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# Knowledge, Attitude and Practice of Classroom Assessment: Implications on the Implementation of School-Based Assessment in Malawi

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KNOWLEDGE, ATTITUDE AND PRACTICE OF CLASSROOM ASSESSMENT:  
IMPLICATIONS ON THE IMPLEMENTATION OF SCHOOL-BASED  
ASSESSMENT IN MALAWI

MASTER OF EDUCATION RESEARCH PROJECT

By

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## ABSTRACT

### KNOWLEDGE, ATTITUDE, AND PRACTICE OF CLASSROOM ASSESSMENT: IMPLICATIONS ON THE IMPLEMENTATION OF SCHOOL-BASED ASSESSMENT IN MALAWI

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The study investigated a sample of Malawi Secondary School teachers' knowledge, attitude and practice of classroom assessment. A knowledge of classroom test and an attitude towards classroom test survey were administered to 51 qualified teachers from six randomly selected secondary schools. Focus group discussions were also conducted to get an in depth understanding of the problem under investigation. Two schools were national secondary schools; two were district boarding schools and the other two were district day secondary schools. The results of the study indicate that although the teachers had positive attitude towards classroom assessment, they had very limited knowledge in this area. Problems that teachers face and how they could be improved are suggested. Recommendations and suggestions for future research studies are provide.

## Introduction

The Malawi Government Ministry of Education Science and Technology (MoEST) strives to improve the quality and relevance of education in Malawi in general and of secondary schools in particular. In its Policy Investment Framework (PIF), MoEST stated that “ The Ministry of Education shall require all secondary schools to strengthen their internal student assessment systems and to issue certificates of attendance to those who do not complete four years of secondary education” (Policy Statement No.4.3.5, p. 27). Another related policy states that secondary school education examinations will be reformed. School-based assessment will replace junior certificate of education (JCE) examinations. School-based assessment means that student assessment will be done internally by the school-teachers. Strengthening student assessment in secondary schools is a move in the right direction, as it will likely improve the quality of teaching and learning in the classrooms. At the same time it will reduce the expenses that the Malawi national Examinations Board (MANEB) incurred in test development, administration, scoring and reporting. Determining student achievement after instruction is very important, as it will enable teachers to monitor and evaluate students’ performance. However, for this policy to be successfully implemented, a number of issues need to be taken into account. These include communicating to all stakeholders, whether the policy will be accepted or face resistance and qualified personnel to implement it. The situation in Malawi is that there are more underqualified than qualified teachers in the system. Although there are a number of issues that are to be considered for the successful implementation of the policy, the major concern is the capacity of the secondary schools. In other words, do the secondary schools have qualified teachers who are knowledgeable to carry out the school-based assessment to the required standard expected by the MoES&T? In a related development, Jere (2000) noted that although the government of Malawi had made a tremendous effort in introducing free primary education (FPE) in Malawi, which has equalized

opportunities for all students irrespective of ethnicity, gender, and urban dichotomy, teachers' attitudes, however, which are fundamental to any innovation, had not changed. In addition, in the United States of America there is evidence that teachers have negative attitudes towards standardized tests and limited knowledge of important testing concepts such as reliability and validity (Impara & Plake, 1999, Sireci; Washington & De Leon, 2002). Knowledge of classroom assessment procedures as well as principles of testing and assessment is vital. Classroom assessment as defined by Stiggins, M. (1988) is taken to mean the tools teachers use to determine whether the pace of instruction is appropriate and whether their instructional objectives have been met. They are the assessments that determine to a large extent what grades students receive and how they perceive their school experiences (p.12). It has been estimated that teachers spend up to 50% of their instructional time in assessment-related activities (Stiggins, 1991). However, studies have shown that teachers receive little or no formal assessment training in the preparatory programs (Schaffer, 1993; Schaffer & Lissitz, 1987; Wise, Lukin & Roos, 1991). Again, Ward, (1980) reported that teachers felt ill prepared to undertake assessment- related activities. In order to find answers to the above question a research study aimed at finding out the teachers' knowledge, attitude and practices of classroom assessment was carried out.

### Statement of the Problem

The introduction of school- based assessment in secondary schools in Malawi will be a milestone in the history of educational assessment in Malawi. Teachers will have more assessment responsibilities as they will be required to make far-reaching decisions on the assessment they carry out besides assessment of pupils' achievement of instruction based on the content taught. This will be different from the current system. Teachers administer weekly tests, end of unit tests as well as end of term tests. In addition, students are required to write the national junior certificate of education (JCE)

at the end of Form 2 and the Malawi School Certificate of Education (MSCE) examinations administered by MANEB after Form four. Teacher assessments that are of good quality will be ideal in monitoring students' progress achievement. However, in a recent study in Malawi, it was shown that secondary school teachers were aware of the purposes of assessments both internal (teacher-made tests) and external (administered by the Malawi National Examinations Board (MANEB)) as providing feedback, diagnosis for planning purposes and for motivating students to learn. It was also reported that teachers' perceived purposes of external assessments/public examinations were for grading, certification and selection, checking standards, classification of learners, and decision-making by politicians (Kholowa, 1999). Teachers' knowledge of the purposes of examination was not a surprise as secondary school teachers take an introductory course in principles of testing measurement and evaluation during pre-service training. This course is aimed at equipping teachers in training with the knowledge and skills in the development, administration, scoring, and interpretation, reporting and using test scores. It is important for teachers to have these skills since it will help them in making decisions regarding the development, selection, use, reporting, and interpretation of test scores. All of these are central in as far as classroom assessment is concerned. Moreover, teachers in Malawi play an important role in the field of test construction for national examinations administered by MANEB. Some teachers are hired as examination setters (item writers) and moderators. Although teachers had indicated knowledge of the purposes of assessment and other assessment related issues in the study done by Kholowa (1999), the problem was how do they put that knowledge into practice when they construct and administer classroom tests, as well as when they analyze, interpret and report test scores. In other words, how do Malawi secondary school teachers put their knowledge in classroom assessment into practice?



## Purpose of the study

The fact that teachers should be knowledgeable in principles and practice of psychological and educational testing cannot be overemphasized. Teachers are required to determine what pupils have achieved after undergoing any instruction. They are also expected to communicate pupils' progress to concerned parties such as the parents and the general public. They are also expected to provide feedback regarding the effectiveness of the curriculum taught. Only teachers knowledgeable in the principles of testing, measurement and evaluation would be able to do this. Studies on knowledge, and attitude of classroom assessment have been done elsewhere in the United States of America (Stiggins, 1991; Plake, 1999). Although these studies have investigated the knowledge, attitude and classroom practices of teachers, administrators and counselors, no such studies have been conducted in Malawi. The purpose of the study is to describe the current knowledge and attitude levels of Malawian secondary school teachers in terms of classroom assessment and how it affects classroom assessment practice. Specifically, the study attempted to address the following research questions:

- a) What do Malawian secondary school teachers know about classroom achievement test development, administration, and test score interpretation?
- b) How do Malawi secondary school teachers prepare tests to assess their students?
- c) How do Malawian secondary school teachers use the knowledge in classroom assessment when developing, administering, and interpreting test scores?
- d) How are tests analyzed and interpreted?
- e) To what extent do Malawian secondary school teachers use test scores?
- f) What are the attitudes of Malawian secondary school teachers toward classroom assessment?

