CLASSROOM ASSESSMENT PRACTICES IN KENYAN SECONDARY SCHOOLS:
TEACHER PERSPECTIVE

BY
GICHURU FRANCIS MAINA

UNIVERSITY OF NAIROBI
SCHOOL OF EDUCATION
PSYCHOLOGY DEPARTMENT

A research project submitted to the School of Education in partial fulfillment of the requirements for the award of a Masters degree in Education (Measurements and Evaluation).

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## DECLARATION

This Project is my original work and has not been presented for a degree in any other University.

## Gichuru Francis Maina

Registration Number: E58/68400/2011

This research project has been submitted for examination with my approval as the university supervisor.

Dr. Karen T. Odhiambo
Supervisor
Psychology Department, Educational Psychology
University of Nairobi.

## DEDICATION

To my loving wife Agnes and daughters, Lisa and Irene, with deepest gratitude and veneration. Without your love and support, I would not have found the time, patience, and courage to complete this study.

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#### Abstract

. This study investigated teacher's perspective on Classroom Assessment Practices in Kenyan Secondary Schools. The following objectives guided the study: a) To determine teachers' perceptions about assessment b) To examine teachers skills and competencies in assessment c) To examine the assessment practices used by teachers to evaluate students learning.

The study adopted a descriptive survey design. Stratified random sampling and purposive sampling were used to select the sample size from the target population. Data was collected using questionnaires for teachers in the selected schools. Data was analyzed using descriptive statistics. The study resulted in a moderately thorough description of these teachers' assessment practices. Based on this, teachers demonstrated competence in assessing students learning but as regards assessment tasks as per the learning taxonomy, they showed lack of demand for application for those areas. The study suggests that there is need to train and create demand on all aspects of assessment in learning.


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## LIST OF ACRONYMS

| AFT | American Federation of Teachers |
| :--- | :--- |
| CA | Classroom Assessment |
| CAPS | Classroom Assessment Practices and Skills |
| KCPE | Kenya Certificate of Primary Education |
| KCSE | Kenya Certificate of Secondary Education |
| NCME | National Council on Measurement in Education |
| NEA | National Education Association |
| SE | Standardized Examinations |

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## CHAPTER ONE

## INTRODUCTION

### 1.1 Background Information

Classroom assessments are an essential component of the teaching and learning process as it helps teachers in classroom decision-making (Goodrum, Hackling, \&Rennie, 2001). Such assessments are not only a means to assign grades and determine whether students achieve objectives but have also become a learning tool (Watering, Gijbels, Dochy, \& Rijt, 2008).

Learning is the ultimate dependent variable in education (Nenty, 1992), everything done in the name of education impacts positively or negatively on learning. It is through assessment that learning and hence quality of education are defined. Any improvement in these depends ultimately on the quality of and improvement in assessment. Just like the physicians cannot have effective practice without good assessment, teachers cannot have effective teaching without skills related to good assessment (Nenty, 2005). Assessment is at the heart or Centre of all educational activities and every activity in education looks on to assessment to establish its validity and effectiveness. The quality of assessment bears on the quality of educational inputs, processes and products and hence on the quality of education enjoyed by the society.

Education should develop in our young ones global competencies that will situate them in an advantageous position among emerging global children. According to 21 st Century Schools (2008), 21st century education is:
". . . bold. It breaks the mold. It is flexible, creative, challenging, and complex. It addresses a rapidly changing world filled with fantastic new problems as well as exciting new possibilities. Fortunately, there is a growing body of research supporting an increasing number of 21 st century schools (p.1)..."

In a review of Tony Wagner's book, 'The Global Achievement Gap', Conlon (2008) listed as seven survival skills of the 21 st century:

Critical thinking and problem solving, Collaboration across networks and leading by influence, Agility and adaptability, Initiative and entrepreneurialism, Effective oral and written communication, Accessing and analyzing information, Curiosity and imagination

According to Conlon (2008), for survival in the 21st century, we: ". . . expect all teachers to teach all students how to think and communicate effectively, and they need to assess these skills and benchmark expectations to what the world will require of our high school graduates. And this needs to happen every day in every class and at all grade levels. If we do this in all of our schools, while also stimulating curiosity and imagination, then all students will have the skills they need to get and keep a good job and be a contributing citizen, while our country will have a workforce that can continually produce innovations. An economy based on innovation will be more competitive and successful than any other in the 21st century (p.1). . . ."

### 1.2 Statement of the Problem

Assessment of students is very critical because effective teaching decisions are based on the ability of teachers to understand their students and to match actions with accurate assessments (McMillan, 2008). However, past research has shown that there are many problems associated with teachers' classroom assessment practices. These include teachers' lack of an adequate knowledge base regarding the basic testing and measurement concepts (Daniel \& King, 1998; Schafer \&Lissirz, 1987; Stiggins, 2005), limited teacher training in assessment (Stiggings, \&Bridgeford, 1985) and failure of teachers to employ and adhere to measurement guidelines they learned in measurement courses (Campbell \& Evans, 2000).

Teachers adopt different classroom assessment practices to evaluate students' learning outcomes, and they spend much of their classroom time engaged in student assessment related activities. Their instructional and classroom assessment practices are a means by which the education system is enhanced and defined (Nenty, Adedoyin, Odili, \& Major, 2007). For this reason, this study will endeavor to bring an awareness regarding how Secondary school teachers perceive their classroom assessment practices, their skills and competencies in evaluating students learning.

### 1.3 Purpose of the Study

The purpose of this study was to examine the extent to which secondary school teachers in Kenya apply assessment practices, their skills on classroom assessment practices, and their perceptions about classroom assessment practices.

### 1.4 Objectives of the study

The study aimed at meeting the following objectives;

1. To determine teachers' perceptions about assessment.
2. To examine teachers skills and competencies in assessment.
3. To examine the assessment practices used by teachers to evaluate students learning.

### 1.5 Significance of the study

This study contributes in the area of teaching and assessment to would be users, MOE, Schools and Teachers. It also helps in exploring various approaches of assessment in relation to students learning; raising awareness about different paradigms of classroom assessment. This study also hopes to contribute to more empirical knowledge on assessment practices.

### 1.6 Definition of Significant Terms

Assessment: This is the process of gathering data, more specifically; Assessment is the way instructors gather data about their teaching and their students learning (Hanna \&Dettmer, 2004).

Classroom Assessment Practices: This term covers a wide range of issues starting from teachers' beliefs and the value they have regarding assessment of students, their perceptions about assessment training, their test planning, construction, to grading and use of assessment results (McMillan, 2008; Nitko, 2001; Popham, 2008; Reynolds, Livingstone \& Wilson, 2009).

Teacher Made/Classroom Assessment: These are tests constructed, administered and graded by teachers as formative evaluation of student learning. They are used for purposes of monitoring students' learning and feedback.

Standardized Examinations: These are national examinations constructed by tests specialists used for making high-stakes decisions that include selection, and placement of students at higher levels of learning, they are summative in nature (Popham, 2008; Reynolds, Livingstone \& Wilson, 2009).

Classroom assessment: Any planned method or strategy used in the classroom to establish the level of students' difficulties or understanding of a particular concept or idea with the purpose of helping students to succeed in learning (Ainscow, 1988; Pophan 1999).

Learning: this is acquiring new, or modifying existing knowledge, behaviors, skills or preferences.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.0 Introduction

This chapter is divided into seven main sections. The first section highlights a review of related studies on classroom assessment while the second gives the types of assessment. This is followed by teachers' perceptions, teacher training, challenges in assessment practices, theories of classroom assessment practices and finally the conceptual model.

### 2.1 Related studies

### 2.1.1 Classroom Assessment Practices

Assessment of student learning is a regular part of the school routine. A sizable amount of classroom time is devoted to the assessment of student learning. Since teachers must give even more time to the preparation and scoring of tests and other assessments, a substantial proportion of a teacher's day is devoted to issues surrounding student assessment. One could argue, then, that careful consideration of testing within formal teacher preparation programs is certainly warranted. If educators, particularly those in teacher preparation programs, are to help teachers use their student testing time efficiently and to be effective at it, more must be learned about how teachers perceive and use classroom tests and other forms of assessment (Gullickson, 1984).

For some time, there has been a perceived misalignment between what is taught to pre-service teachers, in terms of assessment skills and techniques, and what in-service teachers actually practice in the schools (Farr \& Griffin, 1973; Gullickson, 1986). Some have argued that measurement courses tend to overemphasize large-scale, standardized testing (Farr \& Griffin, 1973; Stiggins \& Bridgeford, 1985), as well as statistical analyses of classroom test data (Gullickson, 1986), neither of which serve teachers' primary measurement needs. It has been noted that teachers place much emphasis on non-test assessment and evaluation strategies (Gullickson, 1985).

In his study, Gullickson (1984) reported that the average teacher did not perceive college measurement courses to be pertinent to his/her classroom testing needs and that most teachers
learned how to test their students through their on-the-job experiences. From the perspective of the classroom teacher, this seems to imply a need for the reorientation of college instruction, with respect to measurement issues and concepts.

Several researchers have examined the traditional assessment practices of teachers and have arrived at somewhat similar conclusions. In their study, Stiggins and Bridgford (1985) discovered that about half of the teachers studied reported comfortable use of teacher-made objective tests. Marso $(1985 ; 1987)$ arrived at the same conclusions for teachers in general, but did find several differences between elementary and secondary teachers. Secondary teachers tended to use more self-constructed tests rather than published tests; whereas, the opposite was true for elementary teachers, especially those in grades K-4. Similarly, others have found that the higher the grade level, the greater the tendency for teachers to use their own assessments (Stiggins \& Bridgeford, 1985). Secondary teachers reported relatively more use of essay and problem-type items and less frequent use of completion and multiple-choice items than did elementary teachers (Marso, 1987).

Marso \& Pigge (1987) found no significant differences with respect to assessment practices based on school setting (urban, suburban, or rural) or age of teacher. However, subject area differences did exist. Teachers of mathematics reported more use of problem-type test items as compared to other subject areas, namely business, English, science, and social studies. Social studies teachers reported less frequent use of statistical analyses of test data, but more frequent use of essay items than did the other areas. Science teachers reported more frequent use of problem-type items than did English and social studies teachers.

