

**PERCEPTION OF TEACHERS AND EDUCATIONAL
ADMINISTRATORS OF CENTRAL DIVISION NAIROBI, ON USE
OF SCHOOL-BASED ASSESSMENT FOR CERTIFICATION IN
THE KENYA CERTIFICATE OF SECONDARY EDUCATION.**

**UNIVERSITY OF NAIROBI
EAST AFRICANA COLLECTION**

BY:

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FULFILMENT OF THE REQUIREMENTS OF THE AWARD OF
MASTER OF EDUCATION DEGREE IN EDUCATIONAL
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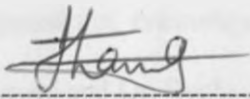
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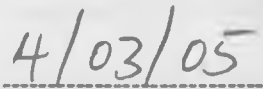
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DECLARATION

This research project report is my original work and has not been presented for a degree in any university

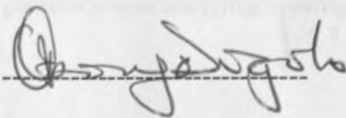


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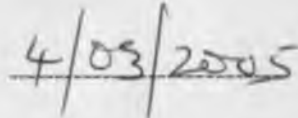


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This research project report has been submitted for examination with my approval as University Supervisor



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It is with great appreciation that I acknowledge the help of those without whom the completion of this work would have been impossible. It may not be possible to mention all of them individually. So, to mention but a few, I am deeply indebted to my supervisor Professor Obonyo Digolo for his guidance, suggestions, encouragement and moral support. I am equally indebted to Dr. Kimani and Dr. Reche for their understanding and moral support in the course of my studies.

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Lastly and most importantly, I wish to express much gratitude to my dear wife Edith Mucheche and my daughter Penninah Waithera Thang'wah for their patience and sacrifice during the entire period of my studies.

DEDICATION

I dedicate this work to all those ladies who mean the world to me: My caring mother- Penninah Njuhi Muui; my loving wife- Edith Muccheche and my inspirational daughter- Penninah Waitthera Thang'wah.

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ABSTRACT

The study focused on the perception of teachers and educational administrators on integration of school-based assessment scores with the Kenya Certificate of Secondary education examination scores in certification. The research intended to find out how teachers and educational administrators perceive integration bearing in mind that school-based assessment is viewed with suspicion by a substantial proportion of stakeholders in education in Kenya and the world over.

In addition the study investigated: How teachers and educational administrators perceive sole reliance on end of course external examination in certification; their perception of the advantages of integrating school-based assessment scores with the end of course external examination; the value teachers and educational administrators place on continuous assessment in the school setting; the challenges teachers and educational administrators face in their administration of continuous assessment; and teachers' and educational administrators' recommendations on how the reliability of school-based assessment can be enhanced.

The reviewed literature focused on the definition of assessment; continuous assessment and weighted combination; how weighted combination is used in the Kenya Certificate of Secondary Education; summative assessment and its strengths and limitations; the five key criteria for assessment i.e. humanity, validity, reliability, efficiency and frequency; advantages of school-based assessment; argument against the use of school-based assessment and the

strategies that are used for integration e.g. moderation of scores, moderation by inspection, statistical moderation, weighting, combining component scores and validation.

Data pertinent to the study was collected using a questionnaire for teachers and an interview schedule for the educational administrators. A pilot study was conducted using ten teachers and two educational administrators so as to establish whether the instrument would collect the relevant data. The results of the pilot study provided a basis for modification and perfection of the research instruments. The revised questionnaires were administered to teachers and the revised interview questions used in the interviews with the education administrators. Teachers were selected randomly from the population. They posted a questionnaire return rate of 80 percent while the education administrators registered a return rate of 75 percent. The raw data from the questionnaires and interviews was analysed using frequencies, percentages, and mean perception scores.

From the data, it emerged that both teacher and educational administrators held school-based assessment in high esteem despite the widespread concerns over the reliability of the school-based assessment scores. It was the feelings of a majority of the respondents that with a little more effort channeled towards enhancing the reliability of the scores, the weaknesses of school-based assessment can effectively be addressed and thus increase the validity and reliability of school-based assessment.

Based on the study, the following recommendations were made: there is need for concerted effort to ensure that the examinations that are administered in the schools are standardized for the scores arrived at to be generally acceptable to all education stakeholders for purposes of certification; a moral rearmament strategy should be developed and employed to instill in the teachers and educational administrators the need for honest reporting of the learners' abilities; inspection of schools should be enhanced so as to ensure that the standards are maintained not only in the teaching but also in the assistance of the learners; effective and efficient data management systems should be developed and sustained in the schools to enable safe storage and quick retrieval of school-based assessment data and; for school-based assessment scores to be well received for integration with the end of the course examination scores for certification, the roles of school-based assessment and end of course external examination should be clearly defined to ensure that they complement each other.

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LIST OF ABBREVIATIONS

G.O.K – Government of Kenya.

K.C.S.E – Kenya Certificate of Secondary Education

K.N.E.C – Kenya National Examination Council

M.O.E – Ministry of Education

N.A.E.B – National Examination and Assessment Board

S.B.A – School Based Assessment

UNESCO – United Nations Educational Scientific and Cultural Organization

S.Q.A – Scottish Qualification Authority

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This Chapter discusses the identification of the research problem under the following sub-headings: background information; current Practice of assessment of learning achievement in Kenya; making a case for school-based assessment; statement of the problem; purpose of the study; objective of the study; research questions; significance of the study; limitations of the study; delimitations of the study; assumptions of the study and definition of terms and concepts.

1.1 Background Information

1.1.1 Current Practice of Assessment of Learning Achievement in Kenya.

There are three main modes of assessment in education practiced in Kenyan schools.

These are:

- i. School based assessment (also at times referred to as continuous assessment!).
- ii. End of course examinations.
- iii. Weighted combination. (Satterly, 1989)

All the three modes of assessment are currently used in Kenya secondary school examinations to varying degrees. Continuous assessment is mainly used at school level in the form of end month, end term, end year tests and mock examinations. School based

assessment of learning is usually carried out by teachers on the basis of impressions gained as they observe their students at work or various kinds of tests given periodically (Kalomba 2001) The final / end of secondary school course examinations in Kenya, is done on completion of a four year course and is commonly known as the Kenya Certificate of Secondary Examination (K.C.S.E.). Weighted combination on the other hand is mainly done in subjects, which have a project component. These subjects include among others Agriculture, Woodwork and metalwork. Another group of subjects where weighted combination applies is those subjects with end of course practical component such as Biology. The project tasks can be done by an individual student or groups and at school or out of school. The project and end of course practical scores are used in the final grading of the candidates at the K.C.S.E. level. (Wasanga & Ingolo 2001). The other subjects without a practical or project component, and which forms the bulk of the examination are assessed purely using end of course examinations.

From the foregoing, it is evident that the Kenyan examination system heavily relies on the end of course examinations in certification of learners' achievement. This is despite the numerous disadvantages of the end of course external examinations.

These single shot examinations done in a few days determine the future of the child. One single error or misfortune such as falling ill during the examination day and the child is condemned to be a failure in life. (Muya 2003) cases abound of learners who have been offered no other alternative by the current examination system than to sit the examination in the least conducive environment such as in a state of mourning, in hospital beds, or in

police cells. The condition of the examinee at the time of testing notwithstanding, he / she is certified as 'failed' and 'unfit' for promotion to the next level or for placement in certain academic or professional courses. The victims of the circumstances created by the mode of examining learners at the end of the course are greatly disadvantaged not only during the examination time but also in their entire life.

1.1.2 Making Case for School Based Assessment.

Continuous assessment was introduced partly because of complaints that it was unfair and unnecessarily stressful to learners to know that they are being examined on only a single occasion and over a short period of time where luck with the questions played a particularly significant part in their chances of success (Miller 1976 in Scatterly 1989).

The idea behind introduction of continuous assessment was to have the learners' performance assessed over a long period of time and in a variety of situations so as to get a representative view of the learner's abilities, than solely relying on the artificial context of the examination room.

True, continuous assessment has its limitations and thus, sole reliance on it poses a danger of eroding the reliability of the examination. However, this is no excuse enough to solely rely on end of course external examination which is equally not perfect and has its own limitations, among others as pointed out above.

The wave that carried along continuous assessment and saw school based assessment take an active role in the assessment of learners achievement in the 1970's and 1980's also

brought in Kenya the clamor for introduction of school based assessment scores in certification of learners achievement. The Presidential working Party on the second university in Kenya of 1981 recommended the inclusion of school based assessment scores in certification (G.O.K. 1981). The Jomtien conference of 1989 that recommended Education for All, also recommended the review of the examination systems with a view to making them more humane – a characteristic that end of course, external examination systems are devoid of. However this has not had enough Impact on the examination system in Kenya. In keeping with the above recommendations and the admissions contained in the current issue of the National Development Plan, which frankly admits that:

‘Centralized curriculum development and examination system geared to certification and selection for further education have adverse effects. In particular:

- i. Teacher based curriculum development, which ought to take account of local environments and enliven student learning, receives inadequate attention.
- ii. Systematic formative monitoring of the overall learning experience of students has not been established on a national basis.’ (G.O.K. 1998)

It is imperative that school-based assessment be integrated with external examination scores for purposes of certification. This will help enhance the human aspect of our public examination, which is currently lacking. In the words of Pratt (1999:114)

regardless of how valid and reliable an assessment may be if it is inhumane, it is inappropriate for use with human beings. On the other hand, our secondary education is organized to select those few who will go to the university the even tinier minority who approach the frontier of theoretical knowledge. For their sake all our children are being put through an overblown, over-academic syllabus, in which the dominant experience for the majority, is one of failure not achievement (Murphy and Torrence 1991:13)

Although there have been numerous reforms on the current education system, the reviews have failed to substantially reform the existing examination system that continues to make it burdensome and stressing to the pupils. There's a need to replace sole reliance on national examinations with a weighted combination of a holistic continuous assessment with the end of course examinations (National examination).

1.2 Statement of the problem

From the foregoing, it is evident that the current examination process in Kenya has great limitations. Over reliance on the end of course examinations has occasioned this. There is therefore a need to look into ways of establishing on a national basis a systematic formative monitoring of the overall learning experience of students (G.O.K. 1998) and to have the resultant scores factored in certification. This will not only help to address the inadequacies of the current examination system but will also make it more humane.

Much research has been done in the area of assessment. However very little has been done in the area of continuous assessment. It is this very gap that this research sought to

fill. This study therefore sought to unveil the potential value of integrating school-based assessment scores with the final examination scores at the Kenya Certificate of Secondary Education level as perceived by secondary school teachers – the key curriculum implementers at that level and educational administrators.

1.3 Purpose Of The Study

Specifically the study sought to examine the perceptions of the teachers on the inclusion of the school based assessment scores in the overall assessment of the learners' achievement and in certification of the same. With this, the study aimed to enhance the current practice of assessment of learners' achievement with a view to making it not only learner friendly but also to enhance the reliability of the scores finally arrived at. The ultimate aim was to increase accuracy in describing the learners' achievement

1.4 Objectives of the Study

The study aimed at achieving the following specific objectives:

- 1) To examine how teachers and educational administrators perceive sole reliance on end of course external examinations in certification.
- 2) To find out teachers' and educational administrators' perception of the strengths of integrating school based assessment scores with the end of course, external examination.