- g) What are the problems teachers face as they develop, administer, interpret and report test scores?

### Significance of the Study

At a National Symposium on Assessment that was held in Malawi, it was noted that the national examinations currently in practice had some deficiencies. Hence it was suggested that continuous assessment should be provided along side National Examinations to circumvent the problem encountered in a one-off examination system (Khembo, 2001). One-off examinations mean that the examinations are conducted once at the end of either junior secondary school level (junior high school) or at the end of senior secondary school level (senior high school). As an alternative, a student final score would be a composite of continuous scores and score obtained from the national examinations. The continuous assessment would include tests, and projects that teachers give students in the course of the year, which will contribute to the final assessment. The argument put forward for continuous assessment is that they will reflect the kind of learning or pupil achievement. This will help improve pupil performance at the end of their studies since decisions of passing or failing will be a composite score of continuous assessment score and National Examination score. Again, this approach would help improve future decision-making and also support good teaching and learning. In addition, the new policy as contained in the Policy Investment framework (PIF) will exert an added pressure on the secondary school teachers in the production of quality tests. However, all this can be achieved only if the teachers are knowledgeable in classroom assessment and actually apply this knowledge as they develop, administer and interpret test scores. A study like this one would be important now than ever before in the light of the new classroom assessment policy.

The staff that handles examinations at MANEB and all other teachers that set examination papers lack training in issues concerning assessment. Noting the lack of qualified staff on issues

concerning assessment in Malawi in general and at MANEB and Chancellor College in particular, the government of Malawi launched an advanced Degree Activity. The aim was to train personnel that will help build capacity at Chancellor College so as to introduce higher degrees in Policy and Planning and in Testing Measurement and Evaluation. Therefore, it was envisaged that a study like this one would contribute information regarding teachers' knowledge and practice on classroom assessment. The results of the study will enable the course developers of Testing, Measurement and Evaluation to take into consideration the needs of Malawian secondary school teachers. Moreover, the results of the study will have a potential in shedding some light on whether Malawi could really introduce continuous assessment in her schools. Again, in view of the continued efforts to improve the quality of education in Malawi in general and the quality of examinations in particular, the results of the study will have the potential to contribute knowledge that will be useful to curriculum developers in the universities and colleges of education in testing, measurement and evaluation.

#### Review of the related literature

This section discusses literature on teachers knowledge, attitude and practice of classroom assessment and how it is put into practice when developing, administering, analyzing and interpreting test scores.

##### *Teacher Education in Malawi*

As Lockheed and Verspoor (1991) noted, teacher-training courses differ widely depending on their assumptions about what teachers need to have in order to develop those abilities. However, teachers basically need knowledge of content, general pedagogy, the curriculum, learners and their characteristics, and educational aims. Teachers need also to acquire teaching skills which include preparation of lessons and schemes of work, delivering and presenting lessons in a variety of ways, managing classes and evaluating pupils' learning and their own teaching.

The education foundation courses offered which include Testing, Measurement and Evaluation are very essential in the teacher preparation program. Teachers need to be well prepared for their future roles. The role of a teacher in educational process is very vital and crucial because s/he has to guide and facilitate the learning of young men and women who will be future leaders. As Wyeth and Watson (1955) observed, a teacher is a counselor, assessor, advisor and designer of situations or environment to overcome tension, anxiety and facilitate learning and development of the child. For a teacher to assume these roles, there is need for thorough grounding in the theoretical concepts and practical aspects of the theory.

#### *Teachers' knowledge of classroom assessment*

As mentioned elsewhere, one of the teacher's roles is to be assessor of the learning. One way in which this may be achieved is through the administration of tests. As Ongom (1989) contends, written achievement examinations are well suited for measuring the examinees' command of knowledge. The results of these examinations can be beneficial to the learner, the teacher and other key players like parents as they can be used for decision making. Mkandawire (1990) lists two main purposes of assessment, which are instructional decisions and guidance and counseling. Under instructional decisions, he identified two areas. The first is in monitoring decisions where assessment can be used to facilitate student learning through frequent tests to monitor their progress so as to be able to identify areas where change may be needed to modify instruction. This assessment when integrated with instruction, can lead to the improvement of the quality of education. The second use is for diagnostic decisions, which are aimed at identifying areas of weakness or strengths in individual learners and then ascertain the nature of the deficiencies to provide corrective measures.

Under the guidance and counseling purpose of assessment, examinations provide needed information and advice to enable the learner to make an individual decision that will pay off in the long run.

All the above purposes of assessment can be obtained if examinations are held with the utmost care and attention they deserve. As Ongom (1989) stated, achievement examinations need to be technically correct, having in the first place been constructed by people who are well versed in the knowledge and skills to be tested.

#### *Putting theory into practice*

A number of studies have been conducted to find out the factors that affect people to perform to the required standards. The Center for Educational Research and Training (CERT) in Malawi conducted an evaluation of The Malawi Special Teacher Education Project (MASTEP) in order to assess the worth of the program as a strategy for producing professionally qualified primary school teachers in Malawi. The results indicated that due to some other problems, professional preparedness and professional competencies were greatly compromised as a result the quality of the teachers was rather lower than the program anticipated when compared with other approaches that were there before. Here it can be said that what was hoped to be achieved was not achieved due to some other factors.

Ndalama (1989) conducted a study to examine why examinees performance at Malawi School Certificate Examinations (MSCE) at credit/ distinction in subjects like Agriculture, Bible Knowledge, commercial Studies, English, History and Needlework was going down. The results of the study showed that candidates' performance was affected greatly by their literary competency and availability of teaching and resources. This clearly indicates a discrepancy between what was expected and the reality. However, in this study nothing was mentioned about how teachers prepared the learners in

readiness for such examinations. For example, it is important to know how much practice was put into those subject areas to improve performance.

### *The Process of Classroom Assessment*

As stated earlier on, tests are administered so as to get important information about the learners with the aim of making decisions. Any test administration, is therefore, a data-gathering occasion and as such, like any other procedure, it needs to be systematic. Millman and Greene, (1985) outlined a number of questions that should be addressed in the development of an educational measure. In a related development, Crocker and Algina (1986) provide a list of steps that should be followed in the test development process. The questions and the steps that are to be followed in the test development process indicate that test development needs to be systematic and should be approached with all the seriousness it deserves in order to come up with good quality items that will be useful as well as those that satisfies accepted standards. In the development of classroom test, the aim is to find out the pupils' achievement of the content taught. It is therefore of great importance to identify the primary purpose(s) for which the test scores will be used; identify the behaviors that represent the construct; prepare a set of test specifications and test blueprint; decide the format of the test; construct an initial pool of items that should be revised as need be; and develop guidelines for administration, scoring, and interpretation of scores. A teacher needs to be conversant with the subject matter content in addition to the cognitive domains and behaviors that represent the constructs. Besides knowledge of these steps in test development, a classroom teacher needs also to be knowledgeable in the technical skills involved in estimating and ensuring that tests are valid as well as reliable.