There is less research concerning teachers' alternative assessment practices. Stiggins and Bridgeford (1985) found that about three-quarters of the teachers studied reported some use of performance assessments in their classrooms. However, only about half of these teachers reported being comfortable with the use of these assessments.

### 2.1.2 Classroom Assessment

Classroom assessment embraces a broad spectrum of activities from constructing paper-pencil tests and performance measures, to grading, interpreting standardized test scores, communicating test results, and using assessment results in decision- making. When using paper-pencil tests and
performance measures, teachers should be aware of the strengths and weaknesses of various assessment methods, and choose appropriate formats to assess different achievement targets (Stiggins, 1992).

Test items should match with course objectives and instruction to ensure content validity (Airasian, 1994), reflect adequate sampling of instructional materials to improve test reliability, and tap higher-order thinking skills. In performance assessment, validity and reliability can be improved by using observable and clearly defined performance tasks (Airasian, 1994; Baron, 1991; Shavelson, Baxter, \& Pine, 1991; Stiggins, 1987), detailed scoring protocols, multiple samples of behaviors evaluated by several judges (Dunbar, Koretz, \& Hoover, 1991), and recording scoring results during assessment (Stiggins \& Bridgeford, 1985). Teachers should be able to revise and improve teacher-made tests based on test statistics and item analysis (Carey, 1994; Gregory, 1996).

Grading and standardized testing are two important components of classroom assessment. Since grade-based decisions may have lasting academic and social consequences (Messick, 1989; Popham, 1997), teachers should weigh assessment components according to instructional emphasis (Airasian, 1994; Carey, 1994; Stiggins, Frisbie, \& Griswold, 1989) and base grades on achievement-related factors only. Grading criteria should be communicated to students in advance and implemented systematically to handle regular as well as borderline cases (Stiggins et al., 1989).

Non-achievement factors such as effort, ability, attitude, and motivation should not be incorporated into subject-matter grades because they are hard to define and measure (Stiggins et al., 1989). In terms of standardized testing, teachers should avoid teaching to the test (Mehrens, 1989), interpreting test items, and giving hints or extra time during test administration. Teachers should appropriately interpret test scores and identify diagnostic information from test results about instruction and student learning (Airasian, 1994). Teachers should also be able to use assessment results to make decisions about students' educational placement, promotion, and graduation, as well as to make judgment about class and school improvement (Stiggins, 1992).

In 1990, the American Federation of Teachers (AFT), the National Council on Measurement in Education (NCME), and the National Education Association (NEA) issued Standards for

Teacher Competence in Educational Assessment of Students. According to the standards, teachers should be skilled in choosing and developing assessment methods, administering and scoring tests, interpreting and communicating assessment results, grading, and meeting ethical standards in assessment.

### 2.1.3 Teachers' Assessment Practices and Competencies

Investigations of teachers' assessment practices revealed that teachers were not well prepared to meet the demand of classroom assessment due to inadequate training (Goslin, 1967; Hills, 1991; O'Sullivan \& Chalnick, 1991; Roeder, 1972). Problems were particularly prominent in performance assessment, interpretation of standardized test results, and grading procedures. When using performance measures, many teachers did not define levels of performance or plan scoring procedures before instruction, nor did they record scoring results during assessment (Stiggins \& Conklin, 1992). In terms of standardized testing, teachers reported having engaged in teaching test items, increasing test time, giving hints, and changing students' answers (Hall \& Kleine, 1992; Nolen, Haladyna, \& Haas, 1992).

Teachers also had trouble interpreting standardized test scores (Hills, 1991; Impara, Divine, Bruce, Liverman, \& Gay, 1991) and communicating test results (Plake, 1993). Many teachers incorporated non-achievement factors such as effort, attitude, and motivation into grades (Griswold, 1993; Hills, 1991; Jongsma, 1991; Stiggins et al., 1989) and they often did not apply weights in grading to reflect the differential importance of various assessment components (Stiggins et al., 1989). Despite the aforementioned problems, most teachers believed that they had adequate knowledge of testing (Gullikson, 1984; Kennedy, 1993) and attributed that knowledge to experience and university coursework (Gullikson, 1984; Wise, Lukin, \& Roos, 1991).

### 2.1.4 Assessment practices and skills

Teachers' concern about the quality of classroom assessment varied with grade levels and slightly with subject areas (Stiggins \& Conklin, 1992). There was an increased concern among teachers about the improvement of teacher-made objective tests at higher-grade levels; mathematics and science teachers were more concerned about the quality of the tests they produced than were writing teachers. Higher-grade level mathematics teachers were found to
attach more importance to and use more frequently homework and teacher-made tests in classroom assessment than lower-grade level teachers (Adams \& Hsu, 1998).

Two points are noteworthy about the existing literature. First, assessment practices and assessment skills are related but have different constructs. Whereas the former pertains to assessment activities, the latter reflects an individual's perception of his or her skill level in conducting those activities. This may explain why teachers rated their assessment skills as good even though they were found inadequately prepared to conduct classroom assessment in several areas.

Current literature is scarce in simultaneous investigation of assessment practices and assessment- related perceptions. Second, classroom assessment involves a broad range of activities. Teachers may be involved in some activities more than in others due to the nature of assessment specific to the grade levels and content areas they are required to teach. Although the existing literature has suggested that grade levels and subject areas may account for some variations in classroom assessment (Adams \& Hsu, 1998; Stiggins \& Conklin, 1992), none of these studies, however, have covered sufficiently the broad spectrum of classroom assessment.

### 2.2 Types of Assessment

### 2.2.1 Teacher-Made Classroom Assessment

Assessment is a systematic process for collecting information that can be used to make inferences about characteristics of people or objects (Reynolds, Livingstone, \& Wilson, 2009). Assessment is not just about collecting data, but is also a processes used to appraise students' knowledge, understanding, abilities or skills and it is inextricably linked to a course or program's intended learning outcomes (Marriot \& Lau, 2008).

The overall scope of assessment can be viewed within five main dimensions: Why assess, what to assess, How to assess, How to interpret, and How to respond? (Rowntree, 1977).

Teachers control classroom assessment environments by choosing how they assess their students, the frequency of these assessments, how and when they give students feedback. McMillan (2008) found that "Assessment of students at classroom level is very critical because effective
decision making is based to some extent on the ability of teachers to understand their students and to match actions with accurate assessments" (p. 5).

### 2.2.2 "High Stakes" or Standardized Assessments

Standardized assessments are types of assessments designed to yield some norm-referenced or criterion-referenced inferences; these assessments are usually administered, scored, and interpreted in a standard manner. These assessments can be used to measure students' performance and to ensure accountability of educational systems that are focused on students' learning outcomes (Glaser \& Silver, 1994). These examinations are called "high stakes" because the information collected from these assessments are used to make high stake decisions such as selection and placement of students into higher educational levels.

According to Stecher, Hamilton \& Klein (2002), highstakes has got both positive and negative effects. The positive effects includes; provides students with clear information about their own skills, motivate students to work hard in schools, send clearer message to students about what to study and helps students associate and align personal efforts with rewards. The negative effects includes; frustrate students and discourage them from trying, makes students more competitive and cause students to devalue grades and assessment.

Other studies came to very distinct conclusions. Roderick and Engel in their analysis of low performing students in Chicago found that children from disadvantaged backgrounds generally worked harder, which manifested itself in higher than average learning and promotion to the next grade level (Roderick and Engel, 2001).

### 2.2.3 Criterion-referenced Assessment

According to Popham and Husek (1969), criterion-referenced measures are those which are used to ascertain an individual's status with respect to some criterion or performance standard. The logic of criterion-referenced assessment is say what you want students to be able to do (see learning objectives), teach them to do it (through lectures, tutorials, and learning activities), and then see if they can do it (Biggs 2003, p.144). Thus, it is about alignment.

For criterion-referenced assessment to work, it is necessary to be clear about what your students should be learning in terms of qualities or performance criteria that define the grading categories
and then to devise assessment tasks that will tell you how well students meet the criteria (Biggs 2003, p.145). The first task is a matter of setting learning objectives.

Criterion referenced assessment is carried out against previously specified yardsticks ('criteria'). Where a grade is assigned, it is assigned on the basis of the performance standard the student has achieved on each of the criteria.

### 2.3 Teachers' perceptions on assessment

Researchers have attempted to investigate teachers' perceptions of assessment in many different ways (Chester \& Quilter, 1998). Chester and Quilter believed that studying teachers' perceptions of assessment is important in the sense that it provides an indication of how different forms of assessment are being used or misused and what could be done to improve the situation. More critical also is the fact that perceptions affect behavior (Atweh, Bleicker \& Cooper, 1998; Calder

A study conducted by Chester and Quilter (1998) on in-service teachers' perceptions of classroom assessment, standardized testing, and alternative methods concluded that teachers' perceptions of classroom assessment affected their assessment classroom practices. Teachers that attached less value to classroom assessment used standardized tests most of the times in their classrooms. Chester and Quilter went further to say that teachers with negative experiences in classroom assessment and standardized testing are least likely to see the value in various forms of assessment for their classroom. They recommended, therefore, that in-service training should focus on helping teachers see the value of assessment methods rather than "how to" do assessment.head, 1996; Cillessen \& Lafontana, 2002).

### 2.4 Teacher Training

According to Hughes (2011), "training is about bridging the gap between what is known (the present) and the level of skills required (the future)" (p. 1). With the fast changing skill demand for growth and development in a highly competitive global economy, teacher classroom practicing skills need to be frequently updated. According to Walter, Wilkinson and Yarrow (1996) "the quality of teaching depends on the quality of teachers which, in turn, depends to some extent on the quality of professional development" (p. 41) of skills necessary for preparing students for future growth opportunities.

Given its importance teachers who are the prime movers of education processes need to be well trained in classroom assessment practices. Lack of a good level of such training handicaps the teacher in any attempt to fulfill his/her roles effectively in the classroom. Trained teachers realize these handicaps when they start teaching. They soon find out that without such skills their effectiveness is limited.