- 3) To establish the value teachers and educational administrators place on continuous assessment in the school setting especially in gauging learners' preparedness and assessing learning achievement.
- 4) To investigate the challenges teachers and educational administrators face in their administration of continuous assessment.
- 5) To establish teachers and educational administrators views on how to enhance the validity of the school based assessment scores.

1.5 Research Questions.

- i. How do teachers and educational administrators perceive sole reliance on end of course external examination in certifications?
- ii. What is the teachers' and educational administrators' perception of the advantages of integrating school based assessment scores with the end of course external examination?
- iii. What value do teachers and educational administrators place on continuous assessment in the school setting?
- iv. What challenges do teachers and educational administrators face in their administration of continuous assessment?
- v. How can the reliability of school based assessment scores that are to be used in integration with the external examination scores be enhanced?

1.6 Significance of the Study

Findings from this study may be useful in different ways. First, it may create insight into the limitations of the current assessment and certification of learning achievement in Kenya and create a foundation on which education policy makers, institutions dealing with assessment and certification, curriculum developers and curriculum implementers will develop assessment practices that will give a truer impression of learning achievement. The study is in addition likely to reveal teachers' feelings about the inclusion of school based assessment scores in certification and thus provide valuable information that can be useful in providing redress. This is in realization of the fact that attitudes can either facilitate or hinder peoples' capacity and enthusiasm in action.

It is equally hoped that the study will provide valuable information that will trigger the minds of policy makers to re-examine the strengths of school-based assessment and to look at its weaknesses not with a view to justifying the status quo but with a view to finding redress for them.

In that regard, the study might specifically be useful to the following organizations: The Kenya National Examination Council; The Kenya Institute of Education; The Ministry of Education; UNESCO and any other organization dealing in education.

1.7 Limitations of the Study

This study had three major limitations. First, there are many groups of stakeholders in education whose views concerning any aspect of education are critical. These include

among others: policy makers, curriculum developers, curriculum implementers, parents, learners and the society in general. Due to the enormous resources needed to capture the feelings of all these groups of stakeholders, the research was only limited to two groups of stakeholders – teachers and a small group of educational administrators. The study also used one mode of data collection instrument for a majority of the respondents – questionnaire. The use of interviews was applied on the smaller sample the respondents. Extensive use of interviews could have helped capture some of the feelings that might not be captured by the questionnaire.

1.8 Delimitation of the Study

Though the study was of concern to all stakeholders in the education sector as a whole, the research was conducted in Nairobi and specifically, Central division. In the wide range of education stakeholders, teachers' and educational administrators' perception was the subject of the study because they are a strategic group of stakeholders in education. In Central division, the schools were divided into two: national schools and provincial schools. A representative sample of teachers was selected randomly.

1.9 Basic Assumptions

The following were the assumptions of the study:

- 1) All teachers undergo the same training.

- 2) The kind of learners found on any school in Kenya were the same having gone through the same curriculum and the same assessment procedure.
- 3) The general Perceptions of teachers could effectively be generalized on all teachers in Kenya.
- 4) Perceptions are the basic factors that underlie attitudes and ultimately, action.

1.10 DEFINITION OF TERMS AND CONCEPTS

Assessment: The process of obtaining information that is used to make decisions about students, to give feedback to the student about his / her progress, strengths and weaknesses, to judge instructional effectiveness and curriculum adequacy. (Kalomba, 2003)

Continuous assessment: a method evaluating the progress and achievement of students in educational institutions and which is done regularly.

School-based assessment: assessment of learners' achievement that is set and administered by the teachers and within the school setting. Most of continuous assessment falls within this category since they are school-based.

Project: Set tasks in specific subjects in which time constraint have largely been removed.

Perception: perception according to Webster's Seventh New Collegiate Dictionary (1976) can be defined as the mental image we have about our surrounding. The Mental

image about our surrounding according to Encyclopedia Britanica (1979) develops through sensory stimulation, which is translated into organized experience. Brown and Deffenbacher (1979:3) points out that perception is our sensory experience of our surrounding and it is the basis of impressions in our minds in regard to our environment. Goldstein (1980) points out that the way an object is perceived depends on the importance attached to it. As such, the more important an object is to an individual, the more favourably the individual will judge it.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

This chapter provides a review of the related literature under the following headings: definition of assessment; continuous assessment; weighted combination; summative assessment; shortcomings of external examination; criteria for assessment that is humanity, validity, reliability, efficiency and frequency; advantages of school based assessment; arguments advanced against the use of school based assessment and way forward in continuous assessment.

2.1 Definition of Assessment

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Different authors based on their background have defined the term assessment differently. Generally assessment can be defined as appraisal, fixing or determining the value of something (Oxford Advanced Learners Dictionary). However in education the term assessment is used to refer to any procedure or activity that is designed to collect information about the knowledge, skills and attitude of a learner or a group of learners. A more detailed definition is that assessment is the process of obtaining information that is used to make education decisions about students; to give feedback to the students about their progress, strengths and weaknesses; to judge instructional effectiveness and curriculum adequacy and to inform policy (Kellaghan and Greaney 2001)

In general, the term assessment should be reserved for use with reference to people. It may include administration of tests or it may simply involve activities of grading or classifying according to some specified criteria. Student achievement in a particular course might be assessed or students' attitude towards a particular aspect of their schooling might be examined. Such assessment are commonly based on an informal synthesis of a wide variety of evidence although it might include the use of the test results or responses to attitude scales and questionnaires (UNESCO 2000:14)

Generally, there are three main modes of assessment. These are: continuous assessment, weighted combination and summative assessment (Scatterly 1989). Continuous assessment as the name suggests is a formative kind of assessment done when learning is in progress.

2.2 Continuous Assessment

Continuous assessment is a formative kind of assessment that is conducted when the learning program is on course. Continuous assessment is thus a method of evaluating the progress and achievement of the student in the educational institutions which aims at getting the truest picture of each students' ability while at the same time helping each student to develop his / her abilities to the fullest since it takes into account their whole performance in the cognitive, affective and in the psychomotor domains in a systematic way during a given period of schooling. It can be characterized as systematic, comprehensive cumulative and guidance oriented (Kithuka 2001, Ogunniyi 1984:113)

Continuous assessment falls under the broad category of school based assessment especially when the assessment instruments are set administered and marked by the concerned teachers in the school.

Continuous assessment was introduced partly because of the complaints that it was unfair and unnecessarily stressful to learners to know that they were being examined on only a single occasion or over a short period of time where luck with the questions played a particularly significant part in their chances of success (Scatterly 1989). It has an advantage in that if assessors do take into account a child's performance over a longer period of time and in a variety of situations, it makes it possible to obtain a more representative view of the learners' ability than in the artificial context of an examination room. It encourages steady application throughout the course and development of a variety of problem solving skills, which are normally inhibited by the need to develop examination tricks. On the other hand, it does not unduly penalize for one or two poor pieces of work (Scatterly 1989)

2.3 Weighted Combination

This is a situation where students are graded using a combination of both continuous assessment and final examination grades. For instance in Tanzania, continuous assessment which has three components namely: exercises which includes homework, class tests and quizzes; terminal tests and project, constitute fifty percent of the total scores while final examination constitute the other fifty percent (Safarani 2001).

In Kenya this approach is used especially in subjects, which have a project or a practical component. Subjects with a project component include: Home Science, Art and Design, Agriculture, Woodwork, Building and Construction, Power Mechanics, Electricity, Drawing and Design, Aviation Technology and Computer studies. Those with practical component include among others Biology and Home Science paper three. Weighting in these subjects varies from subject to subject. For instance in Agriculture, school based assessment constitutes 18.75%, in Computer studies it constitutes 20% while in Art and Design it constitutes 20% of the total score with the rest going to final examination score (KNEC 1995).

Weighted combination is a strategic mode of assessment that seeks to benefit from the advantages of both continuous assessment and the final examination modes of assessment while at the same time lowering the negative aspects of both.

2.4 Summative Assessment

This is a mode of assessment where examination is taken at the end of the course. It has an advantage of forcing comparison of local and national standards and that the examination results seem to enjoy greater respectability compared to school based assessment scores. It thus ensures that whatever is done is done to all candidates in the same way. On the other hand, subscription to the end of course external examinations is frequently justified on the ground that they offer a trustworthy standard, that with thousands of candidates in each subject, examination standards will show little variation

over time and provide an objective measure of worthy (Salehe and Alute 2001) at the same time, end of course external examination is at least in theory immune to corrupt influence. (Kahn 1999 in Salehe and Alute 2001) However, it has a great handicap in that it is lacking in humanity and at times due to extraneous reasons fail to effectively capture the abilities and competencies of the learner and thus comes up with misrepresentations. This mainly happens because, although the external conditions of the examination (i.e. time limit, invigilation, unavailability of sources of reference) remains the same for all the candidates, internal factors such as the learners' condition (environmental, psychological and emotional) at the time of examination differs and so the examination stands to fail in reliability. On the other hand, questions that allow a choice from a wide range of questions provide a wide range of combination and in essence, different learners end up having done different examinations (Scatterly 1989) On the other hand, most of the questions in public examinations that are used for selection and certification tend to measure students ability to recall facts. Relatively little attention is given to higher order cognitive skills such as those involved in synthesis or evaluation. Examinations also tend to be academic in nature with life outside school seldom featuring in the examination questions. This thus makes it imperative for incorporation of school-based assessment with public examination (Kellaghan and Vincent 1992:2)

2.5 Shortcomings of External Examinations

External examination – those that are set administered and marked outside the school i.e. they do not originate from the immediate learning / teaching process and are normally

administered after a long period of study: normally at the end of the course or education cycle. Salehe and Alute (2001) cites the following as the key limitations of the external examinations:

Since they are administered at the end of the course, they tend to report only students performance at the end of the course and not in between. They therefore do not give feedback on the progress of the students while in school. Their results thus cannot be used to effect immediate improvement on the learning process of that particular group of candidates sitting that examination but only helps subsequent groups of students.

External examinations have successfully been used in the measurement of cognitive skills and some psychomotor skills, however they are limited in their ability to measure practical skills, interactive skills and those skills linked with investigation, planning and exploration. They fail to allow assessment of students' work that arises directly out of the learning process and in a wide range of learning situations. Thus due to the small range of skills and abilities external examinations measure, they are not totally sufficient in validity and reliability.

In a diverse learning / teaching environment, schools in the urban areas are well equipped with both teaching and learning materials such as text books, laboratory equipments, library facilities, qualified teachers and relatively more qualified and experienced school administrators while rural schools have poor teaching / learning environment and candidates of both areas sit for the same examination without any

consideration of that diversity. Under such conditions the results of the examinations cannot be expected to reflect the real abilities of candidates particularly from the ill equipped rural schools. (Salehe and Alute 2001:7)

Due to the high stake nature of the external examinations, they create fear and anxiety among candidates. Many candidates thus rightly believe that examinations determine their future hence, passing an examination is a matter of life and death. Under the condition of fear and anxiety, it is least likely that candidates may show their abilities.

On the other hand, due to the limited time allocated to the external assessment, the examinations are unable to cover all the aspects of the curriculum.

2.6 Criteria for Assessment

If assessment has a bad reputation, particularly among those who are being assessed, it is only because the assessment instruments used are in fact deficient i.e. they violate one or more of the basic criteria for assessment (Pratt 1999; 114). These are: humanity, validity, reliability, efficiency and frequency.

