

SENIOR SECONDARY SCHOOL TEACHERS' TEST CONSTRUCTION SKILL AND TESTING PRACTICES IN OYO STATE, NIGERIA

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ABSTRACT

The study assessed the extent to which teachers in senior secondary school applied principles of test construction and administration in senior secondary school in some selected school in Oyo state. The descriptive research design of survey type was used for the study. Simple random sampling procedure was used to include 533 senior secondary school teachers in Oyo state for the study. Three research questions guided the study. A 16-item, 16-items and 23-item questionnaires for teachers were used for data collection. The Cronbach's coefficient alpha for the teachers questionnaires were 0.73, 0.65 and 0.78 respectively. The results showed that, to a great extent, teachers were not aware of the test construction principles. Also, the results showed that, the teachers were not aware of the meaning of test construction terminologies. Again, it was found out that teachers of senior secondary school were not aware of the test administration principles. Students were made aware of the time the exams will start and the subjects to be written each day and nothing more. It is recommended that teachers are given timely in-service training on test item construction and administration. Furthermore, Oyo state teaching service commission should allocate funds for workshops, seminars and others for teachers on test item construction and administration.

Keywords: *Senior secondary, Teacher, Test construction, Construction skill, Testing practices*

BACKGROUND TO THE STUDY

Planning of the test is the first important step in the test construction. The main goal of evaluation process is to collect valid, reliable and useful data about the student. A test can be used for different purposes in a teaching/learning process. It can be used to measure the entry performance, the progress during the teaching/learning process and to decide the mastery level achieved by the students. Tests serve as a good instrument to measure the entry performance of the students. It answers to the questions, whether the students have requisite skill to enter into the course or not, what previous knowledge does the pupil possess. Therefore it must be decided whether the test will be used to measure the entry performance or the previous knowledge acquired by the student on the subject (Gronlund & Linn, 1993).

Tests can also be used for formative evaluation. It helps to carry on the teaching learning process, to find out the immediate learning difficulties and to suggest its remedies. When the difficulties are still unsolved we may use diagnostic tests. Diagnostic tests should be prepared with high technique (Tyler, 1991). Therefore, specific items to diagnose specific areas of difficulty should be included in the test. Tests are used to assign grades or to determine the mastery level of the students. These summative tests should cover the whole instructional objectives and content areas of the course. Therefore, attention must be given towards this aspect while preparing a test. The second important step in the test construction is to prepare the test specifications. In order to be sure that the test will measure a representative sample of the instructional objectives and content areas we must prepare test specifications. One of the most commonly used devices for this purpose is 'Table of Specification' or 'Blue Print.' Preparation of table of specification is the most important task in the planning stage. It acts, as a guide for the test construction. Table of specification or 'Blue Print' is a three dimensional chart showing list of instructional objectives, content areas and types of items in its dimensions (Ukwuije & Opera, 2012).

There are vast arrays of instructional objectives. We cannot include all in a single test. In a written test we cannot measure the psychomotor domain and affective domain. We can only measure the cognitive domain. It is also true that all the subjects do not contain different learning objectives like knowledge, understanding, application and skill in equal proportion. Therefore it must be



planned how much weightage to be given to different instructional objectives. While deciding this, we must keep in mind the importance of the particular objective for that subject or topic (Magno, 2003).

The second step in preparing the table of specification is to outline the content area. It indicates the area in which the students are expected to show their performance. It helps to obtain a representative sample of the whole content area. It also prevents repetition or omission of any unit. Now question arises as to how much weightage should be given to which unit. Some experts say that, it should be decided by the concerned teacher keeping the importance of the chapter in mind (Osadebe, 2013 & Tyler 1991; Ukwuije and Opera, 2012). Others say that it should be decided according to the area covered by the teacher in the course of teaching-learning process. The third important step in preparing table of specification according to Ukwuije and Opera (2012) is to decide appropriate item types. Items used in the test construction can broadly be divided into two types like objective type items and essay type items. For some instructional purposes, the objective type items are most efficient whereas for others the essay questions prove satisfactory. Appropriate item types should be selected according to the learning outcomes to be measured. For example when the outcome is writing, naming supply type items are useful. If the outcome is identifying a correct answer, selection type or recognition type items are useful. So that the teacher must decide and select appropriate item types as per the learning outcomes. Preparation of the three way chart is last step in preparing table of specification. This chart relates the instructional objectives to the content area and types of items. In a table of specification the instructional objectives are listed across the top of the table, content areas are listed down the left side of the table and under each objective the types of items are listed content-wise.