## Summary

The review of the related literature has shown that teachers whose responsibility is to transmit knowledge that is worthwhile need to be knowledgeable not only in the theory of teaching and learning but also in the practice aspect of it. It has also been indicated that for teacher training to succeed there is need to strike a balance between theory and practice. This has been evidenced by the existence of disparities that exist when follow up studies have been conducted to find out how theory gained during pre- service training of teachers is actually put into practice. It has been noted that a gap does exist between what the trainees learn and what actually happens in the field.

The review has also shown that teachers need to have strong background knowledge in the principles of testing so that they are able to put that knowledge into practice as they develop, administer and interpret tests. However, these skills, though important are not easy. They require training and experience. The teacher must know the importance of testing, their types, and uses. It can be seen that assessment is a serious business for teachers and other stakeholders as important decisions can be made from them. In Malawi, there is an outcry that the quality of education has gone down as evidenced by very low pass rates at the Malawi School Certificate of Education (MSCE) examinations. This outcry is due to factors such as the majority of teachers in the system are underqualified, poor quality teachers, low teacher morale, and many others. No effort has been made to examine how the teachers prepare their students for examinations. In fact, there has been no follow up studies done to find out how the knowledge gained at pre-service training in general and in principles of testing, measurement and evaluation, in particular, is actually put into practice. It is important that teacher education program should be designed in such a way that the trainees should be helped to acquire knowledge and also be confident in putting that knowledge into practice.

This study addresses the deficiencies in the literature by examining the Malawi secondary school teachers' knowledge, attitude and practice of classroom assessment.

### Method

The intent of the study was to find out and describe teachers' knowledge, attitude and practice of classroom assessment. Two types of research methods were used. A test and survey instrument was developed. The test contained multiple-choice items on knowledge of classroom test (KOCT) and the survey contained a Likert scale on the attitude towards classroom test (ATCT). It also contained items on background information and open-ended response items. Focused group discussion was also used to gather data. Marshall and Rossman (1999) justify the use of questionnaires in research to "learn about the distribution of characteristics, attitudes, or beliefs" (p.129).

The test and survey were used to get a broader picture of the participants' knowledge, attitudes and practice of classroom assessment while the focused group discussion was used to tap more information which the survey may not have covered and also to get an in depth understanding of the situation on the ground. It was hoped that the mixed study design would provide more insights into the problem under investigation.

### Test

Teachers' knowledge of classroom assessment was measured by knowledge of classroom test (KOCT). This scale comprised twenty-five items. Twenty-three items were multiple-choice and the other two were true/false items. The items are presented in Appendix A. Fourteen of these items were adapted from a scale used by Sireci, DeLeon and Washington (2002). The researcher developed the remaining eleven items. Items on this test were based on the content of the principles of testing and measurement course that teachers study during pre-service in Malawi at Chancellor College and Domasi College of Education. The areas tested in the KOCT were on fundamental measurement



concepts like test score statistics (measures of central tendency and variability), test construction, qualities of a good test (reliability, validity) and test score reporting and interpretation and test-wisness. A list of topics measured on this test and the number of items in each topic are presented in Table1.

### Survey

The survey contained an attitude toward classroom test (ATCT) scale. It contained twenty-one items. Thirteen of them were Likert items. Participants had to choose from a five-point scale that ranged from strongly agree to strongly disagree. Ten of these items were adapted from a scale used by Sireci, Washington and De Leon (2002) while the researcher developed three items. This part contained also three-background information and five openended items. Two of the background information items were adapted from Sireci et al., while the other one was developed by the researcher. One of the constructed response item was adapted from Sireci et., while the other four were developed by the researcher. Another ten questions were developed by the researcher and were the focus of the panel discussions. The ATCT scale is presented together with the KOCT in Appendix A. Seven questions were used during the focus group discussions.

Table 1

Content specification for the KOCT

Content Area	Items
Test score statistics	8
Test score reporting and Interpretation	6
Test construction	5
Qualities of a good test (reliability, validity)	5
Test wiseness	1
Toatl	25

### Participants

A total of 51 qualified secondary school teachers, 34 males and 17 females participated in the survey. Twenty-five of the teachers had a diploma in education (Dip.Ed), twenty-four teachers had a bachelors degree in education (B.Ed) and four teachers had either diploma or a first degree in other disciplines and a university certificate in education (UCE). In Malawi, secondary teacher education is mainly offered at Chancellor College, which is a constituent college of the University of Malawi (UNIMA) in the Faculty of Education. The faculty offers both pre-service and in-service teacher education. Pre-service courses are mainly targeted for school leavers whose intention is to become secondary school teachers. In-service education programs are organized to cater for the academic and professional growth and development of teachers who are already in the service. Persons with a diploma or general degree in other disciplines enroll for a course that will lead to a University

Certificate in Education (UCE). Entry requirements into a Secondary Teacher Education program in Malawi at Chancellor College include an MSCE with credit passes in six subjects including English. Initially, the Bachelor of Education degree program lasted for five years. After the third year students used to get a diploma in Education and those that excelled were allowed to continue with their studies up to degree level. However, the curriculum for the Secondary Teacher Education at Chancellor College was revised and the diploma was phased out. Now the program lasts for four years. A diploma in education program is now offered at Domasi College of Education, which is a department of the Ministry of Education Science and Technology. Some students enroll for the degree in education at Mzuzu University, which is the second university in Malawi. A privately owned college, African Bible College in Lilongwe also offers teacher training programs. In all the institutions, students take foundation courses in education such as Philosophy of Education, Psychology of Education, Learning Theory, Curriculum Studies, Sociology of Education and Testing, Measurement and Evaluation in addition to the subjects they will teach after graduation.

The participants were drawn from six randomly selected secondary schools from the South East Education Division (SEED), which comprise Zomba, Machinga, Balaka and Mangochi Districts in the Southern Region of Malawi. Two of the secondary schools were national secondary schools, another two were district boarding secondary schools and the last two were district day secondary schools. The participants were qualified secondary school teachers who had also studied a course in testing, measurement and evaluation during their pre-service training and had different experiences. Table 2 summarizes the characteristics of the teachers.

Table 2

Characteristics of the sample by sex and qualification

Sex	Qualification			Total	%
	Dip.Ed	B.Ed	UCE		
Male	16	16	2	34	66.67
Female	7	10	0	17	33.33
Total	23	26	2	51	100.00
Precent	45.10	50.98	3.92	100	

### Procedure

Data were collected during the second term of the school session when teachers were teaching. This was done so as to ensure that a good number of teachers were available during the visit to schools. Each participating school was visited after making necessary contacts with the head-teachers of the schools. At each school, the school head-teacher, the deputy head-teacher, or a representative of the head-teacher made brief introductions about the researcher. Once this was made, the researcher outlined the purpose of the study as well as demonstrated how the questionnaires were to be filled out as well as assuring the participants of their confidentiality. Due to the fact that some teachers had teaching responsibilities scheduled, panel discussions were conducted first before the administration of the questionnaire. The researcher distributed the questionnaires and some were collected on the same day. Others were collected on a latter date.