2.6.1 Humanity

Pratt (1999) provides the following questions to try and help us understand what humanity is: is a test, examination, measure or performance criterion humane? Does it help the learners to thrive and grow as persons? Does it develop the learners as social beings? Does it avoid causing the learner unnecessary anxiety, pain, humiliation or self-doubt? He further goes on to point out that no matter how valid and reliable an

assessment may be, if it is inhumane, it is inappropriate for use with human beings (Pratt 1999:114)

2.6.2 Validity

In assessment, a test is deemed to be valid if it measures what it purports to measure (Borg and Gall 1989). However educational tests unlike tape measures or weigh scales rarely measure anything directly. Instead, they provide measures based on a limited sample of behaviours that allow us to make inferences about learners. An assessment is therefore valid if it allows us to make correct and useful inferences about the learning achievement. Validity can be violated in many ways but it is in most cases violated when a test assesses recall of facts rather than achievement of the announced objectives (Pratt 1999:119)

2.6.3 Reliability

In assessment terms, reliability means consistency. This is mainly concerned with how accurately a test sample represents the broader universe of the responses from which it is drawn. A measure cannot be valid unless it is also reliable. However, reliability is a major problem inherent in any measure relying on human judgments. The scoring of essays is notoriously unreliable, but if you could have each student's essay graded by ten judges and average their scores, the measure might have adequate reliability. This is in keeping with the law of measurement that states "reliability increases as a function of the number of observations." (Pratt 1999:119)

2.6.4 Efficiency

Generally defined, efficiency is the quality of doing something well with no waste of time or money. Since reliability is the function of the number of observations, there is always a trade-off between reliability and efficiency. We should thus use the smallest sample that will provide a reliable measure. As in medicine, testing in education should be as quick and painless as possible. Instructional time is crucified if a forty-minute test is used when a five minute quiz could yield results just as useful (Pratt 1999:116)

2.6.5 Frequency

Frequent small tests both formative and summative are more effective than widely spaced major examinations. Frequent opportunities to demonstrate success, practice skills, receive feedback and focus on learning priorities all contribute to higher achievement and more favourable student attitudes. It is thus desirable to assess student achievement once instruction on each objective is complete, rather than (or in addition to) assessing several objectives after a prolonged period of instruction (Pratt 1999:116)

2.7 Advantages of School-Based Assessment

Kellaghan and Vincent 1992:2 argue out six key advantages of school-based assessment. These are: Since assessment by teachers is a crucial component of good learning and teaching, every effort should be made to improve teacher's competencies in this area. As such, if school-based assessment became part of the certification process, it is likely that greater effort will be invested in improving teachers' general competencies in assessment

and this will further enhance teaching and learning in general. Secondly, school-based assessment provides immediate feedback information to teachers on student achievement and teaching effectiveness. This goes a long way in enhancing learning. On the other hand, since school-based assessment is carried out over time and by a person who knows the learners well, it is more likely to provide a more valid and reliable appraisal of the students' achievements than can a single external examination. School-based assessment permits an extension of the range of curriculum topics that are examined. The present system of examination limits the range of achievements that can be assessed and must narrow the curriculum in schools. Aspects of achievement that cannot be satisfactorily assessed in a terminal examination includes a student's ability to plan and organize a project and persevere with it over time while the assessment of oral and practical skills may be carried out in a terminal examination. Inevitably, it will be limited, artificial and expensive. At the same time, school based assessment has an advantage of reducing the undesired backwash effects of external examinations. Lastly, school-based assessment, if spread over the year can increase the level of pupil motivation and application throughout the year.

2.8 Arguments Advanced against the use of School-Based Assessment

It is argued that the use of school-based assessment in certification can change the nature of the relationship between the teacher and students towards a more judicial aspect of the teachers' role more prominently (Kellaghan and Vincent 1992:2). On the other hand, continuous assessment tools and the marking standards are more likely to vary both

within and among schools. Though this can effectively be addressed by moderation procedures, these procedures tend to be expensive (Kellaghan and Vincent 1992:2 Kithuka 2001:3)

School-based assessment would require teachers to devote more time to assessment recording and thus dealing a blow to the other aspects of teaching. School-based assessment gives rise to a variety of administrative problems for schools such as what to do when students are absent for tests or when students transfer from one school to another (kellaghan and Vincent 1992:4)

Teacher assessment are more suspect of containing a variety of biases and this has got to be addressed if the scores are to be acceptable especially for certification.

2.9 Integration Strategies

2.9.1 Moderation of the Scores

Comparatively, school-based assessment tends to be the weaker of the two systems of assessment in terms of psychometric properties. Moderation is a term used in measurement literature to refer to the quality of being reasonable and not being extreme. This is largely a process of making sure that different people in setting, administration, marking and reporting examination results use the same standards. In the case of school-based assessment all efforts are usually directed at making its procedures and scores comparable. (Kpodo 2001)

There are two main types of moderation.

- i. Moderation by inspection.
- ii. Statistical moderation.

2.9.2 Moderation by Inspection.

Amedahe (2000) in Kpodo (2001:6) points out that moderation by inspection involves bringing in persons called moderators to review, to re-grade or to independently grade either a randomly selected sample or all the students' response items on teacher assessment particularly constructed responses. The problem that comes with this method include agreement on common standards, problems of reliability and validity which are so crucial for any assessment systems as well as being very costly. This mode of assessment has been used for a considerable length of time by the National Examinations and assessment Board (N.A.E.B.) of the United Kingdom and the Scottish Qualification Authority (S.Q.A.) (Kpodo 2001:6)

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2.9.3 Statistical Moderation.

School-based assessment scores and external examination to introduce comparability of scores before they are added together, a statistical technique called linear transformation is used. This seeks to establish the level of correlation between School-based assessment scores and external assessment scores and thus enhancing the level of correlation of the two scores. (Amedahe 2000:5)

2.9.4 Weighting

Weighting is a value that you give to each of a number of a number of things to show how important it is compared with the others: in the case of Tanzania for instance, school-based assessment and external examination are weighted at the ratio of 50:50 (Kalomba and Sawala 2001) while in the case of Kenya, the Kenya National Examination Council has adopted different weighting of School-based assessment in different vocational subjects depending on the weightage given in the syllabus content. (Wasanga and Irigolo 2001) This ranges from 7.5% in Home science paper two (441/2) to 40% in Building Construction paper two (446/2) Metalwork paper two (442/2) and Woodwork paper two (444/2) (K.N.E.C. 1995)

2.9.5 Combining Component scores

The scores that arise from the moderated school-based assessment and external examination can be combined in many ways. The simplest being by ordinary addition but this may not be satisfactory enough since different candidates may take different but similar forms of the internal assessment. The extent to which public examination bodies are ensuring that their data fall in line with the requirements before going ahead to combine scores for certification remains rather doubtful (Kpodo 2001:10)

2.9.6 Validation

The validation of the final composite score, which is obtained after all the due process, is a source of concern. It is believed that, there is a need for some form of empirical

procedures to be used to test the validity of the entire process to ensure that the final score is valid (Kpodo 2001)

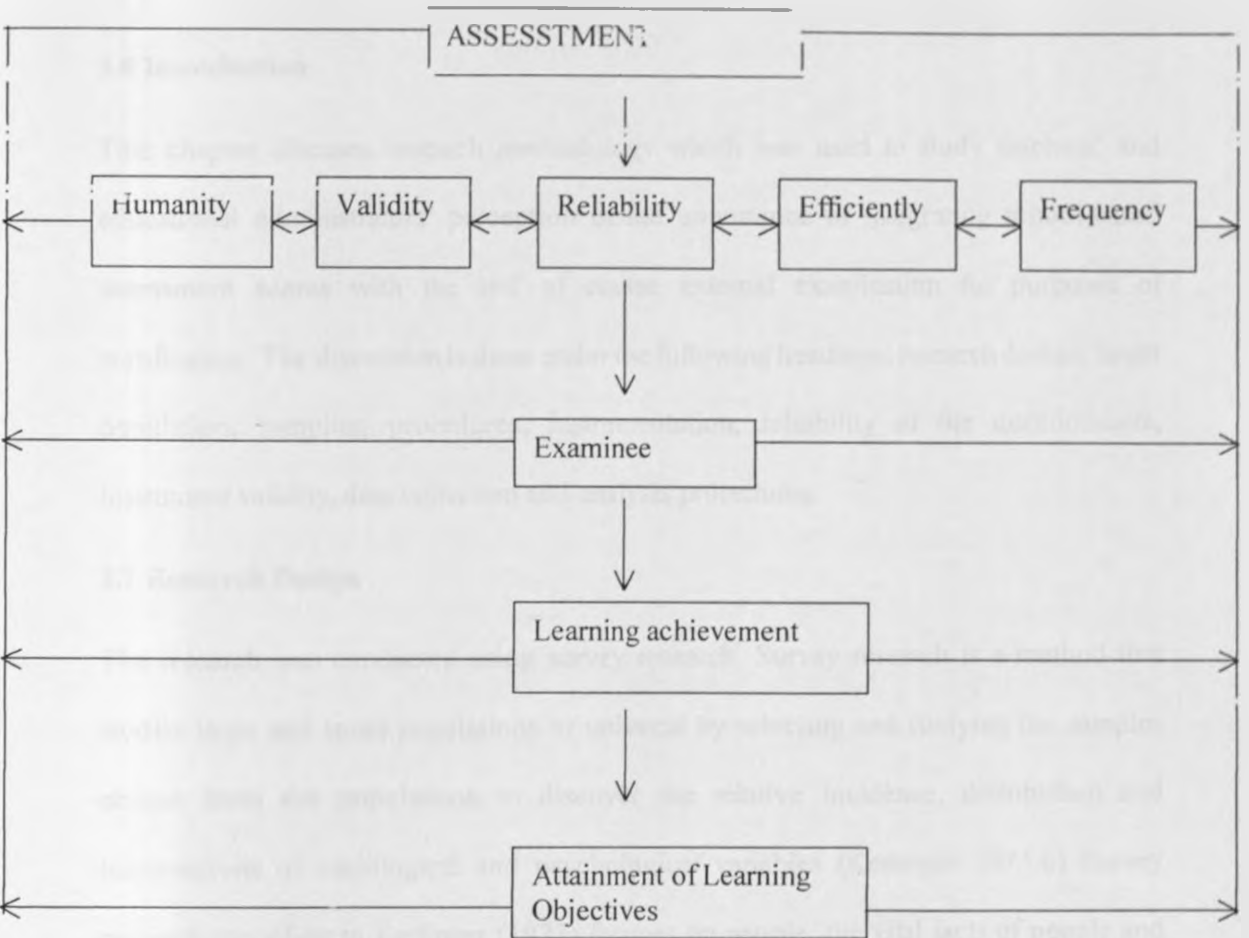
2.10 Way Forward in School-Based Assessment

School-based assessment clearly has many advantages that strongly make its Case for inclusion in the certification process. However, like any other good idea, it has its limitations. These limitations should not be used to shoot down the noble idea but should be carefully considered with a view to being addressed. Such considerations led to the participants in a conference on school-based assessment in Swaziland to conclude that if such assessment is to be used in combination with external examination results, in the final national summative assessment of students, a number of conditions should be fulfilled to at least mitigate if not completely remove the problems to which its use is likely to give rise to: National item banks of tests should be available to teachers; Clear guidelines for assessment should be provided; recording and interpreting procedures should be common to all schools and standards between schools should be 'controlled statistically' and should be moderated and controlled by school inspection (Swaziland MOE 1987)

On the other hand, the fact that school-based assessment has successfully been used in other countries and that it has been used in Kenya especially with those subjects with project or practical component, is a clear indicator that school-based assessment can effectively be used in certification.

