23, SD=1.52, n=248).
c. In a similar result, below average of the teachers pointed out that they match learning outcomes to the items (M=2.45, SD=1.97, n=248).
d. Also, below the average of the Junior High Schools teachers in the Sissala East Municipality were writing more items than needed (M=2.32, SD=1.96, n=248).
e. A few teachers in the Sissala East Municipality again pointed out that they ask any other colleagues' teacher to go through their constructed test items (M=2.15, SD=1.14, n=248).
f. Few of the teachers in the Sissala East Municipality were of the view that they use questions directly from textbooks (M=2.12, SD=1.76, n=248).

The findings from the present study disagree with the assertion of Tom and Gary (2003), who indicated that, when teachers fail to consider the meaning of words against a different ethnic background in constructing test items, the interpretation made from the test may lead to faulty conclusions. The possible cause of this finding and many others in the above findings may be due to the limited time and excessive workload on teachers which may lead them to pay less attention to such important principles.

The study further revealed that teachers often ask other colleagues who are not in the subject area to help them construct test items. This attitude might have a great deal of implication for the validity of the test. This is because the teacher assessing the students might not appropriately measure the real competence of the students since he/she might not know the detail of the content coverage and the thinking process to assess a particular topic. The result from the study also revealed that teachers did not often review their test items before administering them. This confirmed the findings of Quaigrain (1992) who indicated that some teachers do not review their tests.

The accumulated findings on how Junior High Schools teachers in the Sissala East Municipality adhered to the construction of test items supports the assertion of Wiliam, (2008), who stated that to increases the validity of a test, teachers must consider the student's language proficiency. He further stipulated that the "test would be invalidated if it turned out that the reading requirements of the test were so demanding that students with poor reading ability, but a sound understanding obtained low marks" (p. 4). On the other hand, if a student possessed an understanding of an issue demanded by a test, but failed to show it for reasons of linguistic difficulty then, the results of that test would be invalid.

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Research Question 1b: How do Junior High Schools teachers in Sissala East Municipality adhere to the principles of test Administration?

Test administration serves as one of the key components of achievement tests in the classroom. In achieving this, the responses from the teachers were calculated using Means and Standard Deviations to show how they adhere to test administration. The results are presented in Table 3.

Table 3: *Results on How High Schools Teachers in the Sissala East Municipality Adhere to Principles of Test Administration*

When administering a test, I…….	Mean	SD
Prepare classroom a day before the test is taken	1.77	1.78
Inform student about the test format	3.63	1.75
Give more instructions during the time the students are taking the test	2.98	1.27
Proofread all test items before administration	2.76	0.96
Inform students in advance areas for the test	2.72	1.76
Make provision for extra sheets and writing materials	2.20	1.74
Make students aware of the rule and regulation covering the test	2.17	1.22
Make provision for emergencies during the time the test is taken	2.12	1.95
Students start and stop test on time	1.85	1.65
Tests are given after a long vacation or important holidays	1.72	1.25
Adequate ventilation and lighting	1.57	1.14
Use “DO NOT DISTURB SIGN” at the entrance of the classroom	1.35	1.84
Mean of means /SD	2.44	1.66

Source: Field Data, 2019 Cut-off Mean value=2.50

Table 3 gives the result on how Junior High Schools teachers in the Sissala East Municipality adhere to the administration of test items. The results showed that generally, just below the average of the teachers in the Sissala East Municipality adhere to test administration principles in their achievement test. This was evident after the Mean of Means (MM=2.44, SD=1.66) was less than the Cut-off Mean value of 2.50. The teachers only adhere to a few principles which include:

a. They confirmed that they inform the student about the test format (M=3.63, SD=1.75, n=248).
b. Another test administration principle was the fact that most give more instructions in the test paper the time the students are taking the test (M=2.98, SD=1.27, n=248).
c. Above average of the Junior High Schools teachers in the Sissala East Municipality indicated that they proofread all test items. (M=2.76, SD=0.96, n=248).