### Data analysis

Once data were collected, the researcher scored the KOCT part of the survey. Data for the KOCT and ATCT were entered in SPSS, which was used for data analysis. Descriptive statistics and

ANOVAs were run for the KOCT. Bonferroni t-tests were employed, where appropriate, as follow-up comparison tests. In analyzing the ATCT total scores, some negatively worded items were recoded.

Analysis of the focused panel discussions and open-ended items was made by summarizing the results by looking at the frequency of the participants responding to an item and by looking at major issues mentioned.

The correlation between KOCT and ATCT scores was done as supplementary analysis to find out the relationship between the two.

## Results

### *Teachers' knowledge of classroom tests*

The descriptive results for each item showing the proportion correct (p-values), and standard deviation are presented in Table 3. The mean score for the 51 secondary school teachers was 13.08 giving a percent correct of 52.32 percent, with a standard deviation of 3.01. Three items (1, 6 and 15) which were under test construction and two items (7 and 21) which were under test score statistics had very high proportion correct (p-values) above 70). Item 1 (What is the most important consideration in choosing a method for assessing student achievement?) was the easiest (p-value = .92). Two items (10 and 19) under test score reporting and interpretation and another two items (4 and 24), which were under qualities of a good test proved to be very difficult (p were  $\leq .25$ ). Item 19 which was a statistics question was the most difficult (p-value = .12). Generally, it can be said that the teachers had some amount of knowledge in the areas tested.

To understand the performance of teachers across the content areas, Table 4 summarizes the proportion of teachers correctly answering each content area. The results indicate that teachers performed better in test construction (68%) and performed poorly in test score reporting and interpretation (40%). The content area on test-wiseness is not reported since there was only one item in

this category. These results were consistent with that of the open-ended item whereby teachers indicated this area as one of the difficult ones and need further training.

Table 3

Descriptive results for knowledge of classroom test by item

Item	P-Value	Standard deviation
1.What is the most important consideration in choosing a method for student achievement?	.92	.27
2. When scores from a standardized test are said to be reliable, what does it imply?	.59	.50
3. Mrs Monjeza wished to assess her students understanding of the method of problem solving she had been teaching. Which assessment strategy below would be most valid	.40	.50
4. Which of the following strategies would most likely increase the reliability of a multiple-choice end-of- unit examination in	.18	.39
5. Many teachers score classroom tests using a 100-point percent correct scale. In general, what does a student's score of 90 on such a scale mean?	.65	.48
6. Students in Mr. Chipala's science class are required to develop a model of the solar system as part of their end-of-unit grade. Which scoring procedure below will maximize the objectivity of assessing these student projects?	.82	.39
7.A teacher should prepare students before they write any examinations by doing all of the following <b>except</b>	.90	.30
8. When the directions indicate each section of standardized test is timed separately, which of the following is acceptable test taking behavior?	.60	.47
9. When planning classroom instruction for a unit on arithmetic operations with fractions, which type of test has more potential to be helpful?	.39	.49
10.Students' scores on standardized tests are sometimes inconsistent with their performance on classroom tests (e.g., teacher tests or other in-class activities). Which of the following is NOT a reasonable explanation for such discrepancies?	.24	.43
11. In a routine meeting with Jame's parents, Ms Zidyreni observed that James's scores on the Malawi School Certificate of Education examinations reasoning tests indicate that he is performing better in mathematics concepts than in mathematics computation. This probably means that:	.35	.48

12. On a standardized mathematics tests, peter received a standard score of 36. The test publisher reports that the standard deviation of the standard score is 10 units. What can Peter,s teacher conclude from this information?	.41	.50
13. Which of the following types of reliability evidence is most valuable for defending use of a reading proficiency test for evaluating instructional effectiveness?	.67	.48
14. What is the standard score (z-score) of a score of 60 if the following statistics of the test are provided: Mean 50, standard deviation 10?	.59	.50
15. Which of the following should be taken into consideration when constructing test items?	.84	.37
16. What is the major disadvantage of grouping data in a frequency distribution?	.61	.49
17. Which of the following is NOT characteristic of a normal distribution?	.37	.49
18. The score most often earned by a group of examinees is called	.49	.50
19.If most students in your class had read a chapter you gave them so carefully that they know the answers to almost all questions on the mastery test, the scores would probably be	.12	.33
20. Which of the following is NOT the same as the median?	.43	.50
21. Which of the following is NOT a measure of central tendency?	.88	.33
22. Which of the following <i>least</i> belongs to the others?	.33	.48
23. In a distribution of scores for which the mean = 65.5, median = 64, and mode = 60, it was found that a mistake had been made on one score. Instead of 70, the score should have been 90 consequently, which of these measures of central tendency would certainly be incorrect?	.43	.50
24. A test that is valid cannot be reliable	.16	.37
25. If a test is not reliable, it cannot be valid	.61	.49
Total	13.08	3.01

To get an in depth understanding of the performance of secondary school teachers, the mean performance of each school was computed. Figure 1 is a means plot of the results. The results indicated that there was no difference between the schools. School 2 had the highest mean (14.14) and school 4 had the lowest mean (12.30). When analysis of variance (ANOVA) was computed, the results indicated that the mean difference between schools was not statistically significant  $F=.41, p=.84$ ).

Table 4

Teacher performance on KOCT across content area

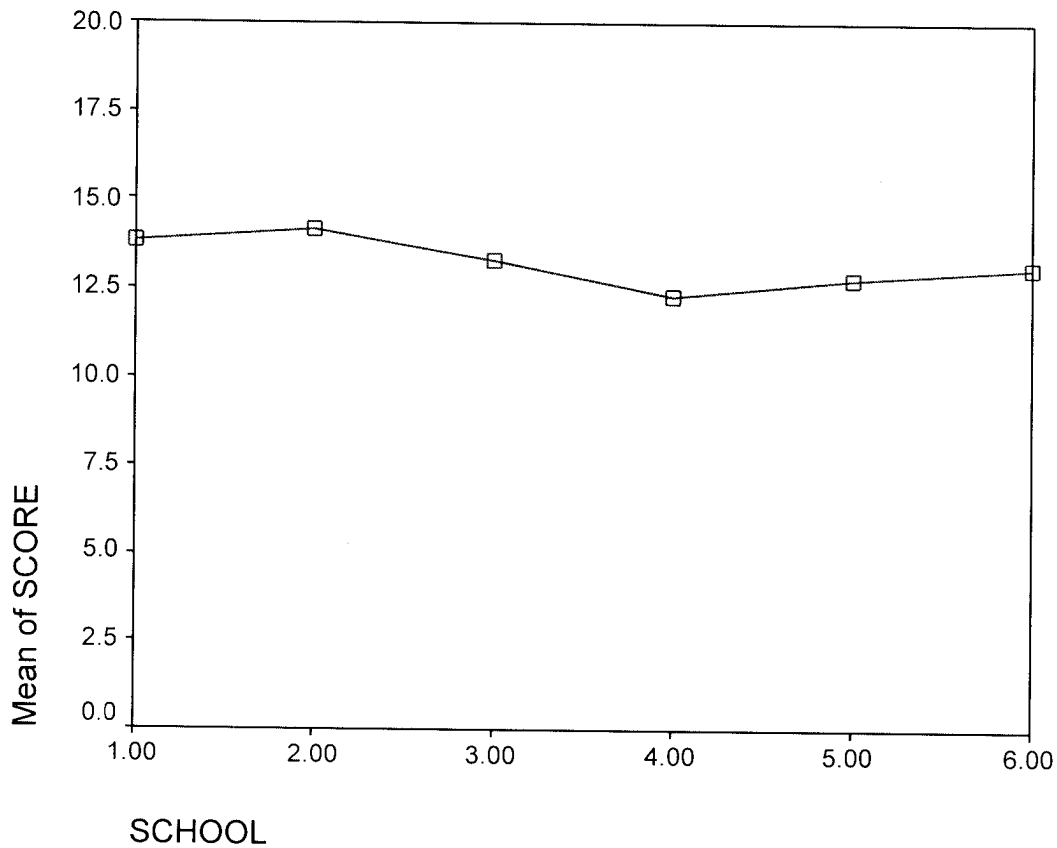
Content Area	Proportion Correct
Test construction	
(Items 1,3,6,9,15)	.68
Test score statistics	
(Items 7,16,17,18,20,21,22,23) .	.56
Qualities of a good test	
(Items 2,4,13,24,25)	.44
Test score Reporting and interpretation	
(items 5,10,11,12)	.40

