# INFLUENCE OF FORMATIVE ASSESSMENT ON ACHIEVEMENT IN BUSINESS STUDIES IN PUBLIC SECONDARY SCHOOLS IN KITUI COUNTY, KENYA.

# MWANDIKWA JOSEPH MUSYIMI

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# **DECLARATION**

This research project is my original work and has not been submitted for any academic award at any other university.			
Mwandikwa Joseph Musyim E58/86804/2016	ni Signed	Date	
This research project has been University Supervisor.	submitted for exar	nination with my appro	oval as the
Dr. Japheth O. Origa	Signed	Date	
Department of Educational Co	ommunication and	Γechnology University	of Nairobi

# **DEDICATION**

I dedicate this project to my wife Jeniffer K. Musyimi, my daughter Eunice Mueni and my son Vincent Mumo for their great support, patience and understanding during my course.

#### **ACKNOWLEDGEMENT**

I sincerely take this opportunity to thank my God for granting me this golden chance to study this course. His grace has enabled me to carry out this research project. This work was possible due to sustained support and motivation from my Supervisor, Dr. Japheth O. Origa who devoted his valuable time to guide me. I honestly thank him for his efforts. I also appreciate all the students, teachers, principals and deputy principals of Mumoni sub County who freely offered the information that aided the compiling of this report. I also sincerely appreciate my student colleagues who encouraged me through the whole process. In conclusion, I want to recognize the inspiration, understanding and financial support I got from my family members during my time of study.

May God abundantly bless you all.

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#### **ABSTRACT**

Authentic formative assessment is a kind of alternative assessment whereby teachers ask learners to do real life activities to demonstrate right application of required knowledge and skills. Formative assessment involves engaging in real world tasks or meaningful questions in which learners are required to use knowledge and skills acquired to improve performance effectively and creatively. Teachers assign learners tasks which are the same as the problems faced in real life situation. Formative assessment helps teachers and learners identify what the learners can do effectively and what they cannot do well. It is investigative in nature. Formative assessment requires learners to make decisions on their own learning by answering the following questions; where do I want to go? How far have I gone? How do I complete the journey? Formative assessment helps teachers to know the progress of the learners and areas of difficulty. This helps teachers to make instructional adjustments such as remedial teaching, varying methods of teaching and providing learners with more engaging tasks. The mentioned activities lead to improved performance of learners. The performance of business Studies has been dropping since 2013 to 2017 with means of 47.12 and 31.06 respectively. Still the performance is very poor in Mumoni Sub County. This aroused the curiosity of the researcher to conduct the study on influence of formative assessment on achievement in public secondary schools in Mumoni Sub County. The researcher wants to determine whether assignments, feedback, continuous assessment tests and their frequency influence the learner's performance in Business Studies. The Vygotsky's social constructive theory guided this study. Vygotsky argued that human mind is constructed through interactions with the environment or world. Vygotsky stated that, a child entirely dependents on other people during early stages as they present variety of tasks and engaging the child in his or her sociocultural environment. This study used mixed design that is descriptive research design and experimental design. A descriptive survey design involves application of questionnaires or conducting interviews to a representative sample to collect information from a common group. Pretest and posttest technique were used. The researcher used stratified random sampling technique to select sample group. Descriptive survey research is reported by use of frequency distribution tables, percentages and then tabulating them accordingly. Teachers should vary their teaching strategies and also give authentic tasks to meet learners' differences. Integration of teaching, learning and assessment helps learners to grasp new concepts easily and apply them to solve real life problems. Teachers should offer timely feedback to learners to know their strong and weak areas, make decisions on how to improve weak areas and evaluate their progress. Feedback should always motivate learners to study tirelessly. It should provoke students to learn. Assignments and continuous assessment tests should consist of authentic tasks which gives learners an opportunity to practice learnt concepts. Assignments and CATs should provide learners with chance to practice learnt skills and knowledge to solve real life problems in order to construct new knowledge. Assignments and CATs should be offered in a friendly environment to enhance motivation of learners to study Business studies. Business studies teachers should offer variety of formative assessment techniques to motivate learners and enhance learning process by providing a more focused application for learners. Teachers should provide a well-designed assignments and CATs with carefully planned authentic tasks to motivate learners to learn Business studies. To be effective all formative assessment tools should be informative. They should help the teacher to monitor learner's progress and point out areas' students did not grasp the concept well. They should identify student's individual differences for the teachers to vary instructional strategies to meet learner's differences. Offering many formative assessments gives students an opportunity to practice learnt concepts leading to mastery of the concepts hence improved academic achievement. As students perform authentic tasks in solving problems in real world situation, they construct new knowledge.

# CHAPTER ONE INTRODUTION

#### 1.1 Background to the Study

There is a paradigm shift from traditional assessment to formative assessment. Formative assessment is a procedure used by both teachers and learners to monitor students' progress in learning and offer guidance to enhance learning during learning process (Cowie and Bell, 1999). It helps teachers and learners identify what the learners can do effectively and what they cannot do well. It is investigative in nature. It's a tool for inspiring leaners to study hence improving learner's academic achievement. It helps the learners to make decisions on their own learning by answering the following questions; where do I want to go? Clearly set goals encourage Learners to learn as they try to achieve them. Clearly set goals aids the learners to understand the reason for achieving goals and they attract the required attributes for success. Teachers guide learners to clarify intended learning as the lesson unfolds.

How far have I gone? The learners should know what they have achieved, what is remaining and how to achieve it. This awareness helps the learners work hard leading to high academic achievement. How do I complete the journey? It should help the learners to come up with alternative learning approaches to practice to attain their goal.

Authentic formative assessment is a kind of alternative assessment whereby teachers ask learners to do real life activities to demonstrate right application of required knowledge and skills. (Mueller, 1998). Wiggins G, (1990), defines formative assessment as engaging in real world tasks or meaningful questions in which learners are required to use knowledge and skills acquired to improve performance effectively and creatively. Teachers assign learners tasks which are the same as the problems faced in real life situation.

Assessment involves all activities done by both teachers and learners to monitor learning and get diagnostic information to adjust teaching and learning. Formative assessment tools include; CATs, quizzes, class exercises, teacher observation, classroom discussion and homework. Any Assessment providing information to modify teaching and learning to meet learner's needs, its formative assessment. In any educational program, assessment of learner's academic achievement forms the basic

step because it provides information about the achievement of intended objectives. (Wass, 2001).

Formative assessment helps teachers to know the progress of the learners and areas of difficulty. This helps teachers to make instructional adjustments such as remedial teaching, varying methods of teaching and providing learners with more engaging tasks. The mentioned activities lead to improved performance of learners. (Sawyer, Graham and Harris 1992).