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The following are some key principles that some teachers least adhered to and which could affect the results of achievement test

a. Below average of the Junior High Schools teachers in the Sissala East Municipality indicated that they make provision for extra sheets and writing materials (M=2.20, SD=1.74, n=248).
b. In another breath, very few of the teachers make students aware of the rules and regulations covering achievement tests (M=2.17, SD=1.22, n=248).
c. Most of the Junior High Schools teachers in the Sissala East Municipality pointed out that they least adhere to the principles; students starting and stopping tests on time (M=1.85, SD=1.65, n=248).
d. The majority of the Junior High Schools teachers in the Sissala East Municipality pointed out that they least provided adequate ventilation and lighting (M=1.57, SD=1.14, n=248).
e. Finally, the teachers indicated that they least used the "DO NOT DISTURB SIGN" at the entrance of the classroom (M=1.35, SD=1.84, n=248).

From the results in Table 3, it was evident that most teachers averagely often prepare their students in advance before administering the test. This might lead to an improper arrangement environment for a test which can affect students' performance. This was because students trying to find a proper place to sit, due to improper arrangement of desks, poor lighting, among other discrepancies may emotionally affect students. Notwithstanding the cause of this practice might be from the fact that most of the Junior High Schools do not have adequate facilities in terms of classroom and desks to accurately administer tests without interrupting the learning process in other classes concerning space, desks, lighting among others. This finding did not support Anhwere (2009) whose earlier findings suggested that teachers at the Training colleges had adequate facilities and also put in much effort to organise classrooms appropriately when administering tests.

The findings further revealed that teachers averagely control noise when administering tests. This practice is not consistent with the assertion made by Mehrens and Lehmann (2001). According to Mehrens and Lehmann, noise and distraction in the testing environment should be kept at the barest minimum if not eliminated. Interruptions within and outside the testing room tended to affect student's performance. Etsey (2004) also affirmed that it is helpful to hang a – "Do Not Disturb Testing in Progress" sign at the door of the testing room to warn people to keep off. The distraction from outside could

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divert the attention of test-takers which could contribute to the low performance of students.

The result also indicated that teachers often give tests immediately after a long vacation or an important holiday. This practice did hinder the test construction principles. The practice was inconsistent with the assertion made by Amedahe and Asamoah-Gyimah (2003) and Etsey (2004) who found that tests must not be given immediately before or just after a long vacation, holidays, or other important events where students are involved either physically or psychologically.

Amedahe and Asamoah-Gyimah (2003) indicated that tests must also not be given when students would normally be doing something pleasant such as having lunch, athletics, or other sporting activities as this will hamper students' concentration. Teachers in the field of testing must be recognised that the implication from the interpretation made of tests weigh a far greater impact on the students more than the teachers' idea of getting a score to represent assessment. Therefore, it would be prudent for teachers to ensure that scores made from students' successive tests yield an appreciable consistency. According to Crocker and Algina (2008), psychological measurement should focus on a way of reducing systematic errors which may result from factors that include "fatigue, boredom, forgetfulness, guessing" among others (p. 6).

Research Question 1c: How do Junior High Schools teachers in Sissala East Municipality adhere to the principles of test scoring?

In achievement tests, the scoring of tests served as one of the principal components in the classroom that teachers were to adhere to. We, assessed how Junior High Schools teachers in the Sissala East Municipality score test items. In achieving this, the responses from the teachers were calculated using Means and Standard Deviations to show how they adhere to test scoring. The results are presented in Table 4.

Table 4: *Results on How High Schools Teachers in the Sissala East Municipality Adhered to Test Scoring Principles*

When Scoring test, I …….	M	SD
mark papers just after the test being taken	2.09	1.18
prepare scoring guide	2.63	1.65
make sure test-takers names are kept anonymous	1.98	1.97
grade the responses item by item	2.96	0.46
keep scores of previous items out of sight	1.72	1.86
periodically rescore previously scored items	1.90	1.14
shuffle scripts before scoring	2.09	1.02
score essay test when I am physically sound and mentally alert in a sound environment	1.72	1.58

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constantly follow scoring guide	2.15	1.75
am influence by the first few papers read when scoring test items	3.22	1.58
score a particular item for all scripts at a sitting	1.57	1.54
provide comments and errors identified on students' scripts	1.35	1.27
give extra marks to students based on Handwriting.	1.43	1.58

Source: Field Data, 2019 Cut-off Mean value=2.50

Table 4 depicts results on how Junior High Schools teachers in the Sissala East Municipality score test items. The results gave evidence that most Junior High Schools teachers in the Sissala East Municipality have poor scoring principles and this could affect their achievement test. Almost all the pre-coded items were confirmed by the teachers. A few of the scoring principles that the teachers followed were that they:

a. below averagely prepare scoring guide (M=2.63, SD=1.65, n=248).
b. below averagely grade the responses item by item (M=2.96, SD=0.46, n=248).