### 2.5 Challenges in Assessment Practices

In fulfilling their role as instructors, teachers work in different environments and face numerous challenges. Some researchers such as Bingimlas (2009), Mustafa and Cullingford (2008), Opolot-Okurut (2007), and Oyelese (1982) have described challenges that teachers face in the course of their work in different environments and subjects. In Uganda, teachers face common problems including pressure to complete the syllabus. Mustafa and Cullingford (2008) pointed out that "teachers have little control regarding what and when they teach and these have an impact on how they teach" (p. 87).

Similarly, Oyelese (1982) identified problems of teaching statistics in Nigerian schools to include lack of qualified teachers, non-existent elementary textbooks for teaching in primary and secondary schools, lack of appropriate teaching aids, non-existent curriculum for statistics, and lack of visiting specialist lecturers to generate interest in the teaching of statistics. Meanwhile, Bingimlas (2009) identified minimum use of Information and Communication Technology (ICT) and its associated barriers in teaching statistics, which deny students opportunities to operate effectively in an information age.

Assessment is an integral part of teaching (Cockcroft, 1982) that serves several functions like enabling teachers judge students' progress, measuring and diagnosing the effectiveness of the instruction, and reporting student progress to interested clients. Black and William (1998) have explained the use of assessment for effective learning, its negative impact and its managerial role but students value only what is assessed and ignore what they would probably need later in the workplace (Garfield, 1995). This poses a challenge to the teachers.

Black and William (1998) sum up the managerial role of assessment situation as "the collection of marks to fill in records which is given higher priority than the analysis of pupils' work to discern learning needs; furthermore, some teachers pay no attention to the assessment records of
their pupils' previous teachers" (p.142). Feedback from teachers to students as part of formative assessment is a prime requirement for progress in learning. Teachers need to team up and to draw on external sources to collect or develop good questions or worthwhile tasks (NCTM, 1991) that are not easy to create.

Thus, understanding the challenges that teachers face and the assessment practices they employ can contribute to better understanding of teachers' work in classrooms and could contribute to education stakeholders' efforts to work effectively with teachers.

### 2.6 Theories of education assessment

### 2.6.1 Title's Theory for Classroom Assessment Practice

Teacher beliefs can be conceptualized within the framework and theory of Title (1994) which she developed to guide assessment practices in classrooms. This theory emphasizes the following dimensions about classroom assessment practices: (a) Interpretation and knowledge, beliefs, intents, and actions, and (b) Assessment characteristics, embeddedness in practice, format and mode, scoring, evaluation, preparation and feedback.

Title (1994) also points out that there are two things essential to know about assessment knowledge related to teaching, and knowledge about assessment process. Teachers' selfknowledge of classroom assessment practices play a major role in this study as it covers a wide range of issues and teachers' belief systems. For instance, teachers may have construed meanings about professional expectations, standards, values, and their personal effectiveness as well as construed beliefs about assessment.

Furthermore, teacher belief systems were found to be integral part of informing their general teaching practices. Teachers are likely to hold beliefs about assessment on students before assessment (provide a focus of learning), knowledge about assessment effects on students during assessments (provide a sense of accomplishment, challenge, failure, or inadequacy), and knowledge about assessment effects on students after assessments (as fair, meaningful, useful providing information for continuing development or lack of it). Teachers may also have beliefs about the effects of assessment on teachers themselves, such as requiring instructions on
particular topics or problems or providing or not providing useful information for instruction (Title, 1994). These are some of the dimensions that informed this study.

### 2.7 Conceptual Model

The model suggests that teacher perception, teachers' skills and competencies and assessment practices to evaluate students learning have influence on classroom assessment practices. On the teachers' perception, there were a number of issues that influenced it. These were; the purpose of classroom assessment is to determine whether students have mastered the learning objectives, the purpose of classroom assessment is to monitor students learning progress as well as preparing students for standardized exams.

On the factor of teacher's skills and competencies, there was a test of whether teachers were able to assess critical thinking skills, assessing creative thinking skills, assessing problem solving skills as well as assessing higher-order cognitive skills. The model also gives a highlight of whether teachers are able to assess ability to contribute solutions to real life problems, assessing ability to make inferences, assessing ability to analyze ideas as well as assessing ability to access information to guide decision making.

On assessment practice to evaluate students learning various classroom assessment modes were used. These included observations, students self-assessment, peer assessment, use of own productions, projects and portfolios. Each of these factors plays a role in classroom assessment practices whose intent was to examine the extent to which teachers apply assessment practices, their skills and competencies in evaluating students learning.

Figure 1.1: conceptual model


## CHAPTER THREE

## METHODOLOGY

### 3.0 Introduction

This chapter presents the research design, sample selection procedures, how validity and reliability were maintained. This chapter also highlights the procedures used for carrying out the field study and data analysis.

### 3.1 Research Design

The study employed quantitative research design as descriptive study approach was adopted because it was appropriate and helped in getting the data as was required for by the study. This research design was the most desirable because the study sought to describe the current situation of classrooms in terms of teachers' perceptions about assessment, their skills and competencies in assessment as well as the practices used by teachers to evaluate students learning

### 3.2. Sample Selection

A sample is a small proportion of a population selected for observation and analysis (Best and Kaln, 1989). The target population was decided as graduate secondary school teachers. The researcher used purposive sampling to select 60 secondary school teachers. An assumption was made that teachers bear similar characteristics having been trained in the same way and having undertaken the same curriculum as set out in the universities and Teacher-training colleges. . Also the mode of assessment was common across all schools and for this matter purposive sample was thought applicable and appropriate

### 3.2.1. Selection of Schools

There are approximately 282 secondary schools in Murang'a County which are distributed in the eight sub- County. Out of these, two are National schools, 16 are county schools, 64 are district schools and the remaining 210 are district day schools.

From the eight districts, a random sample of $14.18 \%$ was selected. The reason for selecting this sample size allowed the researcher to draw a small and manageable number of schools from each
region based on the time and financial constraints. Because districts have different number of schools, different sample sizes were drawn with 6 schools drawn from areas with more schools, and 4 schools drawn from areas with lesser schools. The distribution of the sample schools was as shown in table below.

Table 3.1: Sampling frame for schools by Districts.

| DISTRICT | NUMBER OF <br> SCHOOLS | NO.OF SAMPLED <br> SCHOOLS |
| :--- | :--- | :--- |
| Kiharu | 32 | 4 |
| Kahuro | 40 | 6 |
| Mathioya | 35 | 5 |
| Kangema | 37 | 6 |
| Maragwa | 34 | 5 |
| Kandara | 37 | 6 |
| Kigumo | 33 | 4 |
| Gatanga | 34 | 4 |
| TOTAL | $\mathbf{2 8 2}$ | $\mathbf{4 0}$ |

Note: Sample is $14.18 \%$ of the whole County.

### 3.2.2 Population Selection

Determining sample size is concerned with how much data is required to make appropriate decisions on a particular study. If there is enough data, the amount of error is more likely to be reduced (Abraham \& Russell, 2008).

To ensure that teachers who participated in the study represented all relevant subgroups, the sample of teachers based on their training, grade level, and subject taught, years of experience and school level was selected (Gay, Mills, \&Airasian, 2009; Mertens, 2010). All teachers in the selected schools were asked to participate in the study, and 60 agreed to participate. The sample of teachers was fairly well representative of the County. The distribution of the teachers is shown in the table below.

Table 3.2: Frequency Table of Demographic Variables

| DISTRICT | APPROXIMATE NO. OF <br> TEACHERS | SAMPLE NO. OF <br> TEACHERS |
| :--- | :--- | :--- |
| Kiharu | 290 | 7 |
| Kahuro | 352 | 10 |
| Mathioya | 271 | 8 |
| Kangema | 304 | 8 |
| Maragwa | 339 | 9 |
| Kandara | 298 | 8 |
| Gatanga | 333 | $\mathbf{1 0}$ |
| TOTAL | $\mathbf{2 1 8 7}$ | $\mathbf{6 0}$ |

### 3.3 Data Collection Methods

### 3.3.1 Description of Instrument

A questionnaire titled "The Classroom Assessment Practices and Skills (CAPS)" was used as the data collection instrument. The questionnaire contained 68 closed-ended items that described aspects of global reforms in and assessment for 21st century skills or global competencies. The questionnaire was divided into four main sections. The first section describes teachers characteristics i.e. their gender, age, academic qualification, teaching experience, area of specialization, number of lessons per week and any extended test training received if any ( 7 items).

The second section is divided into two subsections. The purpose of the first one was to document, using closed-ended items, how often teachers employ assessment purposes and assessment tools in the daily classroom practice ( 15 items). The second subsection was a 3-point scale that sought the extent to which teachers perceived the Bloom-taxonomy-related skill measured by the item in ensuring development at the 21st century, hence quality of education (12 items).

The third section described the extent to which teachers use various classroom assessment practices. A 3-point scale which ranged from "Not used" to "a greater extent" was used and
contained 16 items. The fourth section was on the quality of the assessment training teachers received, the purpose of classroom assessment, their perceptions about test construction and grading practices ( 18 items). A 5-point Likert- Scale ranging from "Strongly Disagree" to "Strongly Agree" options was used to measure such perceptions.

### 3.4 Validity and Reliability

To ascertain the validity and reliability of the research instrument, a pilot study was done in two schools within the County that did not participate in the actual study. Following the pilot study, more errors were identified in the instruments. Drawing on the expert opinions, appropriate corrections were made on the instruments. Thereafter, all instruments were administered by the researcher and collected immediately.

### 3.5Data collection Procedure

Data was collected using self-administered questionnaire and an interview schedule. The questionnaire was appropriate because it saves on time and the targeted respondents are literate as well as ensuring uniformity in the way questions are asked. Equally respondents feel free to answer sensitive questions if they are not required to disclose their identity (Mulusi, 1988) as cited by (Mugambi, 2006).

### 3.6 Data Analysis

All the information from the questionnaires was entered into Statistical Package for Social Sciences (SPSS). The program was used to generate descriptive statistics, graphics, tables and charts. The interpretation of the descriptive statistics made it possible to make appropriate inferences in terms of determining the classroom assessment practices. The qualitative data was analyzed into themes and concepts.

### 3.7 Limitations of the Study

Different limitations hindered the progress of this research, for instance; some respondents declined from participating in the study while others kept on postponing the filling of the questionnaires. Others received the questionnaire and submitted it blank-spaced while others never submitted at all. This slowed down the process of data collection.