However, perceptions of key education stakeholders such as teachers, parents, learners and the general society on the use of School Base Assessment in certificate should be established and if need be, means of modifying them be sought.

CONCEPTUAL FRAMEWORK



CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter discusses research methodology which was used to study teachers' and educational administrators' perception of the importance of integrating school-based assessment scores with the end of course external examination for purposes of certification. The discussion is done under the following headings: research design, target population, sampling procedures, instrumentation, reliability of the questionnaire, instrument validity, data collection and analysis procedures.

3.1 Research Design

The research was conducted using survey research. Survey research is a method that studies large and small populations or universe by selecting and studying the samples chosen from the populations to discover the relative incidence, distribution and interrelations of sociological and psychological variables (Kerlinger 1973:6) Survey research according to Kerlinger (1973) focuses on people, the vital facts of people and their beliefs, opinions, motivations and behaviour. It thus involves a systematic collection of data on an entity or a group of entities or operations and drawing conclusions from what the data shows

Survey research is normally interested in the accurate assessment of the characteristics of whole populations of people. It is based on the theory that random samples can often

furnish the same information as a census (and enumeration of the entire population) at much less cost and with greater efficiency and sometimes with greater accuracy.

3.2 Target Population

The research was carried out among teachers in public secondary schools in Central Division and a selected sample of educational administrators. In Central division there was a total population of 250 teachers distributed within five public secondary schools out of which 73 were male and 177 were female. Going by Krejcie and Morgan's (1973) table of determining the sample size the study targeted 152 respondents from the total population were selected using simple random sampling techniques. The educational administrators targeted by the study were all the secondary school head teachers in the division; The Kenya Institute of Educations' head of secondary school curriculum; the Kenya National Examination Councils' officer in charge of test Development; and the head of the Inspectorate division of the Ministry of Education.

3.3 Sampling procedures

From the total population of 250 teachers, the sample was identified using simple random sampling. The sample size of each school was arrived at based on the total population of teachers in that particular school and the proportion of that population to the total population of teachers in the division. A list of schools and their staff establishment obtained from the Nairobi Provincial Director of Education's office served as a guide in the selection of the sample. In that case, out of Starehe Boys' centres' total teacher

population of 57 teachers, 35 were included in the sample; of Jamuhuri high schools' 61 teachers, 37 were sampled; of Pangani Girls' 61 teachers, 37 were sampled; of Ngara girls school's 50 teachers, 30 were sampled while of Muslim Girls school's 20 teachers, 12 formed the sample. In each school the sample was picked using simple random sampling where names of teachers were written on paper chips, the chips were thoroughly mixed then placed in a box. The researcher then picked each one from the box without replacing. The sample of the educational administrators was purposively sampled.

3.4 Instrumentation

Two types of research instruments were used: a questionnaire schedule (Appendix 1) and an interview schedule (Appendix 2). The questionnaire was administered to all the teachers sampled for the study. It was divided into two parts. Part one required teachers to provide background information about themselves such as their age, sex, and teaching subject among others. Part two was divided into three sections: A, B and C. Section A contained questions and statements related to the contemporary use of school-based assessment in schools. Section B contained statements and questions concerning integration of school-based assessment scores with final external examination scores. Section C consisted of statements related to the teachers own perception of school-based assessment.

On its part, the interview schedule, which was used to guide the interview with the education administrators sampled for the study, comprised of six questions.

3.5 Reliability of the questionnaire

The reliability of an instrument refers to the extent that an instrument measures what it intends to measure consistently. A key characteristic of a reliable instrument is that errors of measurement have been reduced to a minimum. Reliable tests are stable in whatever they measure and have the potential of yielding comparable scores on repeated administration (Best and Kahn 1998:284) To establish the reliability of the questionnaires, a stability over time sample (equivalent or parallel forms) approach was used. Here two versions of the questionnaire were combined into one longer questionnaire and administered to the respondents in the pilot study. The items were later separated for separate scoring of the two versions. The questionnaire was to be deemed reliable if the scores of one version were very similar to the scores of the other version. Correlation was not as important here as was the equal results of the two versions (Best and Kahn, 1998:284)

3.6 Instrument validity

A questionnaire is said to be valid if it measures what it claims to measure (Best 1983:281). To establish the validity of the questionnaire, the research supervisor and two other experts independently examined the content of the questionnaire and the feedback that arose was used to improve the instrument. This helped the researcher to omit items,

which appeared vague and include those that work towards improving the quality of the instrument and its validity.

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On the other hand, a pre-test was conducted to establish the instrument validity. A pilot survey is in fact the replica of rehearsal of the main survey. Such a survey if well conducted brings to light the weaknesses (if any) of the questionnaires and also the survey technique (Kothari 1990:91). An improvement on the questionnaire was effected from both the findings of the pilot study and recommendations of the experts named above.

3.7 Data collection and analysis procedures

Data collection begun with obtaining a research permit from the Ministry of Education, Science and technology. The researcher then delivered the questionnaires to all the respondents and the questionnaire collected on the same day. This was a strategy that sought to improve the questionnaire return rate. Thereafter, the questionnaires were collected and analyzed. On the part of the interview, the interview questions were distributed to the interviewees in advance. This aimed at giving the interviewees time to prepare adequately for the interview and thus reduce the time used for the interview on the interview day.

To analyze the raw data from the current study, the researcher used descriptive and inferential statistics. The descriptive statistics used included frequency distribution, percentages, and the mean perception scores.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.0 Introduction

This chapter seeks to report the results of the data collected in the study. The report will be done in three main sub-sections: Questionnaire return rate; demographic data of the respondents; and the results of the data analysis from the information given by the respondents and the interviews. The results of the data analysis will be presented sequentially based on the five research questions of the study.

SECTION A

4.1 The Questionnaire Return Rate

Out of the 151 questionnaires administered to the teachers of Central division – Nairobi, 121 were completed and returned to the researcher. The questionnaire return rate was therefore 80 percent. On the other hand, a total of 8 interviews were scheduled for the five head teachers in the division and three educational administrators – one from the inspectorate, another from the Kenya Institute of Education and another from the Kenya National Examination council. Of the eight scheduled interviews, six were conducted while two were not. This represented a questionnaire return rate of 75 percent.

SECTION B

4.2 Respondents' Demographic Data

The demographic information of the respondents in regard to age, gender, years of service, administrative experience, professional qualification and the type of school taught by the respondents is presented in tables 1,2,3,4,5, and 6 respectively.

4.2.1 The Age of Teachers

The age of the teachers is presented in table 1 as shown.

Table 1: Teachers' age

Age	Number	Percentage
30- 34	49	40.50
35- 39	49	40.50
Above 39	23	19.00
Total	121	100.00

Findings on the age of teachers showed that a broad spectrum of teachers of varying ages was well represented in the study sample. The study also showed that those sampled in the study were above thirty years of age. This is an indication that they were teachers with a wealth of experience.

4.2.2 Teachers Gender

Teachers were asked to indicate their gender. The findings are presented in table 2.

Table 2: Teachers' gender

Years of Service	Number	Percentage
Males	56	46.28
Females	65	53.72
Total	121	100.00

Table two shows that a slight majority of the respondents were females who constituted 53.72 percent while male respondents constituted 46.28 percent. From the findings in table two, we can conclude that both males and females were well represented in the study.

4.2.3 Teachers' Years of Service

The teaching experience of teachers who participated in the study is shown in table three.

Table 3: Teachers' experience

Years of service	Number	Percentage
1 – 10	63	53.07
11 – 20	51	42.14
Above 20	7	5.79
Total	121	100.00

Table three indicates that a majority of the respondents i.e. 52.07 percent had a teaching experience ranging from one to ten years. Those who had a teaching experience of

between eleven and twenty years constituted 42.15 percent while those who had a teaching experience of above twenty years constituted 5.79 percent.

4.2.4 Administrative positions

Teachers were asked to indicate whether they have at any one time held any administrative position in the school. The results are as indicated in table 4 below.

Table 4: Administrative positions once held by the teachers.

Administrative position	Number	Percentage
Head teacher	1	0.83
Deputy head teacher	5	4.13
Head of department	13	10.74
None	102	84.30
Total	121	100.00

From table 4, it can be inferred that a majority of the respondents, 84.30 percent had no administrative experience. Only a small percentage had served as heads of department - 10.74 percent - while those who had served as deputy head teachers constituted 4.13 percent and only 0.83 percent had served as head teachers.

4.2.5 Professional qualification of teachers

Teachers were asked to indicate their professional qualification. The results are as contained in table 5 below.

Table 5: Teachers' Professional Qualification

Professional Qualification	Number	Percentage
M. Ed	7	5.79
B. Ed	86	71.07
B. A / B. Sc +PGDE	12	9.92
B. A / B. Sc	2	1.65
Diploma	14	11.57
TOTAL	121	100.00

Data in table five indicates that of the respondents, 71.09 percent of the teachers were Bachelor of Education holders, 5.79 were Master of Education holders, 9.92 were holders of either a Bachelor of Arts or Bachelor of Science degree only while 11.57 percent were holders of Diploma in Education. None of the respondents were holders of S 1 qualification. This indicates that all the teachers in the study were highly qualified holding a wide range of professional qualifications.

4.2.5 Category of Schools

The category of schools involved in the study are as presented below

Table 6: Category of the schools in the study

School Category	Frequency	Percentage
National	19	15.70
Provincial	102	84.30
Total	121	100.00

The results shows that 15.70 percent of the respondents in this study were from schools categorized as National while a majority of the respondents consisting of 84.30 percent were from provincial schools. This is consistent with the fact that a majority of schools in Kenya are provincial while only a few are National.

SECTION C

4.3 Research Questions' Data Analysis

4.3.1 Perceptions on Sole Reliance on End of Course External Examination

The following research question formed the basis for this section: How do teachers and educational administrators perceive sole reliance on end of course external examination in certifications? Several questions were asked both in the interview schedule for the educational administrators and in the questionnaire for teachers in a bid to answer the above research question. The results are presented in tables and discussed below.

4.3.2 Teachers' competence in assessment

Teachers were asked whether they felt that the pre-service training they received was sufficient enough to make a new teacher trainee feel competent enough to set, administer, mark and grade student assessment items. The results are presented in table 7 below.

Table 7: Perceptions on the adequacy of pre-service training in assessment

Perception	Frequency	Percentage
Adequate	74	61.16
Inadequate	47	38.84
Total	121	100.00

The foregoing results reveal that a majority of the teachers in the study (61.16 percent) perceive their pre-service training in assessment to be adequate while those who perceive it to be inadequate constitute 38.84 percent. Based on the accusations leveled against school-based assessment that teachers lacked adequate pre-service assessment skills, the results of this study disapprove that notion thus setting good grounds for a positive perception of school-based assessment as opposed to its alternative – end of course external examination.