Authentic formative assessment seeks to help learners know expected objectives to be achieved, how far they have achieved the intended objectives and provide strategies to fully meet the expectation.

Alternative assessment requires learners to apply and practice skills and knowledge they have learnt in real life situation. The assessment of student's learning as the lesson progresses forms a very important basic aspect in the teaching - learning process.

Classroom assessment helps teachers to determine learner's competencies and establish problems they are facing to make decision on next instructional strategies to improve academic achievement. Classroom assessment improves the quality of teaching-learning process and it has notable effects on learner's performance.

Assessment for learning is learner centered. All the parties both the teachers and learners are actively involved in the learning process. The teachers and students set objectives and work together towards achieving them. Teachers observe the learners as they apply skills and knowledge in real world situations and offer corrective measures. Teachers use varied teaching approaches to improve quality of teaching which leads to high academic achievement.

Provision of formative feedback to learners helps them to rejoice their academic achievement and to detect problems they are facing. This helps learners to adjust their learning strategies and also direct their own learning. When learners direct their own learning and assessment, their self-esteem is increased and they are motivated to study hard. Learners make vital decisions concerning their learning which are important than decisions made by the teachers, policy makers, stakeholders and politicians.

Authentic assessment enables the learners to construct their knowledge of the real-life world via the knowledge acquired, taught and own experiences with the world. Learners are required to demonstrate acquisition of skills and knowledge through application of the skills and knowledge acquired in real life situation other than recalling information. Teachers are required to fully engage the learners in the construction of knowledge by providing engaging tasks which act as vehicles of learning. Construction of knowledge enhances deep understanding and retention of learnt concepts leading to high academic achievement.

Authentic formative assessments are direct measures of knowledge and skills acquired by learners. Students should not be taught content of various subjects to graduate but they should be taught to grasp the concepts well in order to be able to apply them in real life situation to construct knowledge. Assessment should be informative to the teacher. Learners should display competency in application of learnt skills and knowledge in authentic situations. Learners should be engaged in authentic tasks to display their competency in application of skills and knowledge in solving real life problems. To demonstrate their competency, footballers should be requested to play football for the coach to know if they can apply the taught knowledge and skills hence providing direct evidence of learner's performance.

There is paradigm shift from traditional assessment which encourages recall of information by separating assessment from teaching and learning to Authentic classroom assessment which reassures complete learning process by integrating teaching, learning and assessment leading to construction of knowledge. Teachers provide well designed engaging activities to integrate teaching, learning and assessment. To facilitate learning and evaluate the learner's competency in application of knowledge and skills, the teacher must provide authentic tasks to the learners. When an engineering student is given real life problem to solve like bridge construction, the teacher offers guidance to the student (teaching), the student is learning while constructing the bridge, and the constructed bridge becomes the assessment of how best the student can apply learnt concepts in bridge construction.

Formative assessment provides many ways to determine competency in acquired knowledge and skills. Learners are endowed with capabilities in how they learn. They have different strengths and weaknesses and they also demonstrate mastery of learnt concepts differently. Traditional assessment does not provide learners with multiple paths to demonstrate their ability to apply learned skills and knowledge in real world situation. Traditional assessment does not give learners any choice to critically think the best way to demonstrate their competency on learned concepts.

Wiggins 1990 argued that, for learners to demonstrate their competency adequately, they should be presented to several and diverse assessments. When learners are assessed using varied ways, they get the opportunity to apply learnt concepts in varied ways and from different perspectives. Authentic tasks give learners autonomy to apply learnt concepts in real world situation and construct knowledge.

Alternative assessment requires learners to perform meaningful and engaging activities which are authentic by use of diverse strategies to apply learned knowledge and skills. Authentic classroom assessment is investigative in nature because it enables the teacher to know the level of competency of a student in application of knowledge and skills in solving real world problems. Provision of authentic tasks leads to mastery of concepts hence improved academic performance. Many teachers do not have enough know how on how to correctly implement authentic assessment and assess learner's performance fairly and due to this they fear implementation of authentic assessment. (Airasian 1991). Teachers have been facing challenges in execution of alternative assessment like inconclusive results hence becoming reluctant because of previous discouraging experiences. (Stiggins 1994). The teachers should provide learners with more challenging learning activities intended to encourage the growth of critical and creative thinking. Critical and creative thinking which are higher order thinking skills improves learner's academic achievement because learners construct knowledge in real world situation.

Evidence shows that continuous assessment tests (CAT) have positive effect towards learner's achievement. Teachers use continuous assessment test to continuously assess students learning outcomes. Teachers use CATs to assess learners in all perspectives. The questions are designed to test all the three domains that is cognitive, psychomotor and affective according to developmental stages. Teachers plan instructional strategies and design engaging tasks to meet the individual needs of the learners. Continuous assessment test is diagnostic in nature. It finds out in an orderly manner the total

learner's achievement after a learning experience in relation to skills, knowledge and attitude. (Ogunniyi, 1984).

Formative assignments motivate learner because it helps them discover their potentials and weaknesses. Assignments leads to self-assessment and students are able to practice concepts not grasped well. This leads to high academic achievement in the subject area. Ajogbeje (2012) found that the use of diagnostic assignments during learning process enables learners to grasp and retain learnt concepts. Formative assignment provides information which can be used to adjust teaching approaches. Assignments include; homework, quiz, class exercises and projects. Assignments help students to know their strength and weaknesses and take necessary remediation action.

Teachers frequently assess learners in a classroom featuring formative assessment to test their understanding and ability to apply learned concepts. Frequently assessing the learners helps the teachers to adjust their instructional strategies to meet individual differences of the learners and well assist them to improve academic achievement. Many formative assessments give the teachers an opportunity to use varied modes of assessment to make informed judgement about the learners. If learners are frequently and adequately assessed during teaching-learning process, there is high possibility of academic achievement. Also, immediate feedback and prompt remediation leads to high achievement. Frequent assessments lead to deep understanding of concepts and helps teachers to diagnose problems and offer remedy.

Teachers give feedback to learners to create awareness on gaps and strengths that may exist and also give suggestions on how to close the gaps to better the performance. Feedback tries to bridge the gap between the desired goal and current knowledge and skills. (Sadler 2005). Feedback is helpful if it provides comments on exact errors and precise suggestion for correction and motivates the learner to focus on acquisition and retention of the concept rather than being told the correct answer. (Arbaugh, 2008). Feedback is important to learners because it informs them how well they are progressing. Feedback should give suggestions for future improvement. It should be timely and specific. Formative assessment should have positive impact to both teachers and learners. It should not be made for approval or certification but to provide feedback on learning process. (Rushton 2005). Verbal or written feedback has positive effect on learner's academic achievement if appropriately given to learners.