## CHAPTER FOUR

## RESULTS AND FINDINGS

### 4.0 Introduction

This study examined teachers' classroom assessment practices. Relationships between teachers' perceptions about classroom assessment, their perceived skill and frequency at which they used assessment practices were examined. Comparisons were made based on teacher characteristics (assessment training, level/form taught, subjects taught, academic qualifications, years of experience, gender and age). This chapter presents findings of this study.

### 4.1 Response rate

The rate of return of the questionnaires was tabulated in Table4.1. The data gathered through the questionnaire would enable the researcher to acquire appropriate knowledge to answer the research questions of the study.

Table 4.1: Response rate

| Type of respondent | No of questionnaire <br> Issued | No of questionnaire <br> Returned | Percentage |
| :--- | :--- | :--- | :--- |
| Male teachers | 35 | 26 | 74.28 |
| Female teachers | 20 | 14 | 70.00 |
| Total | $\mathbf{6 0}$ | $\mathbf{4 0}$ | $\mathbf{1 4 4 . 2 8}$ |

The rate of return of the questionnaires was $66.67 \%$ which is appropriate as it is far above the expected return ( $30 \%$ ).

### 4.2 Demographic Information of the teachers

The demographic information would assist the researcher in understanding the respondents' background and relate it to the objectives of the study. The teachers were asked to state their gender, age, their level of academic qualifications, the teaching experience, the teaching subjects,
and the number of lessons taught per week and any extended test training that they may have received.

### 4.2.1 Teachers gender

The teachers were asked to give their gender. Statistical frequency and percent were computed and recorded in table 4.82 below.

Table 4.2: Teacher Gender

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- |
| Malid FEMALE | 14 | 26 | 65.0 | 65.0 |
| 65.0 | 35.0 | 100.0 |  |  |
| Total | 40 | 100.0 | 100.0 |  |

The gender distribution of teachers was such that there were more male teachers; 26 (65.00\%) than their female counterparts; $14(35.00 \%)$. The small percentage of female teachers could be compared to their relatively smaller number as compared to their male counterparts in the County.

Figure 4.1: Gender


### 4.2.2 Age of the teachers

The respondents were given several age brackets so that they could state the category within which their age falls. Statistical frequency and percent were computed and recorded in table 4.3 below.

Table 4.3: Age

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: |
|   <br>  UNDER 25 YRS <br> Valid  <br>  $25-29$ <br>  $30-39$ <br>  $40-49$ <br>  50 AND ABOVE <br>  Total | $\begin{aligned} & 6 \\ & 8 \\ & 17 \\ & 7 \\ & 7 \\ & 2 \\ & 40 \end{aligned}$ | 15.0 20.0 42.5 17.5 5.0 100.0 | 15.0 20.0 42.5 17.5 5.0 100.0 | $\begin{aligned} & 15.0 \\ & 35.0 \\ & 77.5 \\ & 95.0 \\ & 100.0 \end{aligned}$ |

From the data above, $17(42.5 \%)$ teachers lie between the age of $30-39$ years; $8(20.0 \%)$ teachers lie in the age bracket of 25-29 years while 7 ( $17.5 \%$ ) teachers are between $40-49$ years. In the
age bracket of less than 25 years there were $6(15.0 \%)$ teachers while $2(5.0 \%)$ teachers were in the age of 50 and above years.

Figure 4.2: Age


### 4.2.3 Academic qualification of teachers

The teachers were asked to give their highest academic qualification by ticking in the appropriate spaces in the table. This was limited only to diploma and degree holders. Statistical frequency and percent were computed and recorded in table 4.4 below.

Table 4.4: Academic Qualification

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- |
| Valid |  |  |  |  |
|  | D.ED | 25 | 62.5 | 62.5 |
|  |  |  |  |  |
| Total | 40 | 100.0 | 100.0 | 100.0 |

The data shows that $25(62.5 \%)$ of the 60 teachers had Bachelor of Education degree qualifications while 15 (37.5\%) had diploma level qualifications.

Figure 4.3: Academic qualifications


### 4.2.4 Teaching experience for teachers

The teachers were asked to give the number of years that they have taught in secondary school by ticking against various year limits. Statistical frequency and percent were computed and recorded in table 4.5 below.

Table 4.5: Teaching Experience

|  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: |
|  BELOW 5 YRS <br> Valid $5-10$ <br>  ABOVE 10 YRS <br>  Total | $\begin{aligned} & 9 \\ & 17 \\ & 14 \\ & 40 \end{aligned}$ | $\begin{aligned} & 22.5 \\ & 42.5 \\ & 35.0 \\ & 100.0 \end{aligned}$ | $\begin{aligned} & 22.5 \\ & 42.5 \\ & 35.0 \\ & 100.0 \end{aligned}$ | $\begin{aligned} & 22.5 \\ & 65.0 \\ & 100.0 \end{aligned}$ |

It is evident that $22.5 \%$ of the sampled teachers have less than five years teaching experience; $35.0 \%$ lie in the category of above 10 years while the majorities ( $42.5 \%$ ) are in the category of 510 years of teaching.

Figure 4.4: teaching experience


### 4.2.5 Teachers teaching subjects

The teachers were asked to indicate their teaching subjects. Statistical frequency and percent were computed and recorded in table 4.6 below.

Table 4.6: Subjects

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Malid | 10 | 25.0 | 25.0 | 25.0 |
|  | 12 | 30.0 | 30.0 | 55.0 |
|  | 7 | 17.5 | 17.5 | 72.5 |
|  | 9 | 22.5 | 22.5 | 95.0 |
| TECHNICALS | 2 | 5.0 | 5.0 | 100.0 |
| Total | 40 | 100.0 | 100.0 |  |

According to the data there were more responses from teachers in the science department 12 $(30.0 \%)$ followed by the mathematics teachers $9(25.0 \%)$. Humanities teachers were $9(22.5 \%)$; languages, $7(17.9 \%)$ while teachers in the technical subjects were $2(5.0 \%)$.

Figure 4.5: Subjects
SUBJECTS


### 4.2.6 Lessons per week

The respondents were asked to state the number of lessons that they teach per week. Statistical frequency and percent were computed and recorded in table 4.7 below.

Table 4.7: No of Lessons per Week

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :---: | :---: | :---: | :---: | :---: |
| Valid <br>  <br>   <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br>  <br> Total | 4 14 22 40 | $\begin{aligned} & 10.0 \\ & 35.0 \\ & 55.0 \\ & 100.0 \end{aligned}$ | $\begin{aligned} & 10.0 \\ & 35.0 \\ & 55.0 \\ & 100.0 \end{aligned}$ | $\begin{aligned} & 10.0 \\ & 45.0 \\ & 100.0 \end{aligned}$ |

From the table above, it is clear that the majority of teachers' workload lie between 20-29 lessons per week. This accounted for $55.0 \%$ of the respondents. $35.0 \%$ have got a workload of 12-19 lessons; $10.0 \%$ teach below 12 lessons per week.

Figure 4.6: Number of lessons


### 4.2.7 Extended Test Training

The respondents were asked to state any test training they may have received besides the normal training undergone in colleges and universities. Statistical frequency and percent were computed and recorded in table 4.8 below.

Table 4.8: Extended Test Training

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Valid | NONE | 23 | 57.5 | 57.5 | 57.5 |
|  | WORKSHOP | 9 | 22.5 | 22.5 | 80.0 |
|  | 8 | 20.0 | 20.0 | 100.0 |  |
| Total | 40 | 100.0 | 100.0 |  |  |

From the data captured in the table above, it is clear that the least number of teachers 8 ( $20.0 \%$ ) have gone for in-service in assessment while 9 (22.5\%) have undergone some workshops. Majority of the teachers (57.5\%) have not attended any extended test training.

Figure 4.7: extended test training


### 4.3.0 What are the teachers' levels of agreement with factors concerning perceptions about assessment?

The participants were given a set of questions and were required to use the keys which ranged from 1 (Disagree) to 3(Agree) to indicate their response on each statement with regard to their perception on classroom assessment. Exploratory Factor Analysis (EFA) was used to reduce the number of items in the "perceptions about assessment" subscale to four factors (Mastery, Performance, Grading Practices, and Assessment Training). Descriptive statistics means and standard deviations were computed to ascertain teachers' levels of agreement with these factors. All the four factors were significantly different from each other. Teachers showed greatest agreement with items that conveyed performance orientations (mean 2.57) and least agreement with the items that conveyed grading practices orientations (mean 1.56).

### 4.3.1 Mastery factor

Teaching that is conceived on mastery goals is more likely to set in motion affective, as well as cognitive processes that can have positive impact on student learning and performance. One component of mastery is its education philosophy which is a set of beliefs about learning and
teaching. Methods of instruction is another component and it involves a set of clear steps for selecting content, teaching and determining students' progress, focus on skills and feedback for improvement. The researcher intended to bring these steps clearly and the results were as in table 4.9 below.

Table 4.9: Mastery Factor

|  | MASTERLY <br> OF LEARNING OBJECTIVES | EFFECTIVENE  <br> SS OF <br> INSTRUCTION  | $\begin{aligned} & \text { FOCUS } \\ & \text { SKILLS } \end{aligned}$ | ON | MONITOR <br> STUDENTS <br> PROGRESS | FEEDBACK <br> FOR <br> IMPROVEMEN <br> T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 40 | 40 | 40 |  | 40 | 40 |
| Missing | 0 | 0 | 0 |  | 0 | 0 |
| Mean | 2.73 | 1.85 | 2.48 |  | 2.70 | 2.58 |
| Mode | 3 | 1 | 3 |  | 3 | 3 |
| Std. Deviation | . 599 | . 864 | . 599 |  | . 648 | . 781 |
| Variance | . 358 | . 746 | . 358 |  | . 421 | . 610 |
| Range | 2 | 2 | 2 |  | 2 | 2 |

From the table above, it is evident that teachers agreed with 4 out of the 5 attributes in the masterly factor. Masterly of learning objectives had the highest mean (2.73), monitoring students learning progress (mean 2.70), use of assessment as feedback for improvement (mean 2.58) and focus on skills needed (mean 2.48). Some teachers disagreed with the attribute that the purpose of classroom assessment is to determine the effectiveness of teachers' instructions (mean 1.85).