On a larger scale, Junior High Schools teachers in the Sissala East Municipality below averagely adhere to the Test Scoring Principles. Some of the flaws include the fact that:

a. It was evident that most Junior High Schools teachers in the Sissala East Municipality below averagely mark papers immediately after the test is taken (M=2.09, SD=1.18, n=248).
b. It was again evident that most Junior High Schools teachers in the Sissala East Municipality least prepare a scoring guide (M=1.63, SD=1.65, n=248).
c. It was apparent that most Junior High Schools teachers in the Sissala East Municipality least make sure that test takers are kept anonymous (M=1.98, SD=1.97, n=248).
d. In similar results, the teachers least kept scores of previous items out of sight (M=1.72, SD=1.86, n=248).
e. Junior High School teachers in the Sissala East Municipality least periodically rescore previously scored items (M=1.90, SD=1.14, n=248).

Teachers indicated that they constantly follow the scoring guide when marking their tests. This process must be hailed since such an attitude would ensure consistency of test scores. This finding supported the assertion that admonishes teachers to constantly follow the marking scheme as they score tests items, as this reduces rater drift, which comes from the likelihood of either not paying attention to the scoring guide or interpreting it differently as time passes (Mehrens & Lehmann, 2001; Amedahe & Gyimah, 2003; & Etsey, 2004).

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Notwithstanding, the result from the research also indicated that most teachers do not often consider reshuffling scripts when scoring their tests. The finding opposed the assertion of Mehrens and Lehmann (2001) who asserted that randomly reshuffling scripts when beginning to score each set of items will minimise the bias introduced as a result of the position of one's script. Research by Hales and Tokar (cited in Mehrens & Lehmann, 2001) has shown that a student's essay grade will be influenced by the position of the paper, especially if the preceding answers were either very good or very poor. Mehrens and Lehmann (2001) have pointed out that random reshuffling scripts is especially significant when teachers are working with high- and low-level classes and read the best scripts first or last.

Another finding of the research indicated that teachers did not often score a particular item on all papers at a sitting. This was probably a result of most teachers in Ghana's attitude of not practising what they learned during their training at school of which Sissala East teachers are not exceptional. This practice has been chastised by Mehrens and Lehmann (2001); Amedahe and Gyimah (2003); and Etsey (2004), who agreeably asserted that responses of the item should be scored item by item rather than script by script. This principle is to minimize the carryover effect on the scores and thereby ensure consistency. However, this finding did not support the findings of Amedahe (1989), who recounted that teachers in the schools used mainly the analytic method in scoring their essay-type tests. He further asserted that teachers in the schools scored their essay-type tests either item by item or script by script. On the part of Quaigrain (1992), he found that majority of teachers in the schools used the analytic method in scoring their essay-type tests.

With regards to scoring, teachers also indicated that they give extra marks to students based on handwriting, gender etc. Perhaps the teachers did that to encourage them to come to school always. This was at the background that students in the various Senior High Schools in the North hardly love to go to school. This practice has been elaborated by Amedahe and Gyimah (2003) and Etsey (2004), who indicated that the mechanics of expressions such as correct grammar usage, the flow of expression, quality of handwriting, orderly presentation of material, and spelling should be judged separately from subject matter correctness. When teachers are influenced by factors other than the subject matter, the marks awarded would represent construct irrelevant or construct mis-representativeness. This simply means higher scores on tests might not reflect the ability of students on the subject matter but rather discriminate students in proficiencies they have over other students.

The results also indicated that anonymity is not ensured when teachers score their tests. This probably may be due to the cultural settings of the people where they believed that they are each other keepers and therefore may want to help one another to succeed. This finding flouts the assertion of Etsey

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(2004) who indicated that scripts must be scored anonymously. He suggested scripts should be identified by code numbers or any other means instead of the names of students. This principle is to reduce the halo-effect. This happens when a scorer's general impression of a person influences how the paper is scored.