When the proportion correct for teachers who had no experience with MANEB activities were compared with those that had the experience, it was observed that the former had a mean score of 12.23 and the latter had a mean score of 13.74 which was not statistically significant ( $t_{48} = -.796, p = .43$ ).



Figure.1

Means plot of teachers' performance on KOCT across schools



*Attitude towards classroom test*

The ATCT survey was aimed at measuring the teachers' attitude towards classroom tests. The teachers were asked to record their responses by circling a number along a five-point scale: 1= strongly agree, 2 = agree, 3 = uncertain, 4 = disagree and 5 = strongly disagree. The results of the attitude toward classroom test (ATCT) are presented in Table 5.

Generally, the teachers tended to agree to the positively worded items as evidenced by the median scores for each item. For example, 88.2% of the teachers were of the opinion that classroom tests serve a useful purpose and 66.6% tended to be in agreement with the statement that classroom test information should be used extensively to enhance classroom instruction. It can also be said that

teachers had, in general, positive attitudes toward classroom tests. This was indicated by their response to item 9 (I hate classroom tests), where 78.4% of the teachers strongly disagreed with the statement. In addition, teachers showed an overwhelming interest in becoming more proficient in interpreting test score (64.7%) were very interested and 25% really interested).

Table 5

The mean, median and standard deviation for teachers' attitude towards classroom test

Survey Item	Mean	Standard Deviation	Median
1. Classroom tests are the best way to evaluate teachers, effectiveness	2.52	1.40	Agree
2. Classroom tests assess important instructional outcomes	2.20	1.17	Agree
3. Classroom tests waste valuable instruction time	4.32	1.13	Strongly disagree
4. Classroom tests are not true indicators of student achievement	3.67	1.21	Disagree
5. Classroom tests are biased	3.60	1.28	Disagree
6. Teachers whose students score higher on classroom tests should receive higher salaries	4.24	1.36	Strongly disagree
7. Classroom tests serve a useful purpose	1.54	.93	Strongly agree
8. Classroom tests are Not valid indicators of student achievement	3.86	1.28	Disagree
9. I hate classroom tests	4.59	.96	Strongly disagree
10. Classroom test information should be used intensively to enhance instruction	2.16	1.30	Agree
11. I am very comfortable interpreting from classroom tests	2.00	1.12	Agree
12. Classroom tests are difficult to interpret	3.98	1.10	Disagree
13. It is as good to use standardized tests as it is to use teacher-made-tests	2.70	1.36	Uncertain
14. How comfortable are you in constructing classroom tests?	1.84	.92	Comfortable
15. About how well do you expect your students to perform on your tests when compared with MANEB tests?	2.20	.92	Below the national average
16. Which statement below indicates your interest in becoming more proficient in interpreting test scores	1.61	.87	Very interested

However, it was difficult to tell whether it was as good to use standardized tests, as it was to use teacher-made tests, as the teachers were uncertain on this survey item.

Supplementary analyses were conducted to determine the relationship between knowledge of classroom test (KOCT) and attitude toward classroom test (ATCT) total scores; teachers' experience and KOCT; and teachers' experience and ATCT. The results indicated that there was no relationship between these variables ( $r$  statistics were  $-.02$ ,  $.28$ , and  $-.13$ , respectively, all at  $p > .05$ ).

Teachers were also asked to respond to constructed response items. Basically, the items asked the teachers to give their expectation on the performance of their students in future examinations, what could be done to improve students motivation when preparing classroom tests, outlining what they thought were the main problems that were associated with teacher-made test in Malawi, what could be done to improve teacher-made tests, and what information about tests they would like to have that could improve performance of students in tests. The results for each question are given below.

*Looking ahead several years, do you expect the performance of your students on classroom tests to improve?*

In response to the question: Looking ahead several years, do you expect the performance of your students on classroom tests to improve? 41 of the 51 (80.39%) teachers responded affirmatively and 10 (representing 20.61%) teachers responded negatively.

*What could be done to improve students' motivation when preparing for classroom tests?*

In response to the above item, a number of suggestions were made and were summarized as follows. In the first place, twelve out of 51 teachers suggested that classroom teachers should strive at asking questions based on the content covered. Another twelve teachers suggested that teachers should offer rewards/ incentives to students who perform well on tests. There was no explanation as to the nature of incentives that were to be provided. Three teachers suggested that frequent tests/ assessments were to be given to the students. Five teachers suggested that teachers should teach their students test

taking skills such as testwiseness. Finally, six teachers suggested that in order to improve students' motivation when preparing for classroom tests, teachers should review all the material covered and highlight the topics that will be assessed.

*What do you think are the main problems associated with teacher-made tests?*

In response to the above items, a number of reasons were given and were summarized into two categories: Teacher related problems and student related problems.

#### Teacher related problems

In the first place, teachers reported that they lacked psychometric knowledge regarding fundamentals of test construction. Teachers indicated that they lacked practical skills in the knowledge related to test construction. One teacher stated that “ I know what test reliability is, but I do not know exactly how to determine whether my test is reliable or not.” In addition to the above problem, teachers indicated weaknesses in how to relate test items to lesson objectives, how to construct test specifications and how to construct test blueprint. Another problem was that they were unable to interpret test scores in a meaningful way. Teachers reported that they lacked knowledge in constructing items that are unambiguous. Finally, teachers also indicated lack of knowledge and skills in setting the time for tests.

#### Student related problems

Of major concern under student related problems, teachers reported that students did not take teacher-made tests seriously because the results of such tests had no impact on students' performance on national examinations.