After planning, preparation is the next important step in the test construction. In this step the test items are generated in accordance with the table of specification. Preparation of test items is the most important task in the preparation step. Therefore care must be taken in preparing a test item (Ukwuije & Opera, 2012). The following principles help in preparing relevant test items. The test items should be so designed that it will measure the performance described in the specific learning outcomes. The test items must be in accordance with the performance described in the specific learning outcome. The items in the test should be so prepared that it will cover all the instructional objectives—Knowledge, understanding, thinking skills and match the specific learning outcomes and subject matter content being measured. When the items are constructed on the basis of table of specification the items became relevant. The item should be clear. Inappropriate vocabulary and awkward sentence structure should be avoided. The items should be so worded that all pupils understand the task (Osadebe, 2013 & Tyler 1991; Ukwuije and Opera, 2012).

According to Osadebe, (2013), Uzunoz, (2011) and Tyler (1991), the test items should have proper difficulty level, so that it can discriminate properly. If the item is meant for a criterion-referenced test its difficulty level should be as per the difficulty level indicated by the statement of specific learning outcome. Therefore if the learning task is easy the test item must be easy and if the learning task is difficult then the test item must be difficult. In a norm-referenced test the main purpose is to discriminate pupils according to achievement. So that the test should be so designed that there must be a wide spread of test scores. Therefore the items should not be so easy that everyone answers it correctly and also it should not be so difficult that everyone fails to answer it. The items should be of average difficulty level.

According to Uzunoz (2011), he said sometimes there are some unintentional clues in the statement of the item which helps the pupil to answer correctly. For example grammatical inconsistencies, verbal associations, extreme words (ever, seldom, always), and mechanical features (correct statement is longer than the incorrect). Therefore while constructing a test item careful step must be taken to avoid most of these clues. The items should be universal in nature. Care must be taken to make a culture fair item. While portraying a role all the facilities of the



society should be given equal importance. The terms used in the test item should have an universal meaning to all members of group (Osadebe, 2013 & Tyler 1991).

According to Ukwuije and Opera (2012), the most neglected aspect of the test construction generally everybody gives attention to the construction of test items but test makers do not attach directions with the test items. A written statement about the purpose of the testing maintains the uniformity of the test. Therefore there must be a written instruction about the purpose of the test before the test items. Clear cut instruction must be supplied to the pupils about the time allowed for whole test. It is also better to indicate the approximate time required for answering each item, especially in case of essay type questions. So that the test maker should carefully judge the amount of time taking the types of items, age and ability of the students and the nature of the learning outcomes expected. Experts (Osadebe, 2013; Ukwuije & Opera, 2012; Gronlund & Linn, 1993 and Thordike & Hagen, 1977) are of the opinion that it is better to allow more time than to deprive a slower student to answer the question. Test maker should provide specific direction on the basis of which the students will answer the item. Direction must clearly state whether the students will select the answer or supply the answer. In matching items what is the basis of matching the premises and responses should be given. Special directions are necessary for interpretive items. In the essay type items clear direction must be given about the types of responses expected from the pupils.

According to Osadebe (2013), students should be instructed where and how to record the answers. Answers may be recorded on the separate answer sheets or on the test paper itself. If they have to answer in the test paper itself then they must be directed, whether to write the correct answer or to indicate the correct answer from among the alternatives. In case of separate answer sheets used to answer the test direction may be given either in the test paper or in the answer sheet. Direction must be provided to the students whether they should guess uncertain items or not in case of recognition type of test items. If nothing is stated about guessing, then the bold students will guess these items and others will answer only those items of which they are confident (Tyler, 1991). So that the bold pupils by chance will answer some items correctly and secure a higher score. Therefore a direction must be given 'to guess but not wild guesses.'

A marking guide increases the reliability of a test. The test maker should provide the procedure for scoring the answer scripts. Directions must be given whether the scoring will be made by a scoring key or by a scoring stencil- when answer is recorded on separate answer sheet- and how marks will be awarded to the test items (Tamakloe and Amedahe, 1996). In case of essay type items it should be indicated whether to score with 'point method' or with the 'rating' method.' In the 'point method' each answer is compared with a set of ideal answers in the scoring key. Then a given number of points are assigned.