Research Question Two: What kinds of achievement test strategies do Junior High Schools teachers in the Sissala East Municipality use to assess their students' learning outcomes?

To obtain a comprehensive result, we assessed the kinds of achievement test strategies do Junior High Schools teachers in the Sissala East Municipality use to assess their students' learning outcomes. In accomplishing this, the responses from the teachers were compiled and ranked using Means and Standard Deviations. The results are presented in Table 5.

Table 5: *Results on the Kinds of Achievement Test Strategies Junior High Schools Teachers in the Sissala East Municipality Use to Assess Their Students' Learning Outcomes*

Kinds of achievement test strategies	N	M	SD	Remarks
Writing Samples	248	3.19	1.65	S
Assessing work samples	248	3.09	1.78	S
Experiments/Demonstrations	248	2.96	0.98	S
Presentations	248	2.16	1.72	NS
Computer simulation task	248	1.95	1.49	NS
Exhibitions	248	1.86	1.54	NS
Projects	248	1.72	1.75	NS
Constructed-Response Items	248	1.67	1.12	NS
Report writing	248	1.66	1.59	NS
Role-play	248	1.63	1.54	NS
Drama	248	1.42	1.53	NS
Story Telling	248	1.09	1.57	NS

Source: Field Data, 2019 Cut-off Mean value=2.50
Key- S=Strategy, NS=Not a Strategy

Table 5 presents the kinds of achievement test strategies Junior High Schools teachers in the Sissala East Municipality use to assess their students' learning outcomes. From the results, it is evident that few of the achievement test strategies are used. Some of the strategies include: writing samples (M=3.19, SD=1.65, n=248); assessing work samples (M=3.09, SD=1.78, n=248); experiments/demonstrations (M=2.96, SD=0.98, n=248).

Some of the kinds of achievement test strategies Junior High Schools teachers in the Sissala East Municipality averagely use to assess their students include presentations (M=2.16, SD=1.72, n=248); computer simulation task (M=1.95, SD=1.49, n=248); exhibitions (M=1.86, SD=1.54, n=248); projects (M=1.72, SD=1.75, n=248); constructed-response items (M=1.67, SD=1.12, n=248); report writing (M=1.66, SD=1.59); role-play (M=1.63, SD=1.54.

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n=248); drama (M=1.42, SD=1.53) and storytelling (M=1.09, SD=1.57, n=248). The results show that generally, Junior High Schools teachers in the Sissala East Municipality averagely adhere to most principles of test construction (MM=2.46, SD=1.44). This may be as a result of some teachers relying on past questions instead of constructing the items on themselves. Some also copy test items directly from textbooks. Yet these problems may happen due to inadequate knowledge of teachers in test constructions. Because if teachers know the principles of test constructions, they will know that it is not ideal to use already constructed items to assess their students.

Conclusion

The results show that generally, the majority of the teachers in the Sissala East Municipality averagely adhere to test administration principles in their achievement tests. It also gave evidence that most Junior High Schools teachers in the Sissala East Municipality have low average scoring abilities and this always affects the achievement test results. Again, it was evident that most of the achievement test strategies were not used among Junior High Schools teachers in the Sissala East Municipality. Teachers having such a sensitive responsibility of assessing and making a decision concerning students' academic progress are expected to be professional in the process of achievement testing strategies.

Recommendations

Concerning the findings resulting from the study, the following recommendations were made for the improvement of testing practices among Junior High Schools teachers in the Sissala East Municipality:

1. More workshops and in-service training should be organized for teachers in Junior High Schools with respect to their testing practices (construction, administration, and scoring of tests). This could be achieved through the collaboration of the ministry of education, the institute of education, and other stakeholders of education.
2. The teacher education division could make it a point to equip the teachers with skills in their testing practices. This is because testing forms an integral part of the teaching profession since it is the most widely used channel for assessing students in Ghana.
3. Teachers could also be sensitized on regular basis on the importance of their testing practices construction, administration, and scoring by the Ghana Education Service training unit.
4. Teachers should be aware of how misleading scores could affect the future of a student. This could be achieved through effective supervision from the office of the education directorate.

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