According to KNEC report (2017) the mean of Business studies has been dropping. In 2013 the mean was 47%, it dropped to 31% in 2017. Unfortunately, the performance is worse in Mumoni sub county, Kitui County.

Performance of Business studies for last three years in Mumoni sub -county.

YEAR	MEAN
2015	4.345
2016	3.811
2017	2.81
2018	2.42

Source: Mumoni SCDE office, 2019

Kenya is undergoing a paradigm shift from traditional assessment to alternative assessment by implementing a new education system which values the use of formative assessment in determining the ability of learners. Task force headed by Douglas Odhiambo came up with new education system (2-6-3-3-3) which embraces use of formative assessment. Students and pupils will be evaluated through continuous assessment tests. Continuous assessments tests will be offered at school level to facilitate transition by assessing the learner's skills competencies and abilities. The system will enhance authentic classroom assessment which will improve student's performance. If learners are engaged in authentic tasks in real world situations, they deeply understand the content and also retention rate is high. Kenya is now adopting competency-based curriculum which calls for authentic formative assessment which will greatly determine the final grade of the learner. Formative assessment will take 80% and national exam 20% of the grade awarded.

#### 1.2 Statement of the Problem

The reputation of business studies is accredited by individuals, society and the world as a whole. According to KNEC report (2017) the mean of Business studies has been dropping. In 2013 the mean was 47.12%, it has dropped to 31.06% in 2017.

KCSE performance of Business Studies for five years

YEAR	CANDIDATURE	MEAN SCORE
2017	270,755	31.06
2016	256,671	35.47
2015	234,038	43.76
2014	215,394	46.82
2013	196,518	47.12

The students have been failing in extended questions where they are required to explain their answers. Unfortunately, the performance of students in the subject is demanding across Kitui county and specifically Mumoni sub- county.

Performance of Business studies for last three years in Mumoni sub -county.

YEAR	MEAN
2015	4.345
2016	3.811
2017	2.81
2018	2.42

Source: Mumoni SCDE office, 2019

The deteriorating performance in the subject arouses the inquisitiveness of the researcher to conduct the research on the same.

#### 1.3 Purpose of the study

The purpose of the study is to determine the influence of formative assessment on academic achievement in business studies in public secondary schools in Mumoni subcounty, Kitui County, Kenya.

#### 1.4 Research Objectives

The study objectives are;

- i. To determine the influence of assignments on learners' achievement in Business studies.
- ii. To establish the influence of formative feedback on learners' achievement in Business studies.
- iii. To find out the influence of continuous assessment tests on learners' achievement in Business studies.
- iv. To determine the influence of frequency of formative assessment on learners' achievement in Business studies.

#### 1.5 Research Questions

- i. What is the influence of continuous assessment tests on learners' achievement in Business studies?
- ii. What is the influence frequent formative assessment on learners' achievement in Business studies?
- iii. What is the influence of formative feedback on learners' achievement in business studies?
- iv. What is the influence of assignments on learners' achievement in business studies?

#### 1.6 Justification of the Study

This study will come up with findings which will help to determine the influence of formative assessment on academic achievement in business studies in public secondary schools in the 21<sup>st</sup> century across the country. The knowledge will still be very helpful to teachers, learners and stakeholders when making educational policies concerning integration of teaching, learning and assessment.

#### 1.7 Limitation of the Study

The restrictions expected to be experienced during the research study are such as; failure to respond to questionnaires and the respondents not willing to give out sensitive information due to fear of victimization. To overcome fear of victimization, the researcher will clearly explain the respondents that all data collected will be confidential and will not be used for any other business except academic purpose. The honesty of respondents will determine the data validity.

The research will be limited in scope because it focuses only public secondary schools in Mumoni sub-county, Kitui county and not all secondary schools in Kenya, which was not possible due to logistical and financial resources available for the research.

#### 1.8 Delimitation of the Study

The study will be concerned with investigating the influence of formative assessment on achievement in business studies in public secondary schools, Mumoni Sub County, Kitui County

It will cover specific factors such as continuous assessment test, formative feedback, frequency of formative assessment and assignments.

#### 1.9 Basic Assumption of the Study

The assumptions of the study are:

- The targeted respondents will be willing to cooperate and faithfully give information on influence of formative assessment on academic achievement in public secondary schools.
- ii. Formative assessment has a positive contribution to achievement in business studies.

#### 1.10 Definition of Significant Terms

**Formative assessment** is a form of assessment that identifies what the learners know very well and what they do not know. It is diagnostic in nature.

**Frequency of formative assessment** is the number of authentic alternative assessments (CATS, Class exercises, project and homework) given to learners in a certain period of time.

**Assignments** are classical way of measuring learners understanding and progress. They provoke the learner towards demonstrating competency in solving problems. Assignments includes; homework, class exercises, quizzes and projects.

**Academic achievement** refers to the ability of learners to recall and apply learned skills and knowledge in the real-world situation. It is what learners are able to do after going through education system.

**Learning strategies** – These are methods used by a learner to learn new skills and knowledge.

**Formative Feedback -** It is information provided concerning strength and weaknesses of individual learner. It also provides suggestion on how to improve performance.

Continuous assessment test is a tool used assess the ability of learners to recall and apply learned skills and knowledge. It provides evidence concerning learner's academic achievement.

**Public secondary schools** – These are schools financed by the government. They comprise of boys and girls either schooling together or separately. Some students come from their various homes every day in public day secondary schools.

**Assessment** – These are well designed activities by the teachers to test the ability of learners to recall and apply skills and knowledge. The information got is analyzed by teachers and feedback given.

**Authentic formative assessment**- It is a form of assessment which give learners an opportunity to use varied ways to show competency in solving problems through application of knowledge and skills in real world situation.

**Learner autonomy** – It is the ability of learner being independent or being able to direct or to take charge his or her own learning.

**Descriptive feedback** – refers to evidence-based feedback that provides learner with information concerning his or her strength, weaknesses and corrective measures.

**Instructional strategies** refer to teaching methods or approaches.

**Business studies** is an academic subject which equips learners with skills and knowledge to plan, organize and act to create goods and services to satisfy customers.