### 4.3.1.1The purpose of classroom assessment is to determine whether students have mastered learning objectives

Figure 4.8: Masterly of learning objectives


From the graph above it is evident that $80.0 \%$ of the teachers agreed that that the purpose of classroom assessment is to determine whether students have mastered the learning objectives. $12.5 \%$ were not sure while $7.5 \%$ disagreed with the purpose.

### 4.3.1.2Purpose of classroom assessment is to monitor students learning progress.

Figure 4.9: Graph of monitoring progress

$80.0 \%$ of the teachers agreed that the purpose of classroom assessment is to monitor students learning progress while $10.0 \%$ of the teachers were undecided and another $10.0 \%$ of them disagreed with this purpose.
4.3.1.3 Purpose of classroom assessment is to determine the effectiveness of my instructions.

Figure 4.10: Graph on instruction effectiveness


From the graph above, it is clear that $45.0 \%$ of the teachers disagreed with the attribute that the purpose of classroom assessment is to determine the effectiveness of the teachers' instructions. $35.0 \%$ of the teachers agreed while $25.0 \%$ were not sure.

### 4.3.1.4Tests helps me focus on the skills needed by my students.

Figure 4.11: Graph on skills

$52.5 \%$ agreed that tests help teachers to focus on the skills needed by the students while a relatively large number ( $42.5 \%$ ) were undecided or were not sure of the same issue. Only $5 \%$ disagreed with the issue.

### 4.3.1.5Students should consider grades as feedback for improvement.

Figure 4.12: Graph on grades as feedback


From the graph above, it is evident that $75 \%$ of the respondents agreed that students should consider grades as feedback for improvement while $17.5 \%$ did not agree with the same. $7.5 \%$ of the teachers were not sure of this attribute.

At the secondary school levels, the examination and curriculum both emphasize mastery orientations as they stress the need for students to develop understanding and application of higher order thinking skills, such as decision making, reasoning, creativity, problem solving, process skills, as well as acquisition of hands on experiences.

### 4.3.1 Performance factor

More than standardized tests of content knowledge, performance-based tasks are able to measure students' habits of the mind. Performance-based factors requires teachers to use high-level thinking to perform, create something with transferrable real-world application like; making students accountable for their learning, determining students grades, making students consider grades as reward for good work. The researcher elaborated these and recorded the results in table 4.10

Table 4.10: Performance Factors.

|  | DETERMIN <br> E <br> STUDENT <br> S GRADE | STANDAR <br> DIZED <br> EXAMS | REWARD FOR GOOD WORK | ACCOUNTAB <br> LE <br> THEIR <br> LEARNING | TEACHING FOR TEST | MOTIVATE |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | 40 | 40 | 40 | 40 | 40 | 40 |
| Nissing | 0 | 0 | 0 | 0 | 0 | 0 |
| Mean | 2.60 | 2.63 | 2.20 | 2.83 | 2.58 | 2.30 |
| Mode | 3 | 3 | 3 | 3 | 3 | 3 |
| Std. Deviation | . 744 | . 705 | . 853 | . 549 | . 747 | . 883 |
| Variance | . 554 | . 497 | . 728 | . 302 | . 558 | . 779 |
| Range | 2 | 2 | 2 | 2 | 2 | 2 |

From table 4.10, it is clear that teachers agreed with all the six attributes in the performance factor (modes of 3). All their means were above 2. The purpose of classroom assessment is to make students be accountable for their learning had the highest mean (2.83) followed by the purpose of assessment is to prepare students for standardized exams with a mean of 2.63. Students should consider grades as reward for good work had the least mean (2.20) followed closely by the purpose of classroom assessment is to motivate students with a mean of 2.30.

### 4.3.2.1The purpose of classroom assessment is to determine students' grades.

Figure 4.13: Graph on grades determination

$75.0 \%$ of the respondents agreed with the attribute that the purpose of classroom assessment is to determine students' grades. $15 \%$ of them disagreed while $10 \%$ were not sure.
4.3.2.2 The purpose of classroom assessment is to prepare students for standardized exams.

Figure 4.14: Graph on standardized exams


From the graph above it is evident that $75 \%$ of the respondents agree that the purpose of classroom assessment is to prepare students for standardized exams while those who disagreed and those who were undecided both stood at $12.5 \%$.

### 4.3.2.3 Students should consider grades as rewards for good work.

Figure 4.15: Graph on rewards for good work
REWARD FOR GOOD WORK


From the graph above, it is clear that $47.5 \%$ of the respondents agreed with the attribute that students should consider grades as rewards for good work. On the same there were $27.5 \%$ who disagreed while $25 \%$ of the respondents were not sure of the same.

### 4.3.2.4The purpose of assessment is to make students accountable for their learning.

The results were as captured in

Figure 4.16: Graph on learning accountability

$90.0 \%$ of the respondents agreed with the attribute that the purpose of classroom assessment is to make students accountable for their learning. Only $7.5 \%$ disagreed with this attribute while a merely $2.5 \%$ could not agree or disagree with the same.

### 4.3.2.5 Teaching for the test is good as long as the test is well constructed.

Figure 4.17: Graph on teaching for the test


It is evidently clear that $72.5 \%$ of the respondents agree with the attribute that teaching for the test is good as long as the test is well constructed while $15 \%$ of the same sample of respondents disagreed. Another $12.5 \%$ of them were not sure.

### 4.3.2.6The purpose of classroom assessment is to motivate students.

Figure 4.18: Graph on students motivation

$57.5 \%$ of the respondents agreed that the purpose of assessment is to motivate students either positively or negatively. $27.5 \%$ were not satisfied and therefore they disagreed but $15.0 \%$ of the same respondents could neither agree nor disagree with the same.

However, it can be said that both curriculum and examinations at these levels also instill a sense of performance orientations. This is based on the fact that standardized examinations at the school levels are norm-referenced because they are used to select students for tertiary education. Of interest is that the perceptions teachers have about mastery and performance orientations are logical as they can be seen as reflecting both policy goals, teaching practice, and the beliefs that teachers may bring into the educational systems.

### 4.3.1 Grading practices factor

There are a number of practices that educators have long implemented in their grading systems. The most common grading system used is one that assigns students varying numbers of points for different degrees of achievement. Here the researcher intended to capture other factors other than the grades themselves and here he carried out statistical analysis which included the mean, mode, standard deviation, variance and range. The results were as indicated in table 4.11

Table 4.11: Grading Practices Factors

|  |  | INDIVIDUALIZED COMMENTS | LEARNT ASSESSMENT PRACTICES |
| :---: | :---: | :---: | :---: |
| N | Valid | 40 | 40 |
|  | Missing | 0 | 0 |
| Mean |  | 1.55 | 1.58 |
| Mode |  | 1 | 1 |
| Std. Deviation |  | . 846 | . 813 |
| Variance |  | . 715 | . 661 |
| Range |  | 2 | 2 |

The two attributes of the grading practices had an average mean of 1.56 meaning that the respondents disagreed with the attributes. Their modes were both 1 . Giving individualized comments for student learning is more important than giving grades had a mean of 1.55 while assessments practices that teachers learnt and never use them in class had a mean of 1.58.

### 4.3.3.1Giving individualized comments is more important than giving grades.

This is clearly indicated in

Figure 4.19: Graph on individualized comments
INDIVIDUALIZED COMMENTS


From the graph above, it is evident that $67.5 \%$ of the respondents disagreed with the attribute that individualized comments are more important than giving grades. $10.0 \%$ were not sure while $22.5 \%$ disagreed with the same.

### 4.3.3.2I learnt assessment practices that I never use in classroom.

This was clearly indicated in

Figure 4.20: Graph on assessment practice
LEARNT ASSESSMENT PRACTICES

$62.5 \%$ of the respondents disagreed with the attribute that they learnt assessment practices that they never use in the classroom. $20.0 \%$ agreed on the same attribute but $17.5 \%$ of the respondents were undecided on the same attribute.

When teachers assign grades, especially final grades, they are communicating a number of messages to students with a single mark which includes "level of expectation, level of academic achievement, encouragement, and disappointment". The one standard factor that all grading systems take into account is student academic achievement, here referring to students' mastery of specific learning standards.

### 4.3.4Training factor

According to Hughes (2011), "training is about bridging the gap between what is known (the present) and the level of skills required (the future)". With the fast changing skill demand for growth and development in a highly competitive global economy, teacher classroom practicing skills need to be frequently updated. Here the researcher captured two attributes and carried out statistical analysis like mean, mode, standard deviation and variance. Their statistical results are as shown in table 4.12.

Table 4.12: Training Factors
$\left.\begin{array}{|l|l|ll|}\hline & \text { ASSESSMENT } & \text { MORE } & \text { TRAINING } \\ & \text { TRAINING ADEQUATE } & \text { NEEDED }\end{array}\right]$

From table 4.12, it can be seen that the respondents agreed with the aspect that they need more training in students assessment (mean 2.63) but on the contrary they disagreed on the aspect that the kind of assessment training they received was adequate (mean 1.65). The attributes of the training factor were clearly shown by figures 4.21 and 4.22 below.

### 4.3.3.2The student assessment training I received was adequate.

This is clearly shown in:-

Figure 4.21: Graph on adequate training


From the graph above, it is evident that $57.5 \%$ of the respondents disagreed on the attribute that the kind of assessment training they received was adequate. $22.5 \%$ indicated that they were satisfied with kind of training they received while $20.0 \%$ of them were not sure whether the kind of assessment training they received was adequate or not adequate.

### 4.3.3.3 I need more training in student assessment/tests.

This was clearly captured

Figure 4.22: Graph on need for more training
MORE TRAINING


From the figure 4.22 above, it is clear that the majority of the teachers who responded to the questionnaire ( $75.0 \%$ ) concur that they need more training on matters concerning students' assessment. Those who disagreed and those were not sure both stood at $12.5 \%$.

Given its importance teachers who are the prime movers of education processes need to be well trained in classroom assessment practices. Lack of a good level of such training handicaps the teacher in any attempt to fulfill his/her roles effectively in the classroom. Trained teachers realize these handicaps when they start teaching. They soon find out that without such skills their effectiveness is limited.