Once the test is prepared now it is time to be confirming the validity, reliability and usability of the test. Try out helps us to identify defective and ambiguous items, to determine the difficulty level of the test and to determine the discriminating power of the items (Osadebe, 2012). Administration means administering the prepared test on a sample of pupils. So the effectiveness of the final form test depends upon a fair administration. Gronlund and Linn (1995), have stated that 'the guiding principle in administering any class room test is that all pupils must be given a fair chance to demonstrate their achievement of learning outcomes being measured.' It implies that the pupils must be provided congenial physical and psychological environment during the time of testing. Any other factor that may affect the testing procedure should be controlled.

Magno (2003) opined that physical environment means proper sitting arrangement, proper light and ventilation and adequate space for invigilation, Psychological environment refers to these aspects which influence the mental condition of the pupil. Therefore steps should be taken to reduce the anxiety of the students. The test should not be administered just before or after a great occasion like annual sports on annual drama etc. Once the test is administered and the answer scripts are obtained the next step is to score the answer scripts (Oduro- Okyireh, 2008).



According to Thordike and Hagen, (1977), evaluating the test is most important step in the test construction process. Evaluation is necessary to determine the quality of the test and the quality of the responses. Quality of the test implies that how good and dependable the test is? (Validity and reliability). Quality of the responses means which items are misfit in the test. It also enables us to evaluate the usability of the test in general class-room situation.

The difficulty level of an item is expressed in terms of the proportion of examinees that get the item correct. There is a problem here in that tradition somehow got backwards and the index which really tells how easy the item is (proportion that gets it correct) is called the difficulty index (Gronlund and Linn, 1995). You must simply learn to keep this straight because it is too late to change the tradition. Hard items have low difficulty indices – near zero. Easy items have high difficulty indices – near 1.00. It is too bad that this problem exists, but it does, and there is no solution except to keep your thinking straight about what the difficulty index is – the proportion that get the item correctly (Thordike and Hagen, 1977).

As with analysis for difficulty for discrimination analysis the tests must first be scored. But this time we must also put the papers into rank order according to the score, because now we want to select the papers with the highest scores and the papers with the lowest scores and see whether the people in the former group got a particular item correct while those in the latter got the item wrong (Gronlund and Linn, 1995). First compute the median, thereafter decide those scores above the median and those below the median. Find the U + L scores and also determine U – L scorers (Upper, Lower (U + L) & (U – L))

Find the percentages of each group from there you get which of these questions is discriminating. For some items, further analysis will assist in evaluating the items or in improving them. This consists of an analysis of the effectiveness of each alternative response to the item – especially of the effectiveness of the distracters. As we have said; ideally the alternatives of an item show the following pattern.

- 1) Every alternative should be marked by at least one examinee/testee
- 2) More examinees in the upper group than in the lower group should answer the correct alternative
- 3) More examinees in the lower group than in the upper group should answer each distractors
- 4) More than half of the examinees should answer the correct alternative and the nearer the proportion is to the optimal proportions that were presented earlier, the better.

However, it is not really necessary to analyse the functioning of the distracters of every item in a test. Distractors with lower values may be improved through distractors analysis and even the very easy items may be improved through the removal of distractors that are unused.

Evaluation process also estimates to what extent a test is consistent from one measurement to other. Otherwise the results of the test cannot be dependable. Try out and the evaluation process indicates to what extent a test is usable in general class-room condition. It implies that how far a test is usable from administration, scoring, time and economy point of view.

Purpose of the Study

The purpose of this study is a follow up of what the teachers received in training, to determine the level of competence of teachers teaching in senior secondary school as regards their knowledge and skills and constant utilization of sequential stages of test construction of teacher made achievement test. To find out if the teacher made tests constructed by the teachers in Oyo state, Nigeria, as a tool for assessing students' level of achievement, possess the basic psychometric properties. Find out if gender difference in teacher has any significant relationship with their knowledge of test construction.

Research Questions

RQ 1: Do senior secondary school teachers know how to construct test item in line with general principles of test construction?



RQ2: Do senior secondary school teachers aware of major terminologists of test construction in line with general principles of test construction?

RQ3: Do senior secondary school teachers know how to conduct test in line with general principles of test administration?

METHODOLOGY

Research Design

This study made use of descriptive research design of survey type which does not involve direct control of any variable or any experimental manipulation.

Population

The target population for this study consists of all senior secondary school teachers teaching senior school students in various subjects in some selected secondary schools in Ibadan metropolis, Oyo state.