#### **CHAPTER TWO**

#### REVIEW OF RELATED LITERATURE

#### 2.1 Introduction

This section provides review of related literature on influence of formative assessment on learner achievement in Business studies. It covers the following sections, influence of assignments, continuous assessment tests, frequency of formative assessment and formative feedback on learner's achievement in Business studies, conceptual framework and theoretical framework.

#### 2.2 Literature on Continuous Assessment Tests (CATs)

Webb & Briars (1990) pointed out that assessment is diagnostic in nature where the teacher tries to find out what the learner is able to do and the level of performance. It involves the interaction between the teacher and learners. Yoloye (1991) also argued that continuous assessment test helps teachers to assess the level of academic achievement and also monitor the progress of individual learners. He further concluded that continuous assessment test is a type of formative assessment. Results obtained from continuous assessment tests (CATs) can be used to predict future learners' achievement and success at the work place.

William & Black (2003) defined continuous assessment tests as a tool that tries to provide evidence regarding learners' achievements, which when critically interpreted aids the teacher to take remedy for further improvements. Integration of teaching, learning and assessment calls for implementation of formative assessment in various contexts. When continuous assessment tests are used in different contexts, they enhance teaching and learning by providing a more focused application of skills and knowledge by learners. Continuous assessment test help teachers to gather evidence during the process of instruction in order to make informed decision about teaching and learning. To be concluded that continuous assessment tests are formative, results are produced, interpreted, feedback given and be used to adjust instructional strategies and study habits by both teachers and learners. (Wiliam, 2011)

During learning process, classroom assessment is widely used by teachers to teach a lot of content to students. Though, to Kellaghan and Greany (2003), it interferes with learning process because it is too subjective and may interrupt acquisition and retention of concepts. Continuous assessment tests give the learners several opportunities to

demonstrate their competencies and helps teachers and learners to avoid directing all efforts, energy and time on one final exam.

As Kenya adopts new education system teachers and learners should shift their focus from final examinations (KCPE and KCSE) to formative assessment which allows learners to be assessed through continuous assessment tests.

Continuous assessment tests provide evidence about the abilities of the learners and then this information is used to plan next instruction process.

Continuous assessment tests support learning process by integrating instruction and assessment. There are several potential sources of information concerning learners' abilities including all activities done by learners. These activities include; discussion, projects, field work, asking and answering questions, homework, debates, sitting silently and looking confused. (Leahy, 2005).

To improve learner's achievement and classroom practice, continuous assessment tests should be embraced in the learning process. (Petit & Zawojewski, 2010).

Obanya (1985) argued that assessment should include many and diverse assessment tools to collect information systematically in all aspects of learning. This calls for information gathered about learner's academic achievement to be used continuously in an orderly manner to make decision on future instructional strategies for further improvement. Globally, there is paradigm shift of assessment of learner's achievement due to societal changes. In the current society learners are required to be creative and also think critically while solving real life problems through application of learnt knowledge and skills. CATs should serve as a vehicle to enable the learners to display competency in application of acquired knowledge and skills.

#### 2.2.1 Continuous Assessment Test Strategies

Onuka (2006:1) pointed out that teachers should use several and diverse assessment tools to correctly evaluate learners' abilities, results be analyzed and interpreted and feedback be given to help learners improve their performance. Many countries over years have made several trials to improve quality of assessment by use of continuous assessment tests. In 1970s Tanzania came up with a continuous assessment test (CATs) programs to assess academic progress of individual learners in all level of education system.

Ezeudu (2005) quotes Shintoho et al (1989) that, geography teachers in Nigeria use continuous assessment tests assess their learners.

In Uganda, many secondary schools are practicing continuous assessment tests. Kenya is implementing new education system (2-6-3-3-3) which will make CATs as a tool for promotion to the next grade and determine final grade at end of the course. In most educational institutions, testing is done weekly, mid-termly termly, monthly and yearly basis.

Implementation of continuous assessment tests successfully requires conducive classroom atmosphere where the teacher beliefs all the learners are capable of achieving good performance. The classroom culture should breed high achievement but not competition. In this kind of learning atmosphere, the information gathered from assessment tools such as quizzes, homework and class discussions should guide the teacher to make decisions regarding high achievement. According to Chappuis & Chappuis (2008) formative assessment if correctly administered no final mark or summative grade is awarded. He also concluded that, continuous assessment tests be used frequently during learning process.

#### 2.3 Literature on Formative Feedback

Formative Feedback can be provided by teachers, peers, books, parents, self or experiences. It is information provided concerning strength and weaknesses of individual learner. It also provides suggestion on how to improve performance. It provides remedy on weak areas to individual learners.

Learners' Performance forms basis of formative feedback. The agents of feedback provide correct information, offer alternative strategy and clarify concepts as well as assessing rightness of a response.

To conclude that assessment is formative assessment, the teacher should provide feedback to the learners highlighting the gaps that exist between their current abilities and the desired objective and suggest actions to be taken to meet the desired goal. Feedback is a component of formative assessment. (Sadler, 2005). Feedback is helpful if it provides comments on exact errors and precise suggestion for correction and motivates the learner to focus on acquisition and retention of the concept rather than being told the correct answer. (Arbaugh, 2008).

Formative feedback arouses the curiosity of the learners of wanting to perfect their work which leads to putting more efforts in academic work hence improved performance. Low achieving learners are greatly helped by feedback because it motivates them to work hard and disapprove those who think low performance is due to lack of innate ability.

Sometimes low achievers become reluctant and fail to put more effort in learning but formative assessment frustrates the thinking that low achievement is due to lack of ability and supports that all learners have ability to achieve more when given the right guidance. (Vispoel & Austin, 1995).

Self-assessment plays a very vital role to learner's achievement although teachers most of the times provides feedback to them. (Fontana & Fernandes, 1994) argued that experimental research studies indicated that, learners who does not reflect their work to find out the gaps that exist between the expected goals and current ability achieve less but those who critically reflect their work achieve more. When teachers offer proper guidance to low achievers on how to use self-assessment strategies they achieve more. (McCurdy & Shapiro, 1992).

When teachers provide feedback on learner's responses and give suggestions on how to correct their work then feedback and instruction become integrated leading to improved performance. The learners are guided on strategies to use to correct their work. They are actively involved in finding the correct answer. (Kulhavy, 1977,). To close the gap between the current ability and what is expected to be known the feedback should provide information that precisely relates to the task (Sadler, 1989). To close the gap feedback should lead to increased effort, high motivation, proper guidance and provision of engaging activities. Other strategies which can be used to close the gap include; provision of alternative approaches to understand new concepts, use of different cognitive processes such as restructuring thinking and indicating information which needs to be added. Teachers should also approve what is wrong and right and show the leaners the direction to follow to correct wrong responses. Winne & Butler (1994) gave a good of summary in their claim that "feedback is information with which a learner can confirm, add to, overwrite, tune, or restructure information in memory, whether that information is domain knowledge, meta-cognitive knowledge, beliefs about self and tasks, or cognitive tactics and strategies".