*What could be done to improve teacher-made tests in Malawi?*

A number of suggestions were given in response to the above item. There was an overwhelming suggestion (75% of the teachers) that teachers needed re-training in principles of testing

measurement and evaluation, with an emphasis on test construction. Teachers also suggested that they be provided with resources that would help them in constructing quality items. There was no elaboration on this suggestion. Secondly, teachers suggested that end of term exams be externally assessed. The suggestion made on this one was that each cluster should come up with a committee that would be responsible for assessment. This would help in coming up with quality items. Teachers suggested too, that there should be an emphasis in practical application of knowledge during pre-service training of teachers. Another area that was reported as means of improving teacher-made tests was the need for collaboration among teachers at a particular school and between schools in areas of assessment.

*What information about tests would you like to have that could improve performance of students on tests?*

A number of areas were reported in response to the above question. In the first place, teachers were of the opinion that the performance of students would improve if they had information on how they should use test information to improve their instruction/teaching. This was taken to mean that teachers were interested in how they could report scores in a more meaningful way. In addition, the teachers wished they had the knowledge and skills on how to construct items that measure individual pupil performance on test (CRT). There was also an expressed need of acquiring knowledge on how to construct valid and reliable tests.

*How should the course in testing, measurement and evaluation be approached so that it meets your expectation?*

Most of the teachers were satisfied with the content offered at undergraduate level in testing, measurement and evaluation. There were some noticeable differences in the topics covered but this was inevitable as different lecturers approached the course differently. However, all the teachers

suggested that theory should be balanced with practice. They stressed the need for hands on experiences especially in the topics that deal with test construction such as validity, reliability, test specification, and test blueprint. There was also an expressed need that deliberate efforts should be made to look at the items practicing teachers construct during teaching practice (practicum) as nothing of that sort is done.

*What kinds of support or technical assistance in the design and use of classroom assessment do you receive?*

In response to the above question, a lot of the teachers said that they received little or no support with the exception of very few teachers who had the privilege of being trained as item writers for MANEB examinations. Some teachers said that they get some support from fellow teachers during departmental meetings related to examinations.

*Do you wish you had learned more about testing, measurement and evaluation?*

When teachers were asked the above question, there were mixed feelings. One group of teachers said they wished they had learned more on testing, measurement and evaluation. However, this group was in the minority. This group of teachers had a science background. The other group that was in majority had negative feelings about learning more about the course. Their main concern was that the course required a strong background in mathematics, which they lacked.

#### Practice of classroom tests

One aspect that the research study attempted to find out was how the teachers put the knowledge of classroom assessment into practice. A number of questions were asked during the focused group discussions. Initially, teachers were asked whether the course in principles of testing was important and also whether they thought they were adequately trained in classroom assessment. It was clearly observed that teachers felt that the course was very important to them. However, teachers

had different opinions to the second question. One group indicated that they were adequately trained and another group felt that they were not. The teachers that felt that they were not adequately trained were those that graduated ten to twenty years ago. They cited two areas, which they thought, were not adequately covered. These included construction of test specification and test blue print. Another weakness that was cited was lack of practice in the skills learned during training. Teachers said that they only covered the theoretical aspects of the subject but no deliberate efforts were made in putting that knowledge into practice. Teachers reported that they had knowledge on the characteristics of good test such as reliability and validity but they did not know how exactly these could be estimated.

It was also reported that teachers were capable of developing their own classroom tests but it was discovered that the majority of the teachers did not actually develop their own items but used either items that were developed by textbook authors or MANEB. When teachers were asked about the process they followed when constructing items in their school, they indicated that they ensure that the items were related to the content covered. In all the schools there was an examinations committee that oversees the smooth administration of end of term tests. Teachers construct the items and are given to the head of department (HOD) who acts as the moderator (evaluator of standards) of the items. A head of department is a promotional post and the incumbent is in charge of three or more subjects. At each school, there were three HODs: Head of sciences department responsible for the following subjects Biology, Physical Science, Integrated Science Mathematics and Agriculture; head of languages department responsible for subjects like English Language, English Literature, Chichewa Language, Chichewa Literature and French; and Head of humanities who was responsible for subjects like History, Geography, Life Skills, Social Studies, Physical Education and Religious Studies. One person who heads that particular department evaluates all tests in a particular department. Once tests have been evaluated, they are sent back to the test developers who are the subject teachers for revision or

ready for typing. The examinations committee supervises and coordinates the administration of terminal tests.

### Discussion

The study was aimed at describing the knowledge, attitude and practice of classroom teachers in classroom assessment. In order to do that, a number of research questions were asked. The results of this research study indicated that the teachers had very little knowledge based on their performance of KOCT. The average passing score of 52% was very low when one considers that the passing score set by most teachers is over 70%. The teacher-training program in Malawi ensures that the prospective teachers have training in testing, measurement and evaluation. However, the low performance could be attributed to forgetting due to disuse. This reason was supported by the fact that the teachers did not construct their own items but relied on past examination papers set by MANEB and textbook authors.

As far as the teachers' attitude towards classroom test was concerned, it was evident from their responses to the ATCT survey that they had a positive attitude. This result was quite contrary to other research studies (Impara & Plake 1999; Stiggins, 1991; Sireci, Washington & De Leon, 2002).

The study showed that very little effort was made by teachers in putting into practice the knowledge in principles of testing. Issues of test reliability and validity were not taken into account when constructing tests. In addition, very little test analysis was done. A copy of the school report indicated that teachers used percent correct scores in determining cut scores. The average statistic was the only visible analysis that was done. It was also clear that the percent correct scores were used in grading the student performance following MANEB grading procedure. A copy of the school report is presented in Appendix D.

The results also illustrate that the teachers had a lot of problems in certain areas like test construction particularly in the development of test specifications and test blueprints, estimation of test



reliability and validity, test score reporting, and test score interpretation. These are very important areas, which teachers need to be knowledgeable in. Classroom assessments and indeed any achievement examinations must be technically correct, having in the first place been constructed by people who are well versed in the knowledge and skills to be tested. Above all, the examiners should be skilled in the practical art of examining. These deficiencies need to be redressed for effective implementation of the policy. It will be unfair to lay such a demanding task on teachers to conduct internal assessment and issue certificates based on their assessments when they have problems in that area.

### Recommendations

This study has shown that secondary school teachers have inadequate knowledge in some areas. If the policy on school-based assessment is to succeed, much more needs to be done. It is therefore of paramount importance that the methodology used in teaching the course be approached in such a way as to address the expressed needs of the teachers. Teachers on teaching practice should also be evaluated on their quality of assessments. It is important that teachers should come to know and understand the nature of testing and its purposes, and use that knowledge in classroom assessments. Teachers should be able to use tests, in part, to motivate students to achieve. It is common knowledge that tests and testing will affect the direction of pupils' lives in as far as the proposed assessment policy is concerned. Only tests that are properly constructed and which are used in a proper manner can measure how much a student knows.

It is also recommended that teacher certification be based on the teacher's demonstrated competence in classroom assessment among other criteria. A qualified teacher should be competent in making decisions regarding the development, selection, use, reporting and interpretation of test scores

besides knowledge of characteristics of quality tests, types of tests and ability to evaluate tests by conducting item analysis, estimating the tests' reliability and validity.