### 4.4.0 Which areas of classroom assessment practice do teachers believe they are most skilled?

### 4.4.1 Assessment tasks as per the Learning taxonomy

In assessing the work of the students in the classroom, the following keys 1 (Not skilled), 2(Somewhat skilled) and 3(Skilled) were used to indicate teachers' skill level in various
assessment tasks as outlined in blooms taxonomy. Statistical mean, standard deviation, standard error and variance were computed and the results recorded in table 4.13 below

Table 4.13: Learning Taxonomy

|  | N | Mean |  | Std. Deviation | Variance |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Statistic | Statistic | Std. Error | Statistic | Statistic |
| ABILITY TO APPLY | 40 | 2.18 | . 118 | 747 | . 558 |
| ABILITY TO ANALYSE | 40 | 2.35 | . 116 | 736 | 541 |
| CREATIVE THINKING | 40 | 2.38 | . 117 | 740 | 548 |
| MAKE INFERENCES | 40 | 2.25 | . 117 | 742 | 551 |
| ABILITY TO <br> CONTRIBUTE  <br> SOLUTIONS  | 40 | 1.97 | . 098 | 620 | 384 |
| ABILITY TO THINK DIVERGENTLY | 40 | 2.00 | . 113 | 716 | 513 |
| DECISSION MAKING | 40 | 2.35 | . 111 | 700 | 490 |
| CRITICAL THINKING | 40 | 1.95 | . 118 | 749 | 562 |
| AFFECTIVE BEHAVIOR | 40 | 1.85 | . 127 | . 802 | 644 |
| ACCESS INFORMATION | 40 | 1.70 | . 125 | 791 | 626 |
| PROBLEM SOLVING | 40 | 2.32 | . 110 | 694 | . 481 |
| HIGH ORDER COGNITIVE SKILLS | 40 | 2.02 | . 121 | 768 | 589 |
| Valid N (list-wise) | 40 |  |  |  |  |

From table 4.13, it is clear that teachers are more skilled in assessing creative thinking (mean 2.38) as well as assessing students' ability to analyze ideas (mean 2.35). Similarly, teachers also seem to be somewhat skilled in assessing ability to contribute solutions to real life problems (mean 1.97), assessing ability to think divergently (mean 2.00) and assessing critical thinking skills (mean 1.95).

On the other hand, it is evident from the table that teachers are not skilled in assessing ability to access information to guide decision making (mean 1.70) and assessing affective behavior (mean 1.85). To get a clear picture of the themes on blooms taxonomy, the researcher discussed the most conspicuous ones as follows;

## Assessing creative thinking

The results were as recorded in table 4.14 below.

Table 4.14: Creative Thinking

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOT SKILLED | 6 | 15.0 | 15.0 | 15.0 |  |
| Valid | SOMEWHAT SKILLED | 13 | 32.5 | 32.5 | 47.5 |
|  | SKILLED | 21 | 52.5 | 52.5 | 100.0 |
|  | Total | 40 | 100.0 | 100.0 |  |

From table 4.14, it is clear that teachers are skilled in assessing creative thinking ( $52.5 \%$ ). Teachers also seem to be somewhat skilled in the same ( $32.5 \%$ ) but $15.0 \%$ of these respondents are not skilled in assessing creative thinking as shown in

Figure 4.23: Graph on creative printing


### 4.4.1.2 Assessing ability to analyze ideas.

The results were as shown in table 4.15 below.

Table 4.15: Ability to Analyse

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOT SKILLED | 6 | 15.0 | 15.0 | 15.0 |  |
| Valid | SOMEWHAT SKILLED | 14 | 35.0 | 35.0 | 50.0 |
|  | SKILLED | 20 | 50.0 | 50.0 | 100.0 |
|  | Total | 40 | 100.0 | 100.0 |  |

$50.0 \%$ of the respondents were skilled in assessing ability to analyze ideas while $35.0 \%$ of the same respondents were somewhat skilled in the same. $15.0 \%$ of these respondents were not skilled in assessing ability to analyze ideas as shown

## Figure 4.24: Graph on ideas analysis



### 4.4.1.3. Assessing ability to access information to guide decision making

The results were indicated in table 4.16

Table 4.16: Access Information

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOT SKILLED | 20 | 50.0 | 50.0 | 50.0 |  |
| Valid | SOMEWHAT SKILLED | 12 | 30.0 | 30.0 | 80.0 |
|  | SKILLED | 8 | 20.0 | 20.0 | 100.0 |
|  | Total | 40 | 100.0 | 100.0 |  |

From table 4.16, it is evidently clear that $50.0 \%$ of those who responded were not skilled in assessing the ability to access information to guide decision making. Of the same respondents $30.0 \%$ were somewhat skilled while $20.0 \%$ were skilled as indicated in

Figure 4.25: Graph on access to information


### 4.4.1.4 Assessing affective behavior

The results were recorded in table 4.17 below;

Table 4.17: Affective Behavior

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOT SKILLED | 16 | 40.0 | 40.0 | 40.0 |  |
|  | SOMEWHAT SKILLED | 14 | 35.0 | 35.0 | 75.0 |
|  | SKILLED | 10 | 25.0 | 25.0 | 100.0 |
|  | Total | 40 | 100.0 | 100.0 |  |

In assessing affective behavior, it was evidently clear that $40.0 \%$ of the respondents were not skilled, $35.0 \%$ somewhat skilled while $25.0 \%$ of the same respondents were skilled as in

Figure 4.26: Graph on effective behavior


### 4.4.1.5Assessing ability to contribute solutions to real life problems

The results were as indicated in table 4.18

## Table 4.18: Ability to Contribute Solutions

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOT SKILLED | 8 | 20.0 | 20.0 | 20.0 |  |
|  | SOMEWHAT SKILLED | 25 | 62.5 | 62.5 | 82.5 |
|  | SKILLED | 7 | 17.5 | 17.5 | 100.0 |
|  | Total | 40 | 100.0 | 100.0 |  |

From table 4.18, it is clear that the biggest percentage of the respondents (62.5\%) are somewhat skilled in assessing ability to contribute to solutions in real life problems i.e. they cannot be said to be skilled but they some idea of this assessment. $17.5 \%$ of the same respondents were skilled but $20.0 \%$ of them were not skilled on the same kind of assessment as shown in

Figure 4.27: Graph on solution contribution


### 4.4.1.6Assessing ability to think divergently

The results were as indicated in table 4.19 below;

Table 4.19: Ability to Think Divergently

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NOT SKILLED | 10 | 25.0 | 25.0 | 25.0 |  |
|  | 20 | 50.0 | 50.0 | 75.0 |  |
|  | SKILLED | 10 | 25.0 | 25.0 | 100.0 |
| Total | 40 | 100.0 | 100.0 |  |  |

From table 4.19, it is evidently clear that half of the number of the teachers (50.0\%) is somewhat skilled in assessing the ability to think divergently. These can neither be said to be skilled nor not skilled, they are just in between. The number of those skilled and those that were not skilled in the sample of the respondents was equal ( $25.0 \%$ each $)$ as shown.

Figure 4.28: Graph on ability to think divergently


### 4.5.0 Which areas of classroom assessment do teachers use most?

### 4.5.1 Assessment purposes

Teachers responded to how often they employ various assessment purposes in their daily classroom practices. They were categorized by their teaching subjects and their academic qualifications. Their statistical means and standard deviations were calculated and recorded in table 4.20

Table 4.20: Assessment Purposes

| SUBJECTS | ACADEMIC QUALIFICA |  | OWN PRODUCT ONS | $\begin{aligned} & \text { PROJE- } \\ & \text { CTS } \end{aligned}$ | $\begin{aligned} & \text { PORTFO } \\ & \text { LIO } \end{aligned}$ | SELECT <br> TYPE <br> ITEMS | ESSAYS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MATHS | B.ED | Mean | 1.20 | 1.00 | 2.20 | 2.00 | 1.80 |
|  |  | N | 5 | 5 | 5 | 5 | 5 |
|  |  | Std. Deviation | . 447 | . 000 | . 447 | . 000 | . 447 |
|  | DIPLOMA | Mean | 1.20 | 1.20 | 2.20 | 1.60 | 1.80 |
|  |  | N | 5 | 5 | 5 | 5 | 5 |
|  |  | Std. Deviation | . 447 | . 447 | . 837 | . 548 | . 837 |
|  | Total | Mean | 1.20 | 1.10 | 2.20 | 1.80 | 1.80 |
|  |  | N | 10 | 10 | 10 | 10 | 10 |
|  |  | Std. Dev | . 422 | . 316 | . 632 | . 422 | . 632 |
| SCIENCES | B.ED | Mean | 1.14 | 1.00 | 2.57 | 1.86 | 1.86 |
|  |  | N | 7 | 7 | 7 | 7 | 7 |
|  |  | Std. Deviation | . 378 | . 000 | . 787 | . 690 | . 900 |
|  | DIPLOMA | Mean | 1.40 | 1.20 | 2.60 | 1.40 | 1.80 |
|  |  | N | 5 | 5 | 5 | 5 | 5 |
|  |  | Std. Deviation | . 894 | . 447 | . 548 | . 548 | 837 |
| LANGUAGES | Total | Mean | 1.25 | 1.08 | 2.58 | 1.67 | 1.83 |
|  |  | N | 12 | 12 | 12 | 12 | 12 |
|  |  | Std. Dev | . 622 | . 289 | . 669 | . 651 | . 835 |
|  | B.ED | Mean | 1.43 | 1.00 | 1.57 | 2.86 | 2.71 |
|  |  | N | 7 | 7 | 7 | 7 | 7 |
|  |  | Std. Deviation | . 535 | . 000 | . 535 | . 378 | . 756 |
|  | Total | Mean | 1.43 | 1.00 | 1.57 | 2.86 | 2.71 |
|  |  | N | 7 | 7 | 7 | 7 | 7 |
|  |  | Std. Dev | . 535 | . 000 | . 535 | . 378 | . 756 |



From table 4.20 above, it can be seen that academic qualifications do not have a very significant difference in almost all subject combinations. However, a slight difference arises in all issues across the humanities field. Diplomas teachers tend to use own productions more (mean 1.75) than their B.Ed. counterparts (mean 1.00). For the projects, diploma teachers sometimes use them (mean 1.50) unlike their B.Ed. counterparts who never use them (mean 1.00).