Formative Feedback has a very powerful impact on students learning when addressed in a learning context. It has no effect in a vacuum. It forms a basic part of the teaching process and it is provided when learners respond to instruction.it provides important information regarding learner's task performance. Feedback becomes useless if the learners did not understand the concept but it has great impact on learning process when it addresses wrong interpretation of concepts but not lack of understanding. If the content is unfamiliar or complex to the learners the feedback will have very little impact on the performance because it will intimidate and discourage them since the learners cannot relate the new information with what is already known. (Kulhavy, 1977).

Behaviorist input-output model disagree that feedback is information about learners' responses or understanding after a learning experience. The behaviorists' argument, Kulhavy (1977) is that feedback is not a reinforcer and has no power to initiate further actions, also can be accepted rejected or modified. They also argue that feedback can be initiated by learners or detected by learners unintentionally.

#### 2.3.1 Descriptive Feedback

To achieve high performance feedback should be evidence based and intertwined with intended learning outcomes and approaches. Evidence based feedback is more powerful leading to great performance. (McManus, 2008). When descriptive feedback is offered by teachers, learners are motivated to continue with the learning process through suggested strategies for improvement. It should not be for comparison with other students but should be related to desired objectives and learners progress. It should notify learners where they are in terms of competency. (McManus, 2008).

Davies (2008) pointed out that feedback should not be judgmental to avoid discouraging learners. Learners are frustrated by judgmental feedback leading to low achievement. Due that negative effect some learners may hate both the subject and the teacher. If descriptive feedback is well designed, it is the most effective feedback to improve performance of learners.

Crooks (1988) asserted that most examiners use grades to assess the abilities of learners but do not use these grades to facilitate learning. They do not use the awarded grades to motivate learners instead learners get frustrated and stressed interfering with learning process. There is no or little justification for the use of grading system because it leads to low performance as proposed by Marzano (2006), and O'Connor (2002) among

others. Crooks argued that for any assessment to be beneficial to both teachers and learners it should provide descriptive feedback to learners to adjust their learning strategies.

Effective feedback promotes mastery of concepts, increases self-efficacy, avoids comparison practices and encourages learners to work hard towards achievement of their goals. To be more operative feedback should provide information which focuses on learners progress. (Black & Wiliam, 1998, Crooks, 1988).

Provision of feedback should be immediate and relevant to learning task and be given after completion of learning experience for both teachers and learners to take necessary action. It is the expectation of the teacher that the learners will register mastery of concepts or improved performance after feedback is provided. (Black & Wiliam, 1998; Crooks, 1988).

The feedback should be directed to a specific learner and linked to the individual needs in a language which can be understood by every learner. The suggested learning activities should be of high standards but achievable and proper guidance be given towards achieving these standards. (Crooks, 1988).

Learners should be frequently given authentic learning activities to assess their learning abilities and monitor their progress. All learning activities should be monitored by the teacher and feedback given to improve academic achievement.

#### 2.4 Literature on Frequency of Formative Assessment

(Black Wilian, 1998) assessment involves all activities done by both teachers and learners to monitor learning and get diagnostic information to adjust teaching and learning. Formative assessment tools include; CATs, quizzes, class exercises, teacher observation, classroom discussion and homework.

Teachers should analyze and interpret results got from formative assessments and information got be used to adjust teaching and learning strategies to meet individual needs of learners. This information helps teacher to monitor learners progress and diagnose problems they are facing hence make instructional adjustments such as engaging learners in more opportunities for practice, offering remedial teaching or using alternative instructional methods. If this diagnostic information is used to

facilitate all these activities good performance is realized. (Sawyer, Graham, & Harris, 1992)

Assessment involve the use of different ways to collect information about learning and teaching. The main focus of formative assessment is monitoring learner response and progress in the learning process. It also provides immediate feedback regarding learning process to the teacher and learners. A successful formative assessment uses quality assessment tools and the diagnostic information got from the assessment is used by both teachers and learners to improve instruction and learning.

Ajogbeje, (2013) argued that, for proper utilization of formative assessment the subject matter should be divided in to small ordered sub topics, specifying objectives of each formative test, offering remedy in areas where learners have trouble and then offering formative assessment after the completion of the whole unit to improve teaching-learning process.

Ojugo, (2013) pointed out that, to enable the learners to adequately prepare for the test, teachers should break up the subject content into small units. Frequent formative tests enable the learners to be actively engaged and fully participate in the teaching-learning process. Active participation in the learning process promotes high academic performance.

Bloom, Hasting, & Madus, (1971) suggested that formative assessment is a useful tool to learners for diagnosing their difficulties and deciding alternative remedial measures and to teachers for locating the difficulties being faced by learners within the subject matter. Ajogbeje, (2013) highlighted the importance of formative assessments to learners. He came up with three purposes namely; to increase retention and transfer of learning, motivating students and suggesting corrective measures through feedback. Several formative assessments help teachers to know group and individual needs requiring remediation.

During the course of instruction, formative assessment provide feedback to teachers and learners giving suggestions for correction leading to high performance but summative assessment takes place at the end of final instruction and decisions about the learner's ability are made using one exam. Marsh (2007) stated that formative

assessment is an approach intended to detect learner's learning difficulties in order to provide remedy to enhance academic achievement of many of learners.

Jung (2012) concluded that teacher formative assessment is a very good predicter of academic achievement in his investigation on the extent to which cognitive entry characteristics and formative assessment measured leaners' academic achievement among university undergraduates. Ajogbeje, (1998) revealed that continuous assessment test scores (i.e. semester results) are more reliable predictors of performance of undergraduates in universities and colleges. Ughamadu, (1990) in his study found out that when teachers expose their analytical students to formative assessment and proper remediation is provided high academic achievement is realized. Also, Oluwatayo, (2007) in his study pointed out that continuous assessment tests (CATs) strongly improves learner's academic achievement in chemistry.

Kathy, (2013) in all his investigations concluded that alternative assessment gives teachers an opportunity to diagnose learners' learning difficulties and decide on corrective measures. It also help learners to know what they can do better, where they have problems and what they cannot do at all then they decide on strategies to use to improve their learning.