Of the 47 teachers who perceived their pre-service training as adequate, 38 percent recommended that the training offered to the national examiners before they embark on marking the national examinations be included in the pre-service training of teachers. They further recommended that a thorough training in student assessment that should include among others setting, marking and grading of the learners be included at the undergraduate level. 15 percent of them feel that there should be regular seminars / refresher courses / in-service training on contemporary assessment procedures. 14 percent feel that a longer period of teaching practice would arm the teachers better on assessment

of learning achievement. 11 percent recommended that student teachers should be exposed to the school syllabus during training. Another 11 percent recommended that practical work on evaluation should be included in the pre-service training while another 11 percent offered no suggestions.

4.3.3 Frequency of Attendance of Seminars, Workshops, or In-service Courses in Assessment

Asked to indicate the number of times in the last five years that they attended a seminar, workshop or in-service course in assessment, teachers responded as indicated in table 8 below.

Table 8: Frequency of attendance of seminars or in-service course in assessment

Frequency of attendance	Frequency	Percentage
Thrice or more	49	40.50
Twice	16	13.22
Once	23	19.01
<u>None at all</u>	<u>33</u>	<u>27.27</u>
<u>Total</u>	<u>121</u>	<u>100.00</u>

The results show that a bigger percentage of teachers, 40.50 percent have attended seminars, in-service courses or workshops in assessment three times or more. 13.22 percent have attended twice while 19.01 percent have attended once. This means that 72.73 percent have at one time attended a seminar, workshop or in-service course on assessment while a paltry 22.27 percent have not. This implies that the teachers who

found time from their busy schedule to attend the courses and seminars and the educational administrators who organized the workshops, seminars and the courses hold school-based assessment in high esteem. This sets a strong foundation for strong positive perceptions of school-based assessment and a diversion from the view that school-based assessment is highly unreliable. This thus infers that both teachers and educational administrators do not perceive favourably sole reliance of end of course external examination. It further indicates that they feel that school-based assessment indeed has a special place in the overall assessment of the learners and in the entire educational process in general.

Of all those who attended either a seminar, workshop, or in-service course in assessment and who as table 8 shows constitutes 77.73 percent of the respondents, 23.86 percent indicated that they attended courses or workshops organized by national educational institutions such as the Kenya Education Staff Institute, the Kenya National Examinations Council and the Kenya Institute of Education. 37.50 percent attended courses or workshops organized by the Inspectorate especially from the Provincial Directors' office and from the District Education offices while 38.64 percent attended courses or workshops organized by several other educational improvement initiatives such as SMASSE, Science Congress, subject panels, the French cultural Centre and the British Council. This is clearly shown in table 9 below.

Table 9 Organizers of assessment workshops and seminars

Organizers	Frequency	Percentage
National educational institutions	21	23.86
Educational improvement initiatives	34	38.64
The inspectorate	33	37.50
Total	88	100.00

Table 9 shows that education improvement initiatives that are basically the initiative of the teachers and educational administrators at various educational levels represented 38.64 of the total assessment improvement initiatives through seminars and workshops. 23.86 percent attended courses organized by national educational institutions – an initiative of educational administrators at the national level. 37.50 percent attended courses organized by the inspectorate – a quality control arm of the Ministry of Education. This clearly shows the value attached to the development of teachers’ capacities in assessment by both the teachers and the educational administrators of various levels of the educational hierarchy. This is a clear indication that both the teachers and educational administrators would not want to leave assessment to external examinations only but would also like the teachers to effectively play their rightful roles in evaluation.

As indicated in table 10 the duration of the courses ranged from one day to over one month. Although a majority of the respondents attended courses lasting between one and seven days – 66.67 percent, others attended courses for between eight days and four

weeks – 22.86 percent, while 10.48 percent attended courses that lasted more than one month. This clearly indicates that despite the great demands of the teaching profession, both teachers and educational administrators see a need to create time from their busy schedules to organize and attend workshops, seminars and courses on evaluation. This provides evidence of the value placed on school-based assessment as opposed to sole reliance on end of course external assessment.

Table 10: Duration of assessment seminars and workshops

Duration	Frequency	Percentages
1 day - week	70	66.67
8days – 1 month	24	22.86
More than one month	11	10.47
Total	105	100.00

On the perception of educational administrators on the sole reliance of end of course examination, a direct question was posed: Given the two- school –based assessment and end of course external assessment – what would you recommend for use in certification? To this question, 66.67 percent argued that the ideal situation would be to use both. This strategy, they said, would ensure that the weaknesses of either of the two assessment modes are checked by the strength of the other. However, 33.33 percent of the respondents would rather solely rely on end of course external examination for certification. They see it as the most reliable when compared to school-based assessment. They argue that the cost of administering school-based assessment is prohibitive since it

would definitely push upwards the overall cost of education. Thus, they argue, using end of course external examination would ensure the overall cost of education remains minimal. They also viewed school-based assessment with suspicion especially owing to the currently rampant culture of buying examinations as opposed to teachers setting their own. This, they pointed out, implies that what is usually tested may not necessarily be what is taught. Cases of inflation of marks by the teachers were also cited. This the teachers do so that their job performance is not rated unfavorably. However, they see school-based assessment as important in the achievement of learning objectives since they help in the assessment of learning achievement and helps teachers to make decisions on whether or not there is a need for remediation. It was also pointed out that school-based assessment is important in detecting gross marking errors in the end of course external examination and can thus be used as a basis for requesting for remarking of the external examinations where gross errors are suspected.

4.4 The Strengths of Integrating School-Based Assessment Scores with end of Course External Examination

The research question formulated for this part was: what is the teachers' and educational administrators' perception of the advantages of integrating school-based assessment scores with the end of course external examinations? In an attempt to get answers to this research question, teachers were asked to indicate on a five point scale their level of agreement with some statements concerning integration of school-based assessment

scores with the end of course external examination scores. The findings were as presented in table 11, 12 and 13 below.

Table 11: Statements favourable to use of school-based assessment in Certification

Description		Frequency	Percentage	Mean perception
a) Use of school-based assessment in certification is a step forward in education.	SA	37	30.58	
	A	57	46.28	
	U	2	1.65	
	D	21	17.36	
	SD	4	4.13	3.8
b) Use of school-based assessment in certification is a strategic affirmative action	SA	9	7.44	
	A	70	57.85	
	U	26	21.49	
	D	7	5.79	
	SD	9	7.44	3.5
c) Use of school-based assessment in certification would work to increase the humanity of public examination	SA	21	17.36	
	A	60	49.59	
	U	16	13.22	
	D	19	15.70	
	SD	5	4.13	3.6

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d) Use of school-based assessment in	SA	35	28.93	
certification would tremendously	A	42	34.71	
enhance the teaching learning	U	19	15.70	
process	D	19	15.70	
	SD	6	4.96	3.7
e) Use of school-based assessment in	SA	9	7.96	
certification would help reduce	A	62	51.24	
cases of student indiscipline	U	17	14.05	
	D	26	21.49	
	SD	7	5.79	3.33
f) Use of school-based assessment in	SA	17	14.05	
certification would help raise its	A	74	61.16	
status	U	14	11.57	
	D	14	11.57	
	SD	2	1.65	3.7

Table 12: Statements unfavourable to the use of school-based assessment in certification

Description		Frequency	Percentage	Mean perception
a) Use of school-based assessment in certification is a step that stands to be regretted.	SA	-	-	
	A	4	3.31	
	U	12	9.92	
	D	56	46.28	
	SD	49	40.49	2.4
b) Use of school-based assessment in certification would increase cases of teacher bias	SA	42	34.71	
	A	49	40.50	
	U	6	4.96	
	D	19	15.70	
	SD	5	4.13	3.8
c) Use of school-based assessment in certification would give teachers undue authority	SA	21	17.35	
	A	37	30.58	
	U	12	9.92	
	D	42	34.71	
	SD	9	7.44	3.2
d) Use of school-based assessment in certification would greatly increase the level of anxiety in the students	SA	9	7.44	
	A	26	21.49	
	U	12	9.92	
	D	58	47.93	
	SD	16	13.22	2.6

e) Use of school-based assessment in certification would give some learners undue advantage	SA	14	11.57	
	A	48	39.67	
	U	14	11.57	
	D	38	31.40	
	SD	7	5.79	3.2
f) Use of school-based assessment in certification would unfairly disadvantage some learners	SA	21	17.26	
	A	40	33.06	
	U	7	5.79	
	D	43	35.54	
	SD	10	8.26	3.2
g) Use of school-based assessment in certification would be an unnecessary burden to the teachers	SA	10	8.26	
	A	18	14.88	
	U	10	8.26	
	D	64	52.89	
	SD	19	15.70	2.47
h) Use of school-based assessment in certification would greatly erode the reliability of public examinations	SA	18	14.88	
	A	33	27.27	
	U	10	8.26	
	D	55	45.45	
	SD	5	4.13	3.03

i) Use of school-based assessment in	SA	10	8.26	
certification is an unnecessary strain	A	19	15.70	
on the learners and should be	U	7	5.79	
avoided	D	59	48.76	
	SD	26	21.49	2.49

A closer look at table 11 shows that a majority of the teachers had a favourable perception of integrating school-based assessment scores with the end of course external examination scores for purposes of certification. This is because, confronted with statements favourable to the integration of school-based assessment scores with the final examination scores, their mean perception score of 4 indicated that they agreed with those statements. Based on the above mean perception scores of the teachers, it is clear that teachers agree with the following statements:

- 1) Integration of school-based assessment scores with the end of course external examination scores for purposes of certification is an important step forward and should thus be carefully considered.
- 2) Integration is a strategic affirmative action that seeks to ensure that those who are disadvantaged by the end of course external examination finds something else to turn to and vice versa.
- 3) Integration would tremendously add value to the teaching / learning process
- 4) Integration would go a long way in reducing cases of student indiscipline.

- 5) Integration would raise the status of school-based assessment and this would go a long way in enhancing the education stakeholders' perception of school-based assessment.

However the mean perception score on whether use of school-based assessment scores for certification would help reduce cases of student indiscipline (3.3) indicated that the teachers were unsure about this.

Teachers were also confronted with statements unfavourable to the integration of school-based assessment scores with end of course external examination for purposes of certification. The results indicate that they disagree on the following:

- 1) Integration of school-based assessment scores with end of course external examination scores for certification is a step that stands to be regretted.
- 2) Integration of school-based assessment scores with the end of course external examination scores for certification is an unnecessary strain on the learners and should thus be avoided.
- 3) Integration of school based assessment scores with end of course external examination for certification would prove to be an unnecessarily burdensome task to the teachers.

Teachers indicated that they were unsure (mean perception score of 3) on whether the integration of school-based assessment scores with end of course external examination scores for certification purposes would:

- 1) Give teachers undue authority
- 2) Greatly increase the level of anxiety in the students
- 3) Offer some students undue advantage
- 4) Greatly erode the reliability of the public examinations
- 5) Prove to be an unnecessary strain on the learners and should thus be avoided.

However, teachers agreed (with a mean perception score of 4) that integration of school-based assessment scores with the end of course external examination would be faced with a major challenge in that it would increase cases of teacher bias.

The general opinion presented by both table 11 and 12 is that teachers generally have a positive perception of integrating school-based assessment scores with end of course external examination for purposes of certification.