Sample and Sampling technique

The study is restricted to all senior secondary schools in Ibadan Metropolis, Oyo state. The sample for this study was made up of five hundred and thirty-three (533) teachers from the sampled schools using simple random sampling procedure to select the participants in each school. All the teachers in the participating schools are qualified to participate in the study. In all, the sample comprises of 322 males and 211 female teachers in different areas of specialization like Arts, Social sciences or Commercial subjects and Science subjects. 16.9% are PhD holders while 21.6% are Master's degree holders and 61.5% are first degree holders and they have at least 5 years work experience.

Instrumentation

The participants were asked to prepare test in their area of specialization and were asked to follow the exact way(s) they have been using in their various schools in the course of setting objective or essay questions. Thereafter, they were asked to make a synopsis of the steps they normally followed in conducting examinations in their schools. The checklists of the steps to be followed in test construction and steps to be followed in test administration were given to them to strongly agree, agree, and disagree and to strongly disagree with the procedural to be followed.

Data Collection Procedure

In all the schools used for the study the teachers were gathered at a given hall to demonstrate their skills in test construction and test administration. Both the work and question given to them on the two skills were retrieved from the participants after said and done. The questionnaire and the construction, practical and test administration procedures listed were graded and the data were analysed using descriptive statistics and percentages by the researcher.

Method of Data Analysis: Data were analyzed using descriptive statistics of frequency counts, tally and percentages. The results are as shown below under results.



RESULTS

RQ 1: Do senior secondary school teachers know how to construct test item in line with general principles of test construction?

Table 1: Frequency Count Showing the Technical Know-how of Senior Secondary School Teachers Knowledge of construction of test items in line with General Principles of Test Construction

Steps to be followed in Generating Items	SA %	A %	D %	SD %	Decision "NK" (No Knowledge)
I used scheme of work every term before set my question paper	10.20	20.70	36.40	32.70	NK
I determine the test objectives based on scheme of work	23.00	12.00	34.10	30.90	NK
I determine the test contents based on scheme of work	14.40	13.70	36.80	35.10	NK
I prepare a test blueprint as a guide in the test construction	23.30	14.50	34.00	28.20	NK
Based on table of specification I write out the test items	20.50	15.00	38.20	26.30	NK
I typed out the test items	12.80	15.00	41.10	31.10	NK
I organize test items in a logical manner	11.70	14.20	46.80	27.30	NK
I gave clear instructions to guide the testees	8.60	10.20	57.40	23.80	NK
I administered prepared test items on sample of testees	14.00	13.40	47.00	25.60	NK
Scripts are marked according to marking guide	11.3	23.70	36.80	28.20	NK
Items analysis are carried out	25.20	14.50	34.00	26.30	NK
The items that passed both difficulty and discriminatory indices are selected	20.20	14.70	38.00	27.10	NK
These items are re-administered on sample of testees	16.60	15.00	41.10	27.30	NK
The test scripts are marked and the psychometrics properties are computed	15.20	14.20	46.80	23.80	NK
Test manual are prepared in terms of marking guide, test score interpretation and usability	20.20	10.70	37.20	31.90	NK
The test items are documented	9.00	20.00	38.00	33.00	NK

The results from Table 1 showed that the senior secondary school teachers do not know how to construct test items in line with general principles of test construction. Majority of the participants do not know the procedures to be followed in constructing test items like planning, generation of items, trial testing the items generated, item analysis and selection of items that passed the conditions of item analysis.

RQ2: Do senior secondary school teachers aware of major terminologists of test construction in line with general principles of test construction?



Table 2: Frequency Counts Showing the Technical Know-how of Senior Secondary School Teachers Knowledge of Major Terminologies in Test Construction & its Meaning

Major Terminologies in Test Construction & its Meaning as Applicable to Test Construction.	Applicable Freq(%)	Not Applicable Freq(%)	Decision "NK" (No Knowledge)
Planning the Test	77(14.45)	456(85.55)	NK
Item Writing	43(8.07)	490(91.93)	NK
Table of Specification/test blueprint	10(1.88)	523(98.12)	NK
Item Difficulty	76(14.26)	457(85.74)	NK
Item Discrimination	43(8.07)	490(91.93)	NK
Testees	76(14.26)	457(85.74)	NK
Item Analysis	43(8.07)	490(91.93)	NK
Test Reliability	11(2.06)	622(97.94)	NK
Test Validity	78(14.63)	456(85.37)	NK
Psychometrics properties	46(8.63)	487(91.37)	NK
Standardised test	14(2.63)	519(97.37)	NK
Cognitive Domain	83(15.57)	450(84.43)	NK
Affective Domain	51(9.57)	482(90.43)	NK
Psychomotor Domain	20(3.75)	513(96.25)	NK
Item Generation	189(35.46)	344(64.54)	NK
Bloom Taxonomy	158(29.64)	375(70.36)	NK