#### 2.5 Literature on Assignments

Formative assignments when appropriately designed and administered provide information (feedback) to teachers and learners which can be used to perfect learning process. Assignments help teachers to know areas learners are having difficulties and provide necessary remedy. Learners get to know concepts they did not understand well and take corrective measures. Learners diagnosed to have learning deficiencies are frequently assessed to monitor their progress as this improves learner academic achievement. Formative assignments should be frequently used throughout the year to check learner's strength and weaknesses and effectiveness of teaching methods to enable teachers to adjust instructional strategies to improve learning outcomes. Assignment should help the learner to demonstrate competency in solving problems in real world situation. Homework given to learners should be goal oriented.

The most useful homework assignments should provide interesting and engaging activities to motivate and arouse the curiosity of the learners to perform the activities. (Xu, 2009). Engaging and interesting tasks arouses the curiosity of learners to learn,

motivated learners are more likely to understand concepts well hence high achievement. Motivating and engaging assignments should provide information about the level of concepts understanding and areas of difficulties as per learner and not necessarily their hobbies. Teachers must understand individual differences so that they can design assignments which helps learners to understand the concepts well to achieve their goals (Epstein & Van Voorhis, 2001).

Teachers should use assignments wisely in order to manage time well. Meaningful assignments should not take a lot of time to give, do, collect, mark and provide corrective measures. (Ellsasser, 2007). Learners should be involved in designing homework so that they can reflect why they are assigned such assignments. This makes assignments meaningful. To prepare learners for the next lesson, a teacher can provide a well-designed assignment covering materials for that lesson and that is time well spend. (Ellsasser, 2007). Maybe the assignment could be to collect materials, label them and read through the content to be taught to prepare the learners to undertake a learning activity.

To measure learner's progress and offer required remediation assignments are the most effective. Ajogbeje (2012) concluded that, when assignments with remediation are used to monitor learning progress, it enhances the acquisition and retention of learnt concepts among learners. Teachers use diagnostic assessment to determine entry behavior of learners when a teacher is assigned to teach a new group of learners or as the lesson unfolds to check the level of understanding and help adjust instructional methods.

Assignments should cover materials for many days for them to provide meaningful and right information on level of understanding and effectiveness of teaching strategies. (Cooper, 1989). This give learners an opportunity to demonstrate their level of competency of the taught concepts and help the teacher to think on which remediation process to take to improve understanding. The learners clearly understands the purpose of these types of assignments and become more motivated to do them hence increased performance.

High quality homework assignments are very meaningful to learners because they motivate and engage them to apply learnt skills and knowledge in real life situation. They become problem solvers and people who can construct meaningful knowledge to help the changing society (Epstein & Van Voorhis, 2001). High quality is achieved by

carefully selecting, structuring and determining the number of questions on an assignment. Textbook assignments are mostly used by teachers and this lowers learner's motivation and engagement. (Baines, 2007). Teachers should not give assignments for the sake but they should take time to prepare assignments which are related to learning objectives. If learners see the relationship between assignments and learning objective, they are encouraged to work hard and do the assignments seriously leading to improved performance. Assignments should help learners to work towards achieving learning goals. Using the most current homework practices ensures assignments are meaningful which is purely a professional obligation of the teacher (Epstein & Van Voorhis, 2001).

High achievement calls for homework assignments to be checked for completion, collected, marked, formative feedback given and learners also be given an opportunity through the guidance of the teacher to evaluate their own work. The learners should also be actively involved in correction of their work to facilitate understanding. As Ellsasser (2007) argues that, a lot of time during the lesson should not be spent assigning, collecting and correcting homework. Though, De Jong (2000) revealed that time spent assigning homework to the learners as the lesson unfolds is positively corelated to high academic achievement. He also found that checking completion of assignments only is negatively related to high academic performance.

In a study done by Walberg (1985) concluded that, there is a positive correlation between homework and academic performance if teachers collected, marked, corrected, gave feedback and graded homework. This help teachers to identify where learners are having difficulties and the right remedial measures to be taken. Learners also get to know concepts which they did not grasp well and they take corrective measures through the help of the teacher. It is noted that, when homework is graded or commented on, it motivates learners and can increase academic achievement from the 50<sup>th</sup> percentile to 79th percentile (Walberg, 1985). Learners take assignments seriously and clearly know their purpose when teachers collect, check and provide feedback. (Cooper, 1989). Paschal (2001) also found same results in their study that, when teachers graded and commented on assignments, there is positive correlation between assignments and achievement.

Ughamadu (1990) found that, learners who practiced formative assessments accompanied by remediation registered high academic achievement in secondary schools. This shows that more assignments should be given to learners to assess their ability and provoke their thinking to better their performance.

#### 2.6 Theoretical Framework

The Vygotsky's social constructive theory guided this study. Vygotsky argued that human mind is constructed through interactions with the environment or world. Vygotsky stated that, a child entirely dependents on other people during early stages as they present variety of tasks and engaging the child in his or her sociocultural environment.

Parents initiates the child's action by giving instruction on what to do, how to do it, as well as what not to do. The theory emphasizes that, both adults and children are active agents in the process of child's development hence both the teacher and the learner play active role in the learning process. The teacher- learner interaction should be of high quality to facilitate learning of the learners.

It emphasizes that, the learner should actively construct knowledge and be a problem solver. Vygotsky assumes that, interaction aids the learner to perform new tasks with the help of teacher and then internalize the concept and perform it on their own. The right interactions which successfully mediate learning are those which help learner to scaffold new tasks.

Vygotsky introduced zone of proximal development where the teacher and the learner work together to perform a task which the learner could not perform alone because of difficulty level (collective activity). The more knowledgeable and skilled (teacher) share that knowledge and skills with those who know less (students).

Vygotsky theory brings in the idea of reciprocal teaching where the teacher designs the learning activities then both the teacher and learners assume the responsibility of a teacher in turns. Also, peers work together to complete a task and construct new knowledge.

#### 2.7 Conceptual Framework

A conceptual framework is used by a researcher to conceptualize the relationship between variables in the study by use of diagram. It is a model presentation where a researcher represents the relationship diagrammatically (Young, 2009). The influences of formative assessment on learner achievements are diagrammatically illustrated in figure below.