Educational administrators' opinion was sought on whether integration of school-based assessment scores with end of course external examination for certification would add any value to the assessment process in Kenya. 67 percent of them posted a positive response while those who disagreed constituted 33 percent. Those who agreed argued that integration would ensure that those curriculum objectives that are currently not being assessed due to the limitations of the end of course external examination system such as assessment of oral skills and assessment of practical skills can now be assessed using school-based assessment processes and the resultant scores used in conjunction with the end of course external examination for the certification. They particularly pointed out that

the limited time allocated for end of course external examination is inadequate to assess a broad spectrum of curriculum objectives. This, they pointed out, ensures that only a limited scope of the curriculum objectives is tested in a given examination.

Those who felt that integration would add no value to the assessment process in Kenya argued that school-based assessment has numerous weaknesses and that these weaknesses would work to undermine the reliability of the whole assessment process and hence reduce the worth of the resultant assessment report.

4.4.1 Teachers' rating of integration in assessment

Teachers were asked to rate the value of integrating school-based assessment scores with the final examinations' scores for certification using a 4 point scale. The results are presented in table 13 below.

Table 13: Teachers' rating of the value of integrating school-based assessment scores for certification.

Description	Frequency	Percentage	Mean perception
Most Important	14	11.57	
Important	67	55.37	
Inconsequential	2	9.92	
Detrimental	28	23.14	
Total	121	100.00	2.55

As evident in table 13, teachers posted a mean perception score of 2.6 indicating that they view integration of school-based assessment scores with the end of course examination scores for purposes of certification as important.

4.5 Value Placed on School-Based Assessment in the School Setting

The research question formulated for this part was: What value do teachers and educational administrators place on continuous assessment in the school setting? In an attempt to get answers for this research question, the respondents were asked several questions the findings of which are presented below.

4.5.1 Frequency of school-based assessment

Teachers were asked to indicate the frequency with which they assess their students in their subject areas. The results are as presented in table 14 below.

Table 14: Frequency of school-based assessment

Frequency of assessment	Frequency	percentage
After each topic	30	24.79
Weekly	5	4.13
Monthly	60	49.59
Twice a term	14	11.57
Termly	12	9.92
Total	121	100.00

From data presented in table 14, it can be learned that the frequency of assessment is very high. Only 9.92 percent of the respondents assess their learners only once a term while the rest who constitute 90.08 percent of the respondents more than once a term. 24.79 percent assess their students after each topic. 4.13 percent offer assessment tests weekly. The highest number of respondents – 49.59 percent – assess their students monthly while 11.57 percent administer assessment tests twice a term.

From the above data, it is quite evident that teachers highly value school-based assessment. This is evident from the fact that over 90.08 percent of the respondents administer continuous assessment more than twice a term. Only a paltry 9.92 percent administer it only once a term.

4.5.2 Adequacy of the frequency of assessment

Asked to state whether they felt that the number of times they assessed their learners was adequate or not, 62.42 percent of the teachers felt that it was adequate while 30.58 percent felt it was inadequate and that there was a need to administer more tests. This is a distinctive pointer to the fact that teachers place a special value on school-based assessment and if time would allow, they would administer more school-based assessments more often. This is clearly shown in table 15.

Table 15: Adequacy of the frequency of assessment

Statement	Frequency	Percentage
Adequate	84	69.42
Inadequate	37	30.58
Total	121	100.00

4.5.3 Other modes of assessments used

Teachers were asked to state other modes of assessment that they apply in assessing their learners other than the termly tests. The findings are as presented in table 16 below.

Table 16: Other modes of assessment

Modes of assessment	Frequency	Percentage
Oral assessment	42	34.71
Research and discussion groups	10	8.27
Assignments	10	8.27
Group questions and practicals	20	16.53
Assignment after the topic exercises	22	18.18
Quizzes	15	12.40
Inter group competition	2	1.65
Total	121	100.00

The results show that a bigger percentage of teacher, 34.71 percent favoured oral assessment in their day-to-day classroom interaction with the learners. A myriad of other possible modes of assessment was suggested and this included: group questions and

practicals 16.53 percent; assessment after the topic exercises 18.18; quizzes 12.40 percent; assignments 8.27 percent; research and discussion groups 8.27 percent and inter group competition as proposed by 1.65 percent.

From the foregoing, it is evident that there are numerous other modes of assessment that can be considered for scoring learning achievement at the school level rather than the traditional modes of end term tests. However, asked whether they grade the students on the basis of the scores that result from the other modes of assessments listed above, 50.00 percent said yes while another 50.00 percent said no. Those who said no offered various reasons why they do not. Some said that they had numerous assessments for the learners and that the student – teacher ratio was high thus it cannot allow grading using the other assessment modes. For others, those other modes of assessments are just used to perfect certain specific skills and to prepare students for the other examinations that are used for scoring. Others argued that scoring the above-mentioned assessment modes couldn't be relied on since they are not standardized and thus they may be highly subjective. As for such, they may not effectively reflect the performance of the learner. However, others do not use these modes of assessment simply because it is not their schools' policy and thus there is no room provided for it in the schools' progress record books.

4.5.4 Teachers Opinion about the Effectiveness of School-based Assessment

Teachers were asked whether school-based assessment was in a position to effectively report learners' abilities and competencies. The results are as indicated in table 17 below.

Table 17: Opinion on the reliability of school-based assessment

Opinion	Frequency	Percentage
Reliable	84	69.42
Unreliable	37	30.58
Total	121	100.00

The findings above indicate that 69.42 percent of the respondents indicated that it was adequate while 30.58 percent indicated that it was inadequate. This clearly shows that a majority of the teachers felt that school-based assessment is in a position to effectively report the learners' abilities and competencies. Those who indicated that school-based assessment is inadequate in reporting learners' abilities and competencies were asked to explain why. Various explanations were offered. 56.76 percent of them cited favourism by teachers thus resulting in marks being awarded to undeserving students. This makes them see it as highly unreliable. This, they said, was especially motivated by the need to have the teachers get a positive appraisal of their job performance. 13.51 percent cited the differences in the teachers' marking techniques and awarding of marks while another 13.51 percent felt that it was unreliable due to the fact that in the cases where group work is scored, some learners benefit from other learners initiatives and competencies thus the awarded score cannot reflect individual competencies and abilities. 10.82 percent cited the fact that there are other external factors that may contribute to student failure even if the student is academically good. 5.41 percent of the respondents felt that these other

modes of assessment increased chances of receiving marks based on their abilities and competencies.

4.5.5 Teachers' Opinion on School-based Assessment's Accusation of Teacher Bias

Teachers were asked to indicate their feelings about the common accusation leveled against school-based assessment that it is high in teacher bias. The results are as indicated in table 18 below.

Table 18. Opinion on teacher bias in school-based assessment

Opinion	Frequency	Percentage	Mean perception
Strongly agree	26	21.49	
Agree	65	53.72	
Disagree	28	23.14	
Strongly disagree	2	1.65	
Total	121	100.00	2.95

On this question, the teachers had a mean perception score of 2.95, which indicates that they agree. Education administrators were asked to give their opinion on the importance of school-based assessment to the teaching learning process. All respondents posted a result indicating that they highly valued the use of school-based assessment in the school setting. Most were of the opinion that despite the weaknesses of school-based assessment, it is quite important in the school setting especially in the diagnosis of learning achievement. This diagnosis helps the teachers to plan for remediation thus resulting in the achievement of not only the pedagogical objectives but also the broader curriculum

objectives. The above findings indicate that both teachers and educational administrators place an important value on the use of continuous assessment in the school setting.

4.6 Challenges to the Administration Of School-Based Assessment

The following research question forms the basis of this section: what challenges do teachers and educational administrators face in their administration of continuous assessment. In a bid to get answers on the above research question, several question were asked to the teachers and educational administrators. The results are as presented below.

4.6.1 Teachers' Pre-service Training

Teachers were asked whether they felt that the pre-service training they received was sufficient enough to make freshly qualified teacher trainees to feel competent enough to set, administer, mark and grade the students assessment items. The results were as presented in table 7. Judged on the two-point scale of adequate and inadequate, teachers in the study posted a mean perception score of 1.6, which indicates that a slight majority viewed it as adequate. The percentage scores shows this clearly. 61.16 percent said it was adequate while 38.84 percent of the teachers said that the training was inadequate. This indicates that though the majority feel that their pre-service training was adequate, it was the concern of some that it was inadequate and this posed a challenge to the administration of school-based assessment since a section of the teachers feel inadequately equipped to effectively handle it.

4.6.2 Attendance of Seminars Workshops or In-service Courses

Asked to indicate the number of times they attended seminars, workshops or in-service courses, the results, which are presented in table 8, indicate that 40.50 percent had attended three times or more, 13.22 percent had attended twice while 19.01 percent had attended once. 33 percent of the respondents who represents slightly more than a quarter of the respondents indicated that they had attended none at all. This poses as a challenge to the administration of school-based assessment in that a good number of teachers do not have frequent and direct access to the current information on assessment. This coupled with the earlier assertion that a good number of teachers felt that the pre-service training they received was inadequate poses a great challenge to the administration of school-based assessment. It is also noteworthy that as shown in table 10, a majority of those who attended either workshops, seminars or in-service courses – 66.67 percent attended short courses of between one day and one week. This is an indication that the courses have been lacking in depth and breadth.

4.6.3 Reliability of School-Based Assessment Scores

Teachers were asked the following question: Of the school-based assessment scores what percentage would you attribute to the learners' own initiative? The results were as presented in table 19 below.

Table 19: Scoring of learners' own initiative in school-based assessment.

Percentage score	Frequency	Percentage
Over 75	9	7.44
51 – 75	30	24.79
25 – 50	47	38.84
<u>Below 25</u>	<u>35</u>	<u>28.93</u>
<u>Total</u>	<u>121</u>	<u>100.00</u>

Table 19 indicates that those who felt that the learners' own initiative accounts for more than 50 percent constituted 32.23 percent while those who felt that it accounts for less than 50 percent constituted 67.77 percent. This clearly indicates that teachers themselves have no confidence with the resultant school-based assessment scores. They felt that there was too much external influence on school-based assessment scores to make them to effectively report learners' abilities. With teachers expressing lack of confidence with the school-based assessment scores, this deals a major blow to the general perception of school-based assessment. It is thus noteworthy that with teachers' perception of school-based assessment being low, and bearing in mind that they are the ones who help generate the scores, it makes it least likely for other education stakeholders to perceive school-based assessment positively.

4.6.4 The Level of Difficulty of School-based Assessments' Test Items

Teachers were asked to offer their opinion on the general level of difficulty of a majority of the school-based assessment items. 52.07 percent rated them as difficult while 46.28

percent rated them as easy while 1.65 percent rated them as too difficult. This therefore implies that a majority of the teachers rated the school-based assessment test items as difficult. This means that a majority of the teachers know that the test items they present to the learners are more challenging to the learners than they really ought to be. This could explain why learners generally seem to develop a resentment of school-based assessment.

4.6.5 Teacher Bias

Teachers were asked their level of agreement (on a four point scale) with the common accusation that school-based assessment is riddled with teacher bias. The results were as presented in table 18. As the results indicate teachers posted a mean perception score of 2.95. This indicates that they agree that school-based assessment is riddled with teacher bias. That means that teacher bias is a major challenge to the administration of school-based assessment and thus needs to be addressed so as to make school-based assessment scores acceptable.