In addition, practicing teachers need all the technical support in the form of workshops, seminars, and refresher courses and fully fledged in-service training to improve their knowledge and practice of classroom assessment.

It would also be a good idea if the HODs, who act as school-based advisors, had a firm grounding in classroom assessment. It was expected that the Principal Methods Advisors (PEMAs) would be mentioned as the sole source of technical support providers in areas of classroom assessment. The fact that they were not mentioned might be taken to mean that they, too, lack the knowledge and skills in classroom assessment or they do not take this area as of priority. It is therefore suggested that the PEMAs should deliberately check the teachers' classroom assessment practices as they inspect the secondary schools. Another area worth exploring would be to encourage teachers to support themselves in their respective schools and cluster centers in areas of classroom assessment. Teachers who are more knowledgeable in classroom assessment should help other less knowledgeable ones. Related to this, it is also recommended that each school should have an examination committee not only responsible for the administration of tests but also examine the quality of items and offer school-based support to the less knowledgeable teachers. It was felt that a HOD couldn't moderate all test papers single handedly competently.

### Limitations of the Study

Although the results of the study have the potential to shape our knowledge and understanding of how Malawian teachers put their knowledge gained in principles of classroom assessment into practice, the study had a number of limitations. The first weakness was that the sample size was small. An adequate study would have involved a large number of teachers, but this was not feasible due to

time and financial constraints, which limits the generalization of the study. Secondly, the study did not carry out follow-up activities so as to get an in-depth understanding of the situation after holding focused panel discussions. Future research should organize seminars and workshops where the research participants acquire training in areas they showed interest in order to determine the impact of the training on their knowledge and practice of classroom assessment. The results from such gatherings would be more informative in decision-making process regarding how the course in testing, measurement and evaluation would be approached. Future research should also find out the classroom assessment activities that teachers actually use in assessing the students. It would be a good idea find out the common assessment practices that teachers use.

#### Implications for future research study

The successful implementation of the school-based policy on secondary school student assessment depends on the teachers' knowledge on classroom assessment and their commitment to put into practice the knowledge learned in this area. If Malawi has to have a more informed assessment on the capability of teachers in the implementation of the policy, a number of research studies should be done. One way would be to conduct a similar study on a large scale so that the results would be more generalizable to the entire population. Secondly, since the study had shown that HODs were responsible for the moderation of items, a study of their knowledge levels in classroom assessment would also be of great importance. Finally, it would be a good idea to assess the knowledge, attitude and practice of classroom assessment of the unqualified teachers in the secondary schools. It would be interesting to find out how they go about assessing the student learning despite lack of expertise in this area.

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## APPENDICES

## Appendix A

### SURVEY INSTRUMENT

#### PART A: KNOWLEDGE OF CLASSROOM TEST SURVEY

This part attempts to measure your knowledge of Principles of Testing. Please answer all questions.

##### Section A Demographic details. Circle what is applicable to you.

Sex                      M      F

Qualification   Dip. Ed.              B.Ed.   BA/ BSc/Bsoc              Diploma/ Degree with UCE

Year of Graduation.....University/ College attended .....

Experience with MANEB examinations (tick as many as it applies to you)

Assistant Examiner                      Senior Assistant examiner      Examination setter

Examinations moderator              Subject syllabus committee member

Other (specify)

##### Section B: Please read items 1- 25 carefully and circle the response you think best answers the question.

1. What is the most important consideration in choosing a method for assessing student achievement?
  - a. Ease of scoring the assessment.
  - b. Ease of preparing the method of assessment.
  - c. Accuracy of assessing the attainment of instructional objectives.
  - d. Acceptance by the school administration
2. When scores from a standardized test are said to be reliable, what does it imply?
  - a. Student scores from the test can be used for a large number of educational decisions.
  - b. If the student retook the same test, he or she would get a similar score.
  - c. The test score is a more valid measure than teacher judgments.
  - d. The test score accurately reflects the content of instruction in classes where the test is administered.
3. Mrs. Monjeza wished to assess her students' understanding of the method of problem solving she had been teaching. Which assessment strategy below would be most valid?
  - a. Select a textbook that has a "teacher's guide" with a test developed by the authors.
  - b. Develop an assessment consistent with an outline of what she has actually taught in class.
  - c. Select a standardized test that provides a score on problem solving skills.
  - d. Select an instrument that measures students' attitudes about problem solving strategies.



4. Which of the following strategies would most likely increase the reliability of a multiple-choice end-of-unit examination in geography?
- use a blueprint to develop test questions
  - change the test format to true-false questions
  - add more items like those already on test
  - add an essay component
5. Many teachers score classroom tests using a 100-point percent correct scale. In general, what does a student's score of 90 on such a scale mean?
- the student answered 90% of the items on this test correctly
  - the student knows 90% of the instructional content of the unit covered by this test
  - the student scored higher than 90% of all the students who took the test
  - the student scored 90% higher than the average student in the class
6. Students in Mr. Chipala's science class are required to develop a model of the solar system as part of their end of unit grade. Which scoring procedure below will maximize the objectivity of assessing these student projects?
- When the models are turned in, Mr. Chipala identifies the most attractive models and gives them the highest grades, the next most attractive get a lower grade, and so on.
  - Mr. Chipala asks other teachers in the school to rate each project on a 5-point scale based on their quality.
  - Before the projects are turned in, Mr. Chipala constructs a scoring key based on the critical features of the project and assigns scoring weights to these features.
  - Mr. Chipala should look at the models and place them in groups and assign the scores depending on their appearance.
7. A teacher should prepare students before they write any examinations by doing all of the following **except**
- coaching them
  - teaching them how to respond to questions of different formats.
  - teaching them test wiseness skills
  - telling them the questions on the test
8. When the directions indicate each section of a standardized test is timed separately, which of the following is acceptable test taking behavior?
- John finishes the vocabulary section early; he then rechecks many of his answers in that section.
  - Chikondi finishes the vocabulary section early; she checks her answers on the previous test section.
  - Bertha finishes the vocabulary section early; she looks ahead at the next section, but does not mark her answer sheet for any of those items.
  - Enifa did not finish the vocabulary section; she continues to work on that section when the testing time is up.

9. When planning classroom instruction for a unit on arithmetic operations with fractions, which type of test has more potential to be helpful?
- An individually- administered IQ test.
  - A norm referenced elementary mathematics test.
  - A criterion- referenced elementary mathematics test.
10. Student's scores on standardized tests are sometimes inconsistent with their performance on classroom tests (e.g., teacher tests or other in-class activities). Which of the following is NOT a reasonable explanation for such discrepancies?
- Some students freeze up on standardized tests, but they do fine on classroom tests.
  - Students often take standardized tests less seriously than they take classroom tests.
  - Standardized tests measure only recall of information while classroom tests measure more complex thinking.
  - Standardized tests may have less curricular validity than classroom assessment.
11. In a routine meeting with James's parents, Ms. Zidyereni observed that James's scores on the Malawi School Certificate of Education examinations reasoning tests indicate that he is performing better in mathematics concepts than in mathematics computation. This probably means that:
- James's score on the computation test was below average.
  - James is an excellent student in mathematics concepts.
  - The percentile bands for the mathematics concepts and computation tests do not overlap.
  - The mathematics concepts test is a more valid measure of James's quantitative reasoning ability.
12. On a standardized mathematics tests, Peter received a standard score of 36. The test publisher reports that the standard deviation of the standard score scale is 10 units. What can Peter's teacher conclude from this information?
- Peter performed above the national average on the test.
  - Peter performed below the national average on the test.
  - Peter's performance on the test was not significantly different from the national average.
  - Not enough information is provided to interpret Peter's performance.
13. Which of the following types of validity evidence is most valuable for defending use of a reading proficiency test for evaluating instructional effectiveness?
- content validity.
  - face validity.
  - external validity.
  - concurrent validity.