For the case of select items and essays, the trend is similar as diploma teachers use them slightly higher (mean 2.00) than the B.Ed. teachers (mean 1.60). On the issue of portfolios, B.Ed. teachers have a slightly higher use (mean 1.80) than the diploma teachers (mean 1.50).

As regards the various subjects, there exists a significant difference across the assessment purposes. Technical subject teachers use own productions all the times (mean 3.00). Teachers in all the other subject combinations rarely use own productions as an assessment purpose; mathematics teachers (mean 1.20), science teachers (mean 1.25), humanities teachers (mean 1.330 and language teachers (mean 1.43).

Similarly, technical subject teachers use projects as an assessment tool all the times (mean 3.00) unlike their other subject counterparts who never use them. Mathematics (mean 1.10), sciences (mean 1.08), humanities (mean 1.22) and languages (mean 1.00).On the issue of how often the teachers employ portfolios as an assessment tool, it is the science teachers who use it more (mean 2.58) followed by mathematics teachers (mean 2.20). Teachers from other departments rarely use portfolios; humanities (mean 1.67), languages (mean 1.57) and technical (mean 1.00).

As for the select-type items (multiple-choice, true-false, blank-filling and matching items), language teachers tend to use them more often (mean 2.86). Mathematics teachers use them sometimes (mean 1.80) as well as science teachers (mean 1.80). Technical subject teachers rarely use them (mean 1.00). A similar scenario exists for the essay type items. Language teachers use them more often (mean 2.71). Mathematics teachers (mean 1.80) and science teachers (mean 1.83 ) sometimes use them while technical teachers never use them (mean 1.00).

Across the issues of how often teachers use various assessment purposes, the researcher singled out three items that were very conspicuous and did further analysis on each of them as follows;
4.5.1.1How often do teachers use Observation as an assessment purpose in their daily classroom practice?

The results were as captured in table 4.21

Table 4.21: Observation

|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Valid | NEVER | 6 | 15.0 | 15.0 | 15.0 |
|  | SOMETIMES | 11 | 27.5 | 27.5 | 42.5 |
|  | ALWAYS | 23 | 57.5 | 57.5 | 100.0 |
|  | Total | 40 | 100.0 | 100.0 |  |

It is evident from table 4.21 that majority of the teachers ( $57.5 \%$ ) always use observation as an assessment purpose in classroom practice. $27.5 \%$ use it sometimes while $15.0 \%$ hardly use it as indicated

Figure 4.29: Graph on Observation

4.5.1.2How often do teachers use projects as an assessment purpose in their daily classroom practice?

The results are as indicated in table 4.22

Table 4.22: Projects

|  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- |
|  | NEVER | 34 | 85.0 | 85.0 |
| Valid | SOMETIMES | 4 | 10.0 | 10.0 |

From table 4.22 , it is evident that $85.0 \%$ of the general respondents do not use projects as an assessment purpose in their daily classroom practice while merely $10.0 \%$ of the same respondents sometimes use projects as an assessment purpose in their daily practice. Only $5.0 \%$ use projects as an assessment purpose as shown

Figure 4.30: Graph on projects


### 4.5.1.3How often do teachers employ own productions as an assessment purpose?

The results are as shown in the table below;

Table 4.23: Own Productions

|  |  | Frequency | Percent | Valid Percent | Cumulative <br> Percent |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NEVER 28 <br> SOMETIMES 9 | 20.0 | 70.0 | 70.0 |  |  |
|  | ALWAYS | 3 | 7.5 | 22.5 | 92.5 |
|  | Total | 40 | 100.0 | 100.0 | 100.0 |

It is evident from table 4.23 that $70.0 \%$ of the teachers who responded to this issue do not use own productions as an assessment purpose. $22.5 \%$ sometimes use it while $7.5 \%$ use it always. This information is well illustrated

Figure 4.31: Graph on own production


### 4.5.2Assessment tools

The respondents were required to state how often they employed assessment tools in their daily classroom practice. Their responses were as indicated below;

Table 4.2.4: Assessment Tools

| ACADEMIC QUALIFICATION |  | MULTIPLE CHOICE ITEMS | OPEN-OPEN QUESTIONS | SUPER ITEMS | ESSAYS | ORAL TASKS AND INTERVIEWS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B.ED | Mean | 1.04 | 1.92 | 1.40 | 2.08 | 2.72 |
|  | Std. Deviation | . 200 | 640 | . 577 | . 862 | 542 |
|  | \% of Total Sum | 60.5\% | 63.2\% | 63.6\% | 64.2\% | 62.4\% |
|  | Mean | 1.13 | 1.87 | 1.33 | 1.93 | 2.73 |
| DIPLOMA | Std. Deviation | . 352 | 743 | . 617 | . 799 | 594 |
|  | \% of Total Sum | 39.5\% | 36.8\% | 36.4\% | 35.8\% | 37.6\% |
|  | Mean | 1.07 | 1.90 | 1.37 | 2.02 | 2.72 |
| Total | Std. Deviation | . 267 | . 672 | . 586 | . 832 | . 554 |
|  | \% of Total Sum | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |

From table 4.24, it is clear that the assessment tools employed by B.Ed teachers and Diploma teachers are not significantly different. For the case of multiple choice items, they are rarely employed by both categories; B.Ed. teachers have a mean of 1.04 while diploma teachers have a mean of 1.13 implying that majority of the teachers never employ them in their daily classroom assessment practice. These are closely followed by super items which are tasks that give students an opportunity to get involved with a context by answering questions of increasing complexity (mean 1.37). However, teachers tend to use more often oral tasks and interviews (mean 2.72).

### 4.5.3 Extent of use the assessment practice

The respondents were asked to use a set of given statements to indicate the extent to which they use assessment practices described by each item. The scale used was 1 (Not used), 2(To some extent) and 3(To a greater extent). The results are as in table 4.25 .

Table 4.2.5: Assessment Practices


| GRADING PROCEDURES | 40 | 2.78 | .084 | .530 | .281 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| STUDENT |  |  |  |  |  |
| PARTICIPATION | 40 | 2.55 | .107 | .677 | .459 |
| PROBLEM SOLVING | 40 | 2.23 | .131 | .832 | .692 |
| SKILLS | 40 |  |  |  |  |
| Valid N (list-wise) | 40 |  |  |  |  |

From table 4.25, it is clear that to a greater extent, teachers use systematic grading procedures (mean 2.78) as assessment practices followed closely by using assessment results when evaluating class improvement (mean 2.72). other practices that are used to a greater extent includes; assessing individual student participation in class (mean 2.55) and using assessment results for decision making about individual students (mean 2.53).

Practices that are used to some extent includes; using assessment results for when planning teaching (mean 2.13), explaining standardized exam scores to others (mean 2.05). on the other hand, practices that are not used includes communicating assessment results to others (mean 1.65 ) and revising tests based on item analysis (mean 1.08).

### 4.5.4 Use of assessment information gathered from students

The respondents were required to answer to a set of six questions whose scale rated from 1(None), 2(Some extent) and 3(A great extent). They were analyzes along extended test training which they may have undergone; either workshops or in-service courses. The results were as indicated in table 4.26.

Table 4.26: Assessment Information

| EXTENDED TEST TRAINING | PROVIDE <br> STUDENTS <br> GRADE | PROVIDE | FEEDBAC |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| K |  |  |  |

From table 4.26 , it is evidently clear that those teachers who have not undertaken any extended test training have a real problem in using assessment information gathered from students. These teachers rarely use the information gathered to; provide feedback to students (mean 1.39), provide students with grades or marks (mean 1.35), diagnose students learning problems (mean 1.17), report to parents (mean 1.09), assign students to different programs/tracks (mean 1.13) and plan for future lessons (mean 1.39).

On the contrary, teachers who have undergone test training by way of workshops seem to use the information gathered from students to a greater extent. They use the information gathered to; provide students grades/marks (mean 3.00), provide feedback to students (mean 3.00), diagnose
students learning problems (mean 2.56), report to parents about the students' progress (mean 2.89), assign students to different programs (mean 2.67) and plan for future lessons (mean 2.56).

Similarly, those teachers who have undergone in-service course also sometimes use the information gathered from students to provide students grades (mean 2.03) and to provide feedback to students (mean 2.05). they also to some extent use the information gathered to plan for future lesson (mean 1.95) and report to parents about the progress of their students (mean 1.83).

## CHAPTER FIVE

## SUMMARY, DISCUSSION AND CONCLUSION

### 5.0 Introduction

In this chapter, the findings of the study are discussed. The chapter is divided into five sections. The first section discusses the teachers' level of agreement with factors concerning perceptions of classroom assessment followed by areas of classroom assessment that teachers believe they are most skilled in. Assessment methods and tools used by the teachers, implications of findings for improvement, and lastly recommendations for further research.

### 5.1 Discussions

This discussion was presented according to the research variables.

### 5.1.1 Teachers perceptions of Classroom Assessment

Researchers have attempted to investigate teachers' perceptions of assessment in many different ways (Chester \& Quilter, 1998). Chester and Quilter believed that studying teachers' perceptions of assessment is important in the sense that it provides an indication of how different forms of assessment are being used or misused and what could be done to improve the situation. More critical also is the fact that perceptions affect behavior (Atweh, Bleicker \& Cooper, 1998).

This study revealed that these teachers have different levels of agreement with the factors concerning perceptions of classroom assessment. On the issue of assessment training that the teachers may have received, it came out very strongly that they disagreed with the assertion that the training they received on student assessment was adequate. $57.5 \%$ of them felt that the training was in-adequate.

Given its importance teachers who are the prime movers of education processes need to be well trained in classroom assessment practices. Lack of a good level of such training handicaps the teacher in any attempt to fulfill his/her roles effectively in the classroom and this is the reason why $75 \%$ of the teachers involved in this study felt that they needed more training on matters pertaining student classroom assessment.