On the part of educational administrators, they were asked to enumerate the challenges they faced in the administration of school-based assessment. 83.33 percent cited the lack of standard marking schemes and procedures. This gave room to some insincere teachers to inflate scores and thus dealing a major blow to the stakeholders' confidence in the objectivity of the whole school-based assessment exercise. All the education administrators interviewed i.e. 100 percent argued that the administration of school-based

assessment was time consuming and that it was costly to sustain. But they all agreed that it was a worthwhile exercise. 67 percent of them felt that school-based assessment has a high potential of causing fear if not properly managed and this has a potential of causing student unrest and so leading to disruption of school programmes. 50 percent of the educational administrators felt that too much emphasis on school-based assessment results in teachers resorting to examination - based teaching as opposed to curriculum based teaching which is detrimental to the teaching / learning process.

Other challenges highlighted included the limit in the resources availability, which means that many schools are not in a position to install and maintain state of the art information management systems and are often left to rely on the cheap and inefficient means currently at their disposal.

4.7 Ways of Enhancing the Reliability of School-Based Assessment

This section seeks to address the following research question: How can the reliability of school-based assessment scores that are to be integrated with the external examination scores be enhanced? Both teachers and educational administrators were asked to offer their suggestions. Several recommendations were made. 54.55 percent of the teachers recommended standardization of school-based assessment. They recommended that a central body does the management of school-based assessment and that this body be bestowed with the responsibility of ensuring that standards are maintained across all schools. For ease of administration it was recommended that each district should have a

co-ordination center. Those who saw the need for a central body further recommended that the body should ensure that the tests that are administered are standardized and that standardized marking schemes and procedures are used. They further recommended that a standard school-based assessment timetable be used across the country. To ensure that examinations done in all schools in the republic are standardized, it was recommended that a national test item bank be created for each subject and for each class and that school-based assessment test items be drawn from this bank.

Others who made a case for standardization recommended that all teachers should be inserviced on setting the examination, marking, and grading of the learners. They also recommended that pre-service teacher training should consist of setting standard examinations, marking and scoring. As an indication of the seriousness of the examination and to avoid extraneous assistance of learners during examination time, examinations should be marked by external markers and the same should apply to invigilation it was also recommended that standard weighting procedures be employed in each subject to determine what percentage the school-based assessment score should constitute the overall score used in certification.

From the recommendations above it is evident that a majority of teachers and educational administrators feel that the main undoing of the school based assessment is its lack of standardization. There is thus a general agreement that measures aimed at standardizing school based assessment would help enhance its reliability.

24.79 percent of the teachers recommended that the system of school-based assessment data management be carefully planned to ensure that school-based assessment data reaches the certification body in time and intact- without adulteration. Strategies offered for consideration included the forwarding of school-based assessment scores immediately they are generated. It was also recommended that schools take the initiative of improving their data management systems by use of modern technology such as computers.

8.26 percent of the teachers recommended that for school-based assessment to be an effective measure of reporting the learners' abilities school inspection should be enhance. There should thus be regular inspection of the schools. This would go a long way in ensuring that standards are maintained throughout the country and that standard school-based assessment procedures are used. This would thus increase the reliability of the scores and thus boost their acceptability.

It was also recommended that there should be constant appraisal of the school-based assessment systems with a view to perfecting it. This should be done with the involvement of all the education stakeholders where all their concerns about the shortcomings of school-based assessment are carefully looked at and addressed. Key among these stakeholders are the teachers the inspectorate and the national certification body

It was also the recommendation of 4.13 percent of the teachers that ways must be sought to discourage unfair competition among schools. They noted that unfair competition was

to blame for of the school-based assessment scores and thus played a major role in undermining the reliability and the general acceptance of the school-based assessment scores. Ranking of schools was particularly pointed out as a great contributing factor to the unfair competition and it was thus recommended that it be avoided.

All the educational administrators interviewed - 100 percent- were in agreement with the fact that there was a need to strengthen the inspectorate for it to perform its roles in the quality control and in guiding the curriculum effectively. Their call for the strengthening of the inspectorate was based on the premise that for school-based assessment to succeed, it needed thorough supervision and careful guidance. 100 percent of the interviewees recommended that there was a need to clearly divide the roles of assessment between school-based assessment and external assessment. This would ensure that there is no conflict between the two and that the two work to complement each other in the achievement of the curriculum goals. The key recommendation was to broaden school-based assessment to make it capture a majority of the curriculum intentions that cannot be effectively tested by the end of course examinations. This includes among others the assessment of practical skills (both physical and oral) and the attitudes propagated by the curriculum. 83.33 percent of the educational administrators recommended the employment of a moral rearmament strategy on the teachers and educational administrators through regular in servicing and strict disciplinary measures on deviants. This would go a long way in helping teachers and educational administrators to see the

broader importance of assessment as opposed to the simplistic view of assessment for placement.

From the foregoing it is evident that a majority of the respondents felt that for school based assessment to be a reliable measure of learning achievement, certain administrative measures should be taken. This include: enhancement of school based assessment data management; strengthening the inspectorate to enable it to perform its quality control function effectively; constant appraisal of the school based assessment systems and clearly defining the roles between school based assessment and external examination where each is used to measure certain specific objectives.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Summary of the Study

There has been genuine concerns over the years that it was unfair and unnecessarily stressful for learners to know that they are being examined on only a single occasion and over a short period where luck with the question played a particularly significant role in their chances of success (Miller in Scatterly 1989) This necessitated the use of other modes of assessment and continuous school-bases assessment was developed. It has thus been recommended that school-based assessment provide an alternative to the one-off system of assessment usually done in the end of the course. Some countries have completely shifted from end of course external examination system to using school-based assessment scores for certification. Others have decided to blend the two modes of assessment for certification. With the use of school-based assessment scores for certification either solely or in conjunction with end of course examination scores has raised a major question on the validity and reliability of school-based assessment scores. This study thus sought to examine teachers' and educational administrators perception of integration of school-based assessment scores with the K.C.S.E. examination scores in certification. This it did by: Examining how teachers and educational administrators perceive sole reliance on end of course external examination for certification; finding out teachers' and educational administrators' perception of the strengths of integrating

school-based assessment scores with the end of course external examination: establishing the value teachers and educational administrators place on continuous assessment in the school setting; investigating the challenges teachers and educational administrators face in the administration of continuous assessment; and establishing teachers and educational administrators' views on how to enhance the validity of the school-based assessment scores that are to be integrated with the end of course external examination.

The reviewed literature included: Definition of assessment; definition of continuous assessment; definition of weighted combination and its use in the Kenya Certificate of secondary education; summative assessment and its strengths and limitations; the five key criteria for assessment – humanity, validity, reliability, efficiency and frequency; advantages of school-based assessment; and the strategies used for integration.

The research was conducted using survey design where an accurate assessment of the perception of the whole population i.e. teachers and educational administrators in Central Division- Nairobi was sought. The research was carried out among teachers in public secondary schools in Central Division – Nairobi. It targeted 152 teachers and eight educational administrators. Research data was collected using two modes: a questionnaire for teachers and an interview schedule for educational administrators. Teachers' questionnaire was designed to elicit answers that would indicate their perception of integrating school-based assessment scores with final examination scores and their day-to-day use of continuous assessment in schools. It contained both structured and

unstructured questions. On the other hand data from educational administrators was collected by the use of interviews.

5.1 Research Findings

The research findings showed that although there has been concerns that teachers are not adequately equipped to effectively handle assessment, a majority of the teachers – 66.16 percent - felt that the pre-service training they received was adequate and thus on graduating, they had all it takes to effectively handle assessment of learners. The findings disapprove the widely held notion that teachers lack adequate pre-service assessment skills. The research also found out that those who felt that pre-service did not effectively equip them with the assessment skills and who constituted 38.84 percent felt that the pre service training ought to consist of the training offered to national examiners. It was also recommended that pre-service training in assessment should include test item development, marking of the examination and grading. A majority of this group of teachers felt that the duration of time pre-service teacher trainee takes during teaching practice should be increased to give teacher trainees adequate exposure to the practice of assessment.

The research also found out that both teachers and educational administrators held school-based assessment in high esteem. This was evident by the fact that both teachers and educational administrators frequently attended seminars, workshops and in-service

courses on assessment. 72.73 percent of the teachers had attended an in-service course, seminar or workshop on assessment at least once.

Findings from this research also indicate that teachers saw several advantages in the integration of school-based assessment scores with the end of course external examination. Rated on a five point scale, teachers posting a mean perception score of 4 agreed that integration of school-based assessment scores with the end of course external examination is a step forward in education; is a strategic affirmative action; would work to create the humanity of public examination; and would tremendously enhance the teaching / learning process and would help raise the general status of school-based assessment. However, teachers in the study were unsure whether integration would help reduce cases of student indiscipline.

The research also found out that teachers were in disagreement with the assertion that: integrating school-based assessment with the end of course examination for certification would be a step that stands to be regretted; use of school-based assessment would be unnecessarily burdensome to the teachers; and that use of school-based assessment is an unnecessary strain on the learners and should thus be avoided. They however agreed with the assertion that it would help increase cases of teacher bias.

The study however showed that teachers were unsure whether integration of school-based assessment scores with end of course examination scores for certification would: give teachers undue authority; greatly increase the level of anxiety in the students; give some

learners undue advantage; unfairly disadvantage some learners and that it would greatly erode the reliability of public examinations. All the above findings goes a long way to show that teachers have a favourable perceptions of integrating school-based assessment with the end of course external examination for certification.

It was also evident from the study that both teachers and educational administrators highly value the use of continuous assessment in the school setting. This is clearly shown by the fact that the frequency of assessment is very high with 90.08 percent indicating that they assess their students more than twice a term. The frequency for this group ranged from after each topic, weekly, monthly to twice a term. Only 9.92 percent indicated that they assess their learners only once a term. This is further evident from the fact that a good percentage of the respondents – 30.58 percent felt that the number of times they assessed their learners was inadequate meaning that given a chance, they would assess their learners more often. However, 69.42 percent felt that their frequency of assessing their learners was adequate.

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As a further truth that teachers have a positive perception of school-based assessment, asked whether school-based assessment was in a position to effectively report learners abilities and competencies, a majority of the teachers – 69.42 percent posted a positive response. While only 30.58 percent posted a negative response.

The research also found out that a substantial proportion of the teachers – 33 percent (slightly more than a quarter of the respondents) have never at any one time attended a

seminar workshop, or in-service course in assessment. This means that they have not had an opportunity to have direct access to the latest development in the field of assessment. This poses a major challenge to the administration of school-based assessment.

On the other hand, the study revealed that a big proportion of the respondents (67.77 percent) felt that the students were in receipt of extraneous assistance in the course of the examination in the schools. This is the major cause of the question whether school-based assessment is a true measure of the learners' ability.

Other challenges on the administration of school-based assessment that are cited by the study includes the fact that a majority of the test items in school-based assessment are viewed by a bigger percentage of the teachers – 52.07 percent – as too difficult. This is an indication of the fact that, teachers might not be well equipped with the skills on the development of test items. The study also noted that even the teachers agreed with the popular assertion that school-based assessment is riddled with teacher bias. This especially poses a great challenge to the administration of school-based assessment.

The study also reveals that a majority of the educational administrators – 83.33 percent - cite the lack of standard marking schemes and procedures as the major challenge to the administration of school-based assessment. They pointed out that this is what gives room to the insincere teachers to inflate scores and thus greatly denting the image of school-based assessment. Educational administrators also agree that school-based assessment is time consuming and that it is costly to sustain.