The results from Table 2 showed that the teachers of senior secondary school do not have the knowledge of Technical Know-how of major terminologies in test construction and its meaning. The percentage response of the respondents indicated that majority of the terminologies are not known by the senior secondary school teachers neither did they know the meaning of the terminologies in the field of educational measurement. The meaning of terminologies that are not known to them are planning, generation of items, trial testing the items generated, item analysis, reliability, validity, cognitive domain, standardized test, psychomotor domain and affective domain and Bloom taxonomy.

RQ3: Do senior secondary school teachers know how to conduct test in line with general principles of test administration?



Table 3: Frequency Counts Showing the Technical Know-how of Senior Secondary School Teachers Knowledge on Steps to be followed in Conducting Examination

Steps to be followed in Conducting Examination	SA %	A %	D %	SD %	Decision "NK" (No Knowledge)
Style of examination – unseen paper	20.70	10.20	32.70	36.40	NK
Format of papers – Instruction guiding the written and conduct of examination	12.00	23.00	30.90	34.10	NK
Security of papers	13.70	14.40	35.10	36.80	NK
Examination timetable	14.50	23.30	28.20	34.00	NK
Accommodation	15.00	20.50	26.30	38.20	NK
Alternative examination venues in case of emergency	15.00	12.80	31.10	41.10	NK
Examination concessions	14.20	11.70	27.30	46.80	NK
Use of calculators should be allowed for science subjects/courses	10.20	8.60	23.80	57.40	NK
Electronic devices	13.40	14.00	25.60	47.00	NK
Invigilation arrangement (2 invigilators for 40 students) and vice-versa	23.70	11.3	28.20	36.80	NK
Students identification to ensure no impersonation	14.50	25.20	26.30	34.00	NK
Question papers, stationery materials and other equipments should be similar for all testees	14.70	20.20	27.10	38.00	NK
All testees must be given same question paper	15.00	16.60	27.30	41.10	NK
Students are free to raise query on the question paper	14.20	15.20	23.80	46.80	NK
Supervision must be thorough throughout the exam period	10.70	20.20	31.90	37.20	NK
Late arrival of candidate is allowed within 30 minutes of commencement	20.00	9.00	33.00	38.00	NK
Leaving the examination room is not allowed in the first hour of commencement of examination	23.70	18.89	35.10	22.31	NK
Irregular conduct – testee can be expelled with the involvement of chief examination officer of the Department/College/School	24.50	19.10	28.20	28.20	NK
Infringement of examination regulation shall be judged as academic misconduct policy	25.00	22.40	26.30	26.30	NK
Emergencies – appropriate action must be taken with immediate effect	21.00	16.80	31.10	31.10	NK
At the end of the examination – candidates must be told to prepare to stop 10 minutes to the actual time given to the paper	24.20	21.20	27.30	27.30	NK
Collection of unused stationery must be collected first	17.20	35.20	23.80	23.80	NK
Examination attendance records must be collected with the real examination scripts to prevent non submission of examination script which could lead to looking for paper that was not submitted	23.40	20.79	25.60	30.21	NK

The results from Table 3 showed that the senior secondary school teachers do not know how to conduct test in line with general principles of test administration. Administration and conduct of examination is not clear to teachers of senior secondary school they lack the knowledge that has to do with Style of examination, examination format, security of question paper, examination timetable, accommodation, invigilation arrangement, uniformity of examination materials, thorough supervision, mode of behaviour of testees in the examination room/hall and attendance records for the testees.

DISCUSSION OF FINDINGS

The purpose of research question one was to find out from the teachers of senior secondary school their level of awareness of test construction principles. The findings from the study revealed that in general, the teachers of senior secondary school who participated in the study are not aware of the test construction principles. Some of the test construction principles indicated by the teachers of senior secondary school who participated in the study include defining the



purpose of every test, determining the test items format, preparing marking scheme as soon as test items are written, test items covering adequately all aspects of students learning, preparing test specification table for every test, not copying items from textbooks verbatim and others. The teachers of senior secondary school awareness of these test construction principles would aid them to know the kind of test items to construct to assess their students. The findings of the study would also help the teachers of senior secondary school to educate other colleagues who may not be privy to the principles regarding test construction principles. The findings from the study was not supported by previous findings of Magno (2003) who in his study found that the teachers of senior secondary school were aware of general principles, guidelines and procedure in test construction. The results further indicated that majority of the teachers of senior secondary school who participated in his study were aware of test construction principles. The findings also were against the research findings of Oduro-Okyireh (2008). In the literature, Oduro-Okyireh pointed that teachers were aware of the basic principles in test construction such as defining the purpose of test, preparing test specification table and others.