14. What is the standard score (z-score) of a score of 60 if the following statistics of the test are provided: Mean 50, standard deviation 10?
- 1.00
  - 0.00
  - +1.00
  - +2.00
15. Which of the following should be taken into consideration when constructing test items?
- instructional objectives
  - student characteristics
  - time available
  - difficult level of the content
16. What is the major advantage of grouping data into a frequency distribution?
- tallies of individual scores become impossible to indicate
  - identities of individual scores become obscure
  - it becomes difficult to determine the lowest class interval
  - it becomes difficult to determine the class boundaries
17. Which of the following is NOT characteristic of a normal distribution?
- symmetrical
  - uniform
  - bell-shaped
  - unimodal
18. What is the score most earned by a group of examinees called?
- mode
  - median
  - average
  - arithmetic mean
19. If most students in your class had read a chapter you gave them so carefully that they know the answers to almost all questions on the mastery test, the scores would probably be
- symmetrically distributed
  - negatively skewed
  - positively skewed
  - rectangular
20. Which of the following is NOT the same as the median?
- the 5<sup>th</sup> decile
  - the 50<sup>th</sup> percentile
  - the 75<sup>th</sup> percentile
  - the second quartile

21. Which of the following is NOT a measure of central tendency
- a. mean
  - b. median
  - c. mode
  - d. range
22. Which of the following *least* belongs to the others?
- a. median
  - b. mode
  - c. most popular score
  - d. most frequent score
23. In a distribution of scores for which the mean = 65.5, median = 64, and mode = 60, it was found that a mistake had been made on one score. Instead of 70, the score should have been 90. Consequently, which of these measures of central tendency would certainly be incorrect?
- a. mean
  - b. median
  - c. mode
  - d. more than one of these measures

**Please answer “true” or “false” to questions 14 and 15, by circling your choice.**

24. A test that is not valid cannot be reliable.                      True                      false
25. If a test is not reliable, it cannot be valid                      true                      false

## APPENDIX B

### ATTITUDE TOWARD CLASSROOM TEST SURVY

This part of the survey attempts to measure your attitude towards classroom (teacher-made) tests. An example of classroom test is an end of lesson test, end of course, or end of term test. Your responses to this survey are completely confidential.

Part 1: Please record your responses by circling a number along a five-point scale. Indicate your responses in the spaces provided for the rest of the questions.

1. Classroom tests are the best way to evaluate teachers' effectiveness.

1	2	3	4	5
Strongly				strongly
Agree				disagree

2. Classroom tests assess important instructional outcomes.

1	2	3	4	5
Strongly				strongly
Agree				disagree

3. Classroom tests waste valuable instruction time.

1	2	3	4	5
Strongly				strongly
Agree				disagree

4. Classroom tests are not true indicators of student achievement.

1	2	3	4	5
Strongly				strongly
Agree				disagree

5. Classroom tests are biased.

1	2	3	4	5
Strongly				strongly
Agree				disagree

6. Teachers whose students score higher on classroom tests should receive higher salaries.

1	2	3	4	5
Strongly				strongly
Agree				disagree

7. Classroom tests serve a useful purpose.

1	2	3	4	5
Strongly				strongly
Agree				disagree

8. Classroom tests are **NOT** valid indicators of student achievement.

1	2	3	4	5
Strongly				strongly
Agree				disagree

9. I hate classroom tests.

1	2	3	4	5
Strongly				strongly
Agree				disagree

10. Classroom test information should be used extensively to enhance instruction

1	2	3	4	5
Strongly				strongly
Agree				disagree

11. I am very comfortable interpreting information from classroom tests.

1	2	3	4	5
Strongly				strongly
Agree				disagree

12. Classroom tests are difficult to interpret

1	2	3	4	5
Strongly				strongly
Agree				disagree

13. It is as good to use standardized tests, as it is to use teacher-made tests.

1	2	3	4	5
Strongly				strongly
Agree				disagree

## Part 2: Background questions

14. How comfortable are you in constructing classroom tests?

1	2	3	4	5
Very				not comfortable
Comfortable				

15. About how well do you expect your students to perform on your tests when compared with MANEB tests?

1	2	3	4	5
Far below				far above the
The national				national average
			average	

16. Which statement below indicates your interest in becoming more proficient in interpreting test score?

- a. I am very interested
- b. I am somewhat interested
- c. I am really interested
- d. My level of proficiency is high; I don't need any more proficiency in student assessment

17. Looking ahead several years, do you expect the performance of your students on classroom tests to improve?

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18. What could be done to improve students motivation when preparing for classroom tests?

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19. What do you think are the main problems associated with teacher-made tests Malawi?

- a. 

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- b. 

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- c. 

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20. What could be done to improve tests teacher-made tests in Malawi?

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21. What information about tests would you like to have that could improve performance of students in tests?

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**Thank you for your cooperation in answering the questionnaire**

## **APPENDIX C**

### **QUESTIONS FOR THE FOCUSED PANEL DISCUSSIONS**

1. Do you think that a course in Principles of Testing is important to you as a teacher? How important is it?
2. Do you think you were adequately trained in classroom assessment?
3. Do you develop your own assessments or use those developed by others?
4. What do you do when you want to construct tests in your school?
5. How should the course in Testing, Measurement and Evaluation be approached so that it meets your expectation?
6. What kinds of support or technical assistance in the design and use of classroom assessment do you receive?
7. Do you wish you had learned more on Testing, Measurement and Evaluation?



**APPENDIX D**  
**SAMPLE SCHOOL REPORT**

Name and address of the school

NAME.....  
TERM.....

FORM.....  
YEAR.....

SUBJECT	EXAM %	GRADE	REMARKS
English			
Mathematics			
Chinyanja			
Geography			
Biology			
Physical Science			
Agriculture			
Social Studies			
Integrated Science			
History			
Bible Knowledge			
Home Economics			
Average			
Number in Class			
Position in Class			

Form Teacher's  
Comments

Signature

Headteacher's Remarks

Signature

### KEY FOR GRADES:

#### JC EXAMS

A = Excellent

B = Above Average

C = Average

D = Below Average

F = Fail

#### MSCE EXAMS

1-2 Distinction

3-6 = Credit

7-8 = Pass

9 = Fail

Next Term begins on: \_\_\_\_\_ and ends on \_\_\_\_\_

School fees: \_\_\_\_\_ GPF: \_\_\_\_\_

Other \_\_\_\_\_