The research also revealed various ways of enhancing the reliability of school-based assessment scores for them to be acceptable for certification. 54.55 percent recommended that various strategies be employed to help in the standardization of school-based assessment. These strategies include the bestowing of the management of school-based assessment to a central agency. This agency should be responsible for ensuring that specific standards are maintained across the board. The agency should also coordinate the development of a test item bank for each subject and each class and ensure that all test items administered across the country are drawn from this bank. Other recommendations that would help in standardization included the in servicing of teachers to equip them with the knowledge on the current assessment practice; careful planning and administration of the school-based assessment data management systems; the enhancement of the School Inspectorate with a view to enabling it to regularly inspect schools. It was also recommended that the school-based assessment process be given a constant appraisal with a view to perfecting it.

However, for all the above to succeed in enhancing the reliability of school-based assessment scores, ways must be sought to discourage unfair competition among schools as this has a great potential of undermining the objectivity of the whole school-based assessment process.

5.2 Conclusions

The following conclusions are made from the research findings and within the framework of the limitations of this study. Both teachers and educational administrators acknowledge the limitations of both school-based assessment and end of course external examination. End of course examination has a major limitation in that it can only effectively measure certain curriculum objectives and not others. However, its major strength is that it is high in reliability. On the other hand, school-based assessment has a major advantage in that it can measure a broader spectrum of curriculum objectives than end of course examination. However, its major limitation is that it is low in reliability. From the foregoing it is clear that an assessment strategy that involves the use of the two modes of assessment would be ideal. This is because it would enable the assessment to benefit from the best of the two assessment modes while at the same time ensuring that the weaknesses of either of the two assessment modes are checked by the strengths of the other.

From the study, it is also evident that despite the much-touted weaknesses of school-based assessment it is highly regarded by both teachers and educational administrators. And that both teachers and educational administrators believe that with a little more effort, the weaknesses can effectively be addressed.

5.3 Recommendations

The following recommendations are made on the basis of findings of this study:

- 1) There is a need for concerted effort to ensure that examinations that are administered in the schools are standardized for the scores arrived at to be generally acceptable to all the stakeholders for certification. This will give the local examinations (school-based Assessment) some level of acceptance in integration with the national examination (end of course external examinations)
- 2) A moral rearmament strategy should be developed and employed to instill in the teachers and the educational administrators the need for honest reporting of the learners abilities
- 3) School inspection should be enhanced so as to ensure that standards are maintained not only in teaching but also in the assessment of the learners.
- 4) Effective and efficient data management systems should be developed and sustained in the schools to enable safe storage and quick retrieval of school-based assessment data.
- 5) For school-based assessment scores to be well received for integration with the end of course examination scores for certification, the roles of school-based assessment and the those of the end of course external examination should be clearly defined to ensure that they complement each other.

5.4 Suggestions for further studies

The study acts as an eye opener to the following areas of further research.

- 1) Replication of the current study needs to be carried out using an interview schedule in order to establish whether similar results can be arrived at.
- 2) A study of the perception of other educational stakeholders such as parents, employers and even students needs to be carried out to determine their perception of integrating school-based assessment and the end of course external examination.
- 3) A study of the relationship between school-based assessment scores and student performance in subjects with a project or practical component in the Kenya Certificate of Secondary Examination needs to be done.

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TEACHERS' QUESTIONNAIRE

UNIVERSITY OF NAIROBI
EAST AFRICANA COLLECTION

This questionnaire is designed to gather general information on the importance of integrating school based assessment scores with the end of course external examination for purposes of certification. This questionnaire has three sections namely A, B, and C. Kindly provide information to all questionnaire items. For confidentiality, please do not write your name or that of your school anywhere in this questionnaire.

PART ONE

This section seeks information about you your school and your work. Please provide the information as required.

1) How old are you?

_____ Years.

2) What is your sex? (Tick appropriately)

Male

Female

3) How long have you served as a teacher?

_____ Years

4) How many years have you served in the following post?

Head Teacher _____ Years

Deputy Head Teacher _____ Years

Head of Department _____ Years

5) Please put a tick [✓] besides your highest professional qualification

Master of Education

Bachelor of Education

Bachelor of Arts (plus Postgraduate Diploma in Education)

Bachelor of Arts only

Diploma

Secondary Teacher I

6) Please put a tick in the box that best describes the school you teach

National School []

Provincial School []

District School []

7) Please indicate your teaching subject(s) below

1) _____

2) _____

3) _____

PART TWO

SECTION A

This section contains questions and statements related to the contemporary use of school-based assessment in schools. Please provide answers to the questions by means of ticks [✓] or as otherwise may be required.

(a) How often do you assess your students in the subjects you teach?

After each topic [] Weekly []

After a fortnight [] Monthly []

Twice a term [] Termly []

(b) Do you feel the number of times you assess the learners is adequate?

Yes []

No []

(c) If your answer to (b) above is NO, what remedial action do you recommend? (Please explain briefly)

(d) Other than the weekly or terminal tests, which other modes of assessment

do you apply in assessing learners in your teaching subject(s)

(e) Do you grade them on the basis of the resultant scores from the other

assessment procedures stated in (d) above?

Yes []

No []

(f) If your answer to (e) above is NO, please briefly state why not.

(g) Do you feel that the pre-service training you received was sufficient

enough to make a new teacher trainee feel competent enough to set,

administer, mark, and grade student assessment items?

Yes []

No []

(h) If your answer to (g) above is NO, what do you suggest should be included in the pre-service training that is currently lacking?

(i) How many times in the last five years have you attended a seminar, workshop or in-service course in assessment?

- Once Thrice
Twice Not at all

(j) if your answer to (i) above is YES, please state the organizers

(K) If you attended some course(s), what was the duration of the course(s)?

SECTION B

This section contains statements concerning integration of school-based assessment scores with final examination scores. Please indicate by means of a tick [✓] the degree you agree / disagree with them on the five point scale

Indicated as: Strongly agree [SA], Agree [A], Disagree [D], unsure [U],
Disagree [D], Strongly disagree [SD]

(a) The use of school-based assessment in certification is an important step forward in education. SA [] A [] U [] D [] SD []

(b) The use of school-based assessment in assessment is a step that stands to be regretted SA [] A [] U [] D [] SD []

(c) School-based assessment is a strategic affirmative action SA [] A [] U [] D [] SD []

(d) School-based assessment would work to increase the humanity of public examination SA [] A [] U [] D [] SD []

(e) The use of school-based assessment scores for certification would increase cases of teacher bias

SA [] A [] U [] D [] SD []

(f) Use of school-based scores for certification would give teachers undue authority.

SA [] A [] U [] D [] SD []

(g) Use of school-based assessment would tremendously enhance the teaching / learning process

SA [] A [] U [] D [] SD []

(h) Use of school-based assessment for certification would greatly increase the level of anxiety in students

SA [] A [] U [] D [] SD []

(i) Use of school-based assessment in certification would go a long way in reducing cases of student indiscipline.

SA [] A [] U [] D [] SD []

(j) The use of school-based assessment in certification would raise the status school-based assessment. SA [] A [] U [] D [] SD []

(k) Use of School-based assessment in certification would give some learner undue advantage. SA [] A [] U [] D [] SD []

(l) Use of school-based assessment in certification would unfairly disadvantage some learners. SA [] A [] U [] D [] SD []

(m) Use of school-based assessment for certification would be unnecessarily burdensome to the teachers. SA [] A [] U [] D [] SD []

(n) Use of school-based assessment in certification would greatly erode the reliability of the public examinations.

SA [] A [] U [] D [] SD []

(o) The use of school-based assessment in certification is an unnecessary strain on the learner and should thus be avoided.

SA [] A [] U [] D [] SD []

SECTION C

This section contains question / statements related to your own perception of school-based assessment. Please provide information as required.

(a) Do you feel that school-based assessment scores are reliable enough to be integrated with the final examination scores for purposes of certification?

YES

NO

(b) How would you rate the reliability of school-based assessment?

Highly reliable

Reliable

Not reliable

(c) How would you rate the value of integrating school-based assessment scores with final external examination scores for purposes of certification?

Most important

Inconsequential

Important

Detrimental

(d) Of the school-based assessment scores, what percentage would you attribute to the learners' own initiative?

Under 25%

51% - 75%

25% - 50%

Over 75%

(e) If some of the work is not done by the learners themselves, what do you think may be the source of their assistance? (please tick as may be applicable)

Teachers

Fellow classmates

Reference sources

Any other(s), please specify _____

(f) How in your opinion would you rate a majority of school-based assessment items?

Too difficult

Difficult

Easy

(g) In your opinion, do you feel that school-based assessment is in a position to effectively report learners abilities and competencies?

YES

NO

(h) If your answer to (g) above is NO, briefly explain why not.

(i) School-based assessment has been accused of teacher bias. What are your feelings about it?

Strongly agree [] Disagree []

Agree [] Strongly disagree []

(j) If school-based assessment scores were to be incorporated in the certification process, what would you recommend should be done to make the resultant scores more acceptable

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THANK YOU FOR YOUR CO-OPERATION

INTERVIEW SCHEDULE

School-based assessment is widely used in the school setting to gauge learning achievement. This comes in the form of teacher-made tests that are administered at the discretion of the school or individual subject teachers. It is also found in the form of projects, assignments and observations. In Kenya, school-based assessment is also used albeit in a limited form in the certification process especially in the subjects that have a project or a practical component. However there have been unending debates on the importance and viability of using school-based assessment scores in certification. Opinion on the viability of using school-based assessment in certification is largely divided. Some countries have totally embraced the integrated approach, others have embraced it partially while others have totally snubbed it.

This interview seeks your personal opinion about the use of school-based assessment in certification.

- 1] What do you understand by the term:
- i. School-based assessment?
 - ii. Continuous assessment?
 - iii. End of course-external assessment?

- 2] Given the two – school-based assessment and end of course external assessment, what would you recommend for certification?

- 3] In your opinion, would the integrated approach to assessment (Integrating school-based assessment scores and end of course external examination scores) add any value to the assessment process in Kenya?

- 4] What would you say is the importance of continuous assessment to the teaching/ learning process?

- 5] What challenges does the administration of continuous assessment pose?

- 6] How can the validity of the school-based assessment scores be enhanced for purposes of integration?

MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY

From: "EDUCATION", Nairobi

Phone: Nairobi 334411

replied please quote

No. MOEST 13/001/34C 297/2
and date



JOGOO HOUSE "B"

HARAMBEE AVENUE

P.O. Box 30040-00100

NAIROBI

24th August 2004

Stephen Mbugua
Nairobi University
P.O BOX 30197
NAIROBI

Dear Sir

RE: RESEARCH AUTHORISATION

Following your application for authority to conduct research on "Teachers and Educational Administrators Based Assessment Scores with KCSE Examination Scores in Certification." A case of starehe Division, Nairobi.

This is to inform you that you have been authorized to conduct research in Nairobi for a period ending 30th November, 2004. You are advised to report to the PC and the PDE Nairobi before embarking on your research project.

Upon completion of your research project, you are expected to submit two copies of your research findings to this office.

Yours faithfully


B.O ADEWA
FOR PERMANENT SECRETARY

Cc

The Provincial Commissioner
Nairobi

The Provincial Director Of Education
Nairobi

District Officer
Starehe