The purpose of research question two was to find out from the teachers of senior secondary school who participated in the study whether they adequate knowledge in terms of the meaning of test construction terminologies. These include defining and know the purpose of every test construction terminologies. The meaning of terminologies that are not known to them are planning, generation of items, trial testing the items generated, item analysis, reliability, validity, cognitive domain, standardized test, psychomotor domain and affective domain and Bloom taxonomy. This could also help to know the strengths and weaknesses of the teachers in senior secondary school in the test construction skills and by writing clear and concise directions for the entire test and sections of the test during test items construction. These findings did not confirm the findings of Etsey (2004) which indicated that teachers' competencies and skills in writing clear and concise directions for test will help students to respond to test items effectively. This would prevent students from asking invigilation assistants questions regarding the tests and hence avoid students cheating in the test.

The purpose of research question three was to find out from the teachers of senior secondary school their level of awareness of test administration principles. The findings from the study showed that the teachers of senior secondary school involved in the study were not aware of the test administration principles. The teachers of senior secondary school who participated in the study indicated the following as some of the test administration principles they are aware of; students are made aware of the rules and regulations governing the test, the purpose of the test is communicated to them, students are made aware of the content areas the test will cover, when the test will be given, preparing for eventualities such as power outages and silence when examinations in progress sign only. Since the teachers of senior secondary school are not awareness of the test administration principles how would they help to prepare students for examinations since students would not know the nature and when the test would be taken. The findings of the study are not in line with the findings of Etsey (2004) who found out in his study that teachers' awareness of test administration principles would first and foremost helps them to prepare their students in advance for the test. He further emphasized that for students' maximum performance, they should be made aware of when (date and time) the test will be given, the conditions (number of items, place of test, open or closed book) under which the test will be given, the content areas that the test will cover, the emphasis or weighting of content areas, the kinds of items (objective-types or essay-types) on the test, how the test will be scored and graded, and the importance of the results of the test. The participants claimed that unannounced test is meant to prepare the testees ready 24/7. The results of the study further did not corroborate research findings of Tamakloe et al., (1996). Tamakloe et al., revealed that teachers were aware of the test administration principles. The awareness level would aid teachers to ensure quietness in the vicinity, good lighting and ventilation. Adequate work space is very essential for test administration

because when tables and chairs are closely arranged together, students will not have the independence to work on their own. This will in no doubt lead to students copying from each other.

Conclusions

On the application of the principle of test construction, the teachers of senior secondary school generally reported they applied the principles when constructing test items. But when they asked to demonstrate how they constructed items in their various subjects reverse was the case because there is no evidence that they put the principles of test construction in practice. It could therefore, be concluded that, to a great extent, the teachers of senior secondary school in the selected schools did not apply test construction principles in the sense that they were unable to construct test items in line with the principles of test construction. Also, the class size could not allow them to administer tests as expected.

Recommendations

From the findings from the study, it was evidently clear that the teachers of senior secondary school who participated in the study were not aware of test construction, lack knowledge of meaning test construction terminologies and administration principles. The application of test administration principles by the teachers of senior secondary school was very low. I therefore, provide the following recommendations to serve as motivation for the teachers of senior secondary school regarding test item construction, meaning of terms and administration.

- 1) I recommend that the teachers of senior secondary school are given timely in-service training on test item construction. The purpose of this is to help the teachers of senior secondary school advance their knowledge with contemporary issues regarding test item construction.
- 2) They should be given training on conduct of tests and examinations as well.. This would also help the teachers of senior secondary school to adopt the contemporary procedures of conducting tests thereby, improving the reliability of the test results.
- 3) I recommend that the teachers of senior secondary school should be encouraged by the TESCO not to hint students who have problems on test items.
- 4) I recommend that the teachers of senior secondary school should write test items in advance, prepare test specification table and should reduce copying directly from textbooks.
- 5) I recommend that the Principals in each school put students in smaller class sizes. This would help the teachers of senior secondary school to overcome most of the challenges such as difficulty in controlling students in large class sizes during quizzes and examinations thereby ensuring sound atmosphere during quizzes and examination.

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