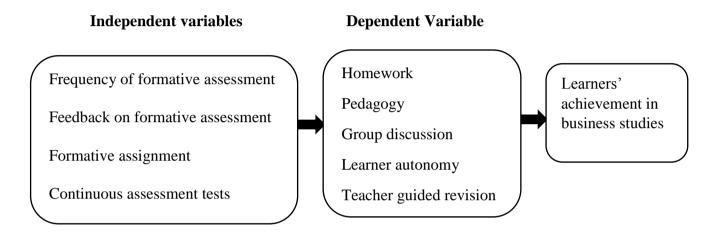


Figure 2.1: Conceptual Framework

# CHAPTER THREE METHODOLOGY

#### 3.1 Research Design

This study will use mixed design that is descriptive research design and experimental design. A descriptive survey design is preferred because large samples are feasible and data is collected by use of questionnaires or conducting interviews to a representative sample. The results can be used to analyze multiple variables. To collect information from a common group. This design was preferred because very large samples are feasible, making the results statistically significant even when analyzing multiple variables. When all objects are presented to a standardized stimulus high reliability is achieved and observer subjectivity is significantly reduced (Mugenda and Mugenda, 2003). Surveys are important in description of a large population.

Experimental design involves use of pretest and posttest technique whereby the sample group is split in to two groups that is experimental group and control group. Pretest is done to the two groups to know the entry behavior of the learners. Intervention is done to experimental group and posttest is conducted to both groups and results analyzed to note any variation.

RESEARCH OBJECTIVES	RESEARCH	INFORMATION TO
	INSTRUMENT	BE COLLECTED
Influence of assignments on	Questionnaire	Impact of assignments
learners' achievement	Pretest posttest	on academic
		achievement
influence of formative	Questionnaire	Effects of formative
feedback on learners'	Pretest posttest	feedback on learner's
achievement		achievement
influence of continuous	Pretest posttest	Impact of continuous
assessment tests on learners'		assessment on
achievement		learner's achievement.
influence of frequency of	Questionnaire	Impact of frequency of
formative assessment on	Pretest posttest	formative assessment
learners' achievement		on learner's
		achievement.

#### 3.2 Target Population

To make conclusion to generalize the results of the study the researcher uses a certain number of participants or subjects (population) called target population (Mugenda & Mugenda, 2003). According to the Mumoni sub county Education Office (2018) there are 20 public secondary schools with a population of 97 teachers and 3205 students. The study targeted form three students doing Business studies and their teachers. The total number of form three students doing Business studies were 320 and teachers teaching Business studies were 20 so the target population became 320 learners and 20 teachers making a total of 340 participants.

#### 3.3 Sample and Sampling Procedures

Mugenda and Mugenda (2003) concluded that, 30 percent of the target population is enough for descriptive studies. To select sample group the researcher will use stratified random sampling technique which gives every participant equal chance to be selected to form the sample group. It is on the basis of the above discussion that the researcher will select 30% of the 320 business studies students.

A total of 96 respondents will be randomly selected from 6 secondary schools within mumoni sub County. Schools will be selected using stratified and systematic sampling technique to get a representative sample of 6 schools comprising of 3 public boarding secondary schools and 3 public day secondary schools.

Half of the respondents that are 48 students, 24 boys and 24 girls will be sampled from public boarding secondary schools and other half that is 48 students 24 boys and 24 girls will be selected from public day secondary schools.

#### 3.4 Research Instruments

This study will use pretest and posttest (continuous assessment tests) and questionnaire to collect primary data. The questionnaire will help to get information on whether assignments, CATs, feedback on formative assessment and frequency of formative assessment improves student achievements

To collect information from the Business studies teachers and students, questionnaires will be used. Tests will be administered to students. Pretest and posttest technique will be used to administer tests to students.

The responses collected by use of questionnaire are more objective compared to other tools of data collection because responses are collected in a consistent way. This makes questionnaire more reliable compared to other tools of data collection. The researcher will use a well-designed questionnaire comprising of open and closed ended questions.

#### 3.5 Validity of Instrument

The degree to which a test measures what is supposed to measure correctly is referred to as validity (Kothari, 2008). The instrument should measure the concept accurately. The questionnaire content should measure what is supposed to measure accurately. The researcher will try out the research instruments to establish its ability collect all the information expected to get feedback which will lead to improvement of the instrument. He will also consult with supervisors who are experts.

#### 3.6 Reliability

It is the ability of a test to produce consistent results all the time Joppe (2000). The results of empirical measure should be the same always. If a research tool reproduces the same results under the same methodology consistently is said to be reliable. To be reliable, the instrument should produce expected results consistently when used several times to collect information from two or more sample selected from the same population. To evaluate whether the research instrument is effective, pretesting will be done on a small sample of the targeted population.

#### 3.7 Data Collection Procedures

To get permit to do research, the researcher will apply for research permit from the National Commission for Science, Technology and Innovation. After being cleared and research permit given, the researcher will start by going to the selected schools and request the principals to invite the teachers for introduction and a briefing on the confidentiality of the data to be filled in the questionnaire. To administer the questionnaires effectively, they will be dropped to respective schools to be filled and be picked later after a week (Drop and pick later method).

#### 3.8 Data Analysis Techniques

Kothari (2004) pointed out that, descriptive survey research findings are reported by use of graphs, charts, frequency distribution tables, percentages and then tabulating

them accordingly. The researcher will code, tabulate, record and compute them appropriately using the Statistical Package for Social Science (SPSS). To get dependable conclusions accurate analysis must be done by use of SPSS because it is fast and flexible and it also provide more accurate analysis of results.

#### 3.9 Ethical Considerations

All information given by respondents will be held confidential and no person will be forced to give information. Right language which can be understood by respondents will be used during the research.

#### **CHAPTER FOUR**

#### DATA ANALYSIS AND INTERPRETANTION OF FINDINGS.

#### 4.1 Introduction

Chapter four concerns interpretation and presentation of findings. The purpose of the study was to determine the influence of formative assessment on learner's achievement in public secondary schools in Mumoni sub county Kitui county Kenya. Presentation of the finding were done inform of tables, figures and bar graphs.

## 4.2 Response Rate.

Table 1: Response rate.

RESPONSE	FREQUENCY	PERCENTAGE
		(%)
Filled questionnaires	102	87.9
Unfilled/unreturned	14(only students)	12.1
questionnaires		
Total	116	100

Source: Field data.

The targeted sample was 116 respondents from different public secondary schools in Mumoni Sub County. One hundred and sixteen (116) questionnaires were distributed to respondents of respective secondary schools. The researcher collected 102 questionnaires which were filled and returned. Fourteen (14) questionnaires were either not filled or not returned. This was 87.9% response rate which was enough for data analysis as Mugenda and Mugenda (2003) stated that, for data analysis and generalization to be done a minimum of 50% response rate must be achieved. He also argued that if the researcher achieves 60% is good and 70% is excellent. Only 14 questionnaires were not returned or not filled (12.1%) by students. All teachers returned their questionnaires.