In terms of standardized testing, teachers should avoid teaching to the test (Mehrens, 1989), interpreting test items, and giving hints or extra time during test administration. Teachers should also appropriately interpret test scores and identify diagnostic information from test results about instruction and student learning (Airasian, 1994). On the contrary, what is coming out of this study is that teachers concur with the argument that teaching to the test is good as long as the test is well constructed.

Standardized assessments are types of assessments designed to yield some norm-referenced or criterion-referenced inferences. These assessments can be used to measure students' performance and to ensure accountability of educational systems that are focused on students' learning outcomes (Glaser \& Silver, 1994). Teachers in this study are in agreement that the purpose of classroom assessment is to prepare students for standardized examinations.

According to Stecher, Hamilton \& Klein (2002), highstakes testing has got both positive and negative effects. The positive effects includes; providing students with clear information about their own skills, motivate students to work hard in schools, send clearer message to students about what to study and helps students associate and align personal efforts with rewards. This comes out very clearly in this study where teachers agree that students should consider grades as rewards for good work and that the purpose of assessment is to motivating them.

The negative effects includes; frustrate students and discourage them from trying, makes students more competitive and cause students to devalue grades and assessment and this is evident when the teachers agree that the purpose of classroom assessment is to make students accountable for their learning and determine their grades.

The one standard factor that all grading systems take into account is student academic achievement, here referring to students' mastery of specific learning standards (Wormel, R cit). In practice, this means using assignments that assess students' knowledge of course material. The respondents in this study strongly agreed that assessment should be used to determine whether students have mastered the learning objectives or not.

Whether or not to grade for student conduct and behavior is one of the more contentious aspects of the debate on grading practices. According to a study quoted in an article by Thomas Guskey (2004), for many teachers, "grades and other reporting methods are important factors in
determining how much effort students put forth." This means that students are graded on nonacademic factors such as attendance, homework completion, poor academic integrity (i.e., cheating), and their ability to turn assignments in on time. Effectively, teachers use grades as feedback for improvement according to this study.

### 5.1.2 Teacher Skills and Competencies in Assessment

In the context of the problem of the current study, such classroom assessment skills include ability to detail or breakdown syllabus subject matter content into bits and pieces for ease of instructional coverage, as well as ease of valid assessment (Nenty, 2005). This should reflect the depth and width of actual coverage of each subject matter in the class. It should have detailed conceptual knowledge and application of levels and sub-levels of Bloom's taxonomy of human cognitive behavior, and of their skill demands. They should be able to differentiate among and develop items (tasks, questions, statements, etc.) that call on each level or sub-level of these domains.

Teachers demonstrated a high skill level in assessing the students’ ability to analyze ideas as well as the ability to assess creative thinking skills. On the contrary teachers demonstrated a low skill level in assessing affective behavior as well as assessing the ability to access information to guide decision making. Teachers also demonstrated some skill level in assessing ability to contribute solutions to real life problems, assessing ability to think divergently and assessing critical thinking skills.

### 5.1.3 Assessment Practices in evaluating Students learning

Due to inadequate training, teachers were not well prepared to meet the demand of classroom assessment (Goslin, 1967; Hills, 1991; O’Sullivan \& Chalnick, 1991; Roeder, 1972). This was a revelation by an investigation into teachers' assessment practices. The major problems were particularly notable in performance assessment, interpretation of standardized test results, and grading procedures.

According to Stiggins \& Conklin, (1992), when using performance measures, many teachers did not define levels of performance or plan scoring procedures before instruction, nor did they record scoring results during assessment. In terms of standardized testing, teachers were reported
having engaged in teaching test items, increasing test time, giving hints, and changing students’ answers (Hall \& Kleine, 1992; Nolen, Haladyna, \& Haas, 1992).

Teachers who had not undertaken any extended test training (workshops or in-service courses) had trouble in using assessment information gathered from students. According to this study, these teachers rarely use the information gathered to; provide feedback to students, provide students with grades or marks, diagnose students learning problems, report to parents, assign students to different programs/tracks and plan for future lessons.

Existing literature has suggested that grade levels and subject areas may account for some variations in classroom assessment (Adams \& Hsu, 1998; Stiggins \& Conklin, 1992), as regards the various subjects in this study; there exists a significant difference across the assessment purposes. Technical subject teachers use own productions and projects all the times while teachers in all the other subject areas rarely use them as assessment tools. As for the select-type items (multiple-choice, true-false, blank-filling and matching items), language teachers tend to use them more often than the other teachers.

### 5.2 Conclusions

The study sought to examine the extent to which teachers apply assessment practices, their skills and competencies on classroom assessment as well as their perceptions towards classroom assessment practices. The results show that teachers are yet to demonstrate appropriate assessment practices. This has implications on themes on assessment related to "assessment knowledge related to teaching" and "knowledge about assessment process". Further this has implications regarding teacher perception towards classroom assessment. However, regarding assessment tasks as per the learning taxonomy and the utility of information gathered from evaluating students learning, teachers still showed incompetence or lack of demand or accountability in their application regarding the assessment attributes. This implies that there is need to for capacity building, training programmes that articulate these areas of need, beliefs that teachers behold on their practice and applications. There is also need for the education fraternity to provide knowledge that articulate areas of need more so based on education paradigms that are shifting, consider $21^{\text {st }}$ Century learning as well as measurement theory approaches that are being contested towards authentic testing. Thus the shift from traditional approaches to
measurement theory to assessment as inquiry must guide practice in education today. Kenya educators and government should not be left behind.

### 5.3 Recommendations

Based on findings, the study suggests the following recommendations;
Embedding classroom assessment as a subject in the curriculum of higher education to increase awareness about efficient classroom assessment practices.

Building capacity of teachers through short courses, workshops and seminars to improve their assessment skills should be a priority if learning has to be meaningful. Kenya must realize that improving educational standards goes beyond community mobilization, effective management of external examinations, construction of school buildings, and availability of teachers and books. It includes good classroom assessment practices of which assessment of students is a critical aspect.

There is need for a policy on assessment at all levels, Ministry, School and classroom level of learning.

There is need for policy shift from "assessment measurement" to "assessment as inquiry" that emulates the $21^{\text {st }}$ century thinking.

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## APPENDICES.

## APPEDIX A:

## TEACHER QUESTIONNAIRE

## Classroom Assessment Practices and Skills (CAPS)

The purpose of this questionnaire is to examine teachers' perceptions about issues related to their classroom assessment practices. The results of the study will advance our understanding of teachers' classroom assessment needs. All responses are anonymous and your participation in this study is completely voluntary, there are no benefits or disadvantages from your participation. However, your participation is very much appreciated and will assist in the education process.

## SECTION A: Teacher characteristics

Please Tick ( $\sqrt{ }$ ) the response that describe you in the box that applies.

| Teacher characteristics | Options | Tick(V) |
| :--- | :--- | :--- |
| Gender | Male |  |
|  | Female |  |
|  | Under 25 yrs. |  |
|  | $25-29$ yrs. |  |
|  | $30-39$ yrs. |  |
|  | $40-49$ yrs. |  |
|  | 50 or more yrs. |  |
| Academic qualification | PhD |  |
|  | Masters' degree |  |
|  | Bachelors' degree |  |
|  | College Diploma |  |


| Subjects taught | 5-10yrs |  |
| :--- | :--- | :--- |
|  | above 10yrs |  |
|  | Mathematics |  |
|  | Sciences | Languages |
|  | Humanities |  |
|  | Technical |  |
|  | Below 12 |  |
|  | $12-19$ |  |
|  | $20-29$ |  |
| Extended Test Training | 30 or more | Workshops |
|  | In-service |  |
|  | Short-courses |  |

## SECTION B: Classroom assessment practices and skills.

Please grade the following on a 3-point scale format where 1-Never, 2-Sometimes, 3-Always.

In assessing the work of the students in your class, use the following key to indicate your skill level for the following assessment tasks as per the Blooms Taxonomy. Please tick ' $\sqrt{ }$ ' in the appropriate box where; $\mathbf{1}=$ Not Skilled, $\mathbf{2}=$ Somewhat Skilled, $\mathbf{3}=$ Skilled

## SECTION C: Use of Classroom Assessment Practices.

Directions: For each statement below please use the following scale to indicate to what extent you use the assessment practice described by each item. Please tick ' $\sqrt{ }$ ' in the appropriate box. Where; 1=Not Used, 2= some extent, 3=Greater extent,

How often do you use the assessment information you gather from students to.... (Check one box in each row where $1=$ None, 2= Some extent, $3=$ A great deal)

## SECTION D: Teachers' Perceptions on Assessment Practices.

Directions: For each statement below use the following key to indicate how you respond to the statement regarding your perceptions of classroom assessment. Please tick ' $\sqrt{ }$ ' in the appropriate box.
$\mathbf{1}=$ Strongly Disagree, $\mathbf{2}=$ Disagree, $\mathbf{3}=$ Not Sure, $\mathbf{4}=$ Agree, $\mathbf{5}=$ Strongly Agree

## APPENDIX B:

## LETTER OF INTRODUCTION

Dear Teacher,
This letter is to introduce you to a study concerning classroom assessment. Study Title: Teacher Classroom Assessment Practices in Kenyan Secondary Schools.

Study Purpose and Rationale: This study, will attempt to shed some light on teachers' classroom assessment practices adopted by teachers as they assess student learning by building on what has been done in others parts. The main purpose of this study will be to examine current assessment practices, skills, and beliefs about assessment for secondary school teachers. The study wishes to determine which areas of assessment are utilized and under-utilized, whether the teachers' skills match these practices, and make comparisons based on training and placement.

Participation Procedures for this study: you will be asked to respond to an anonymous 68 items questionnaire which asks you about the assessment training you may have received, purpose of classroom assessment, your perceptions about test construction, and grading practices, as well as your perceived assessment skills, and how often you use assessment methods described by each item.

Data Anonymity: All data will be anonymous. Do not write identifying information, such as your name on the questionnaire.

Thank you very much for your time and input.
Sincerely,
Gichuru Francis Maina; Principal Investigator, Graduate Student, (M.Ed-Measurements \& Evaluation).

Dr. Karen T. Odhiambo, Ph.D. Faculty Supervisor.
Department of Educational Psychology
University of Nairobi,
P. O. BOX 30197.

Nairobi, Kenya.