The researcher worked together with research assistants during the data collection process from the six sampled schools. He (researcher) was constantly communicating with assistants through phone calls and meetings to guide on how questionnaires should be filled and to collect filled questionnaires.

## 4.2.1 Demographic characteristics of respondents.

**Table 2: Designation of Respondents** 

DESIGNATION	FREQUENCY	PERCENTAGE
Principals	5	4.3
Deputy principals	4	3.4
Senior teachers	2	1.7
Subject teachers	9	7.8
Students.	96	82.8
Total.	116	100

The majority of the respondents were students 82.8%, principals were 4.3% and subject teachers were 9.5%. this implies that, the respondents were able to give credible information on influence of formative assessment on learner's achievement in Business studies because the respondents composed of administrators, subject teachers and students doing Business studies.

## 4.2.2 Educational Qualification.

The researcher requested the respondents i.e. Teachers to indicate their academic qualification because it correlates with the capability of teachers to carryout authentic formative assessment.

**Educational Qualification of teachers** 

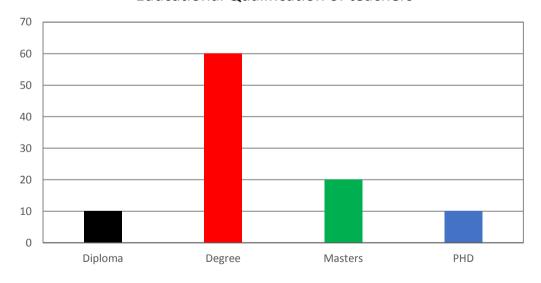


Figure 1: Educational Qualification of Teachers

The above figure indicates that, most teachers were degree holders 60%, diploma10%, masters 20% and PHD 10%. This indicates that, most teachers are able to teach form three students well and administer formative assessment successfully.

## 4.2.3 Duration of working.

The study requested respondents to indicate their working experience based on the number of years they worked. Working experience is important because it forms basis to which the researcher can rely on the response provided by the Business studies teachers.

**Table: 4 Duration of working** 

YEARS	FREQUENCY	PERCENTAGE
1-5	1	5
6-10	2	10
11-15	7	35
16 and above	10	50
Total	20	100

The study findings from the table above shows that half of teachers had worked for over 16 years (50%), 11-15 years 35%, 6-10 years 10% and 1-5 years 5%. This implies that, the respondents have taught Business studies for a long time in different capacities as subject teachers, head of departments, senior teachers, deputy principals and principals hence they can give valid information concerning learner's achievement in Business studies. It also indicates that they know different strategies of administering formative assessment practices and its consequence in classroom setting.

## 4.3 Influence of Assignment on Learner's Achievement

To determine the extent to which assignments influence achievement of learners in Business studies, the respondents were required to tick Yes or No on various statements on influence of assignment on learner's achievement in Business studies.

Table 5 illustrates the findings.

**Table 5: Students** 

STATEMENT	FREQUENCY	PERCENTAGE
Do you do assignments daily	70	85.4
Are the assignments marked daily	80	97.6
Does class exercises enhance retention of	72	87.8
learnt concepts?		
Do you want teachers to continue giving you	68	82.9
assignments		
Do you do class exercises daily	62	75.6

The study findings show that, Business studies teachers give their learners assignments daily. Majority of the learners have agreed that teachers mark assignments daily and they wish that teacher should continue providing assignments to them to enhance retention of learnt concepts. Class exercises as form of assignments are offered to Business studies student regularly promoting their understanding and monitoring their progress on daily basis.

**Table 6: Teachers** 

STATEMENT	FREQUENCY	PERCENTAGE
Do you give assignments to students daily	18	90
Does diagnostic assignments with remediation	20	100
facilitate acquisition and retention of concepts		
to learners		
Do you employ formative assessment	14	70
approach in teaching Business studies		
Assignments tests as a formative approach is	16	80
used to measure learners progress in Business		
studies academic achievement.		

The study findings show that, majority of the respondents agreed that assignments as a form of formative assessment is practiced in Business studies classrooms.it also implies that assignments improve learner's achievement in Business studies. Most teachers (100%) agreed that, assignment with remediation helps students to practice and retain

learnt concepts. Assignments gives learners an opportunity to learn concepts in real life situation leading to construction of knowledge. It also implies that teachers should provide plenty of assignments and give prompt feedback to enable learners to identify gaps, correct themselves and encourage peer teaching. The study findings show that formative assessment motivates students to learn Business studies. Frequent assignments improve learner's achievement.

## 4.4 Influence of CATs on learner's achievement.

To determine the influence of CATs on learner's achievement in Business studies, respondents were requested to tick Yes or No on various statements on the influence of CAT on learner's achievement in Business studies. Findings are illustrated in table 7. Table 7: illustrates findings from teachers and students.

Table 7: Teachers.

STATEMENT	FREQUENCY	PERCENTAGE
Do continuous assessment tests provide	20	100
evidence concerning learner's		
achievement in Business studies.		
When formative continuous assessment	18	90
tests are well interpreted help the		
teachers to take measures for further		
improvement.		
Formative continuous assessment tests	19	95
can enhance teaching and learning by		
providing a more focused application		
knowledge and skills.		

From the study it is evidenced that continuous assessment tests (CATs) is a critical tool for promoting improvement of learner's achievement. The study findings imply that CAT enhance teaching and learning by promoting practice of the learnt concepts. It enables the learners to demonstrate competency in applying knowledge and skills in solving real world problems facing the society today.

The study further shows that, when CAT results are well interpreted can be used to plan for measures to take to improve learner's achievement, 90% of teachers agreed. 100%

of teachers agreed that, CATs provide evidence concerning learner's achievement in Business studies. 95% of teachers agreed that, CATs enhance teaching and learning by providing a more focused application of knowledge and skills.

**Table 8: Students** 

STATEMENT	FREQUENCY	PERCENTAGE
We do CATs at the end of every unit.	65	79.3
CATs are very helpful because learners	76	92.7
are able to monitor their academic		
progress.		
Doing many CATs help learners to	80	97.6
practice learnt concepts hence high		
retention rate.		

Majority of Learners 79.3% agreed that, they do CAT at the end of every unit, 92.7% agreed that CATs help them monitor their academic progress and 97.6% agreed that, doing many CATs help them to apply learnt concepts in construction of knowledge in real life situation hence high retention rate.

Further the study indicates that to improve learner's achievement in Business studies, teachers should frequently give CATs in different contexts to help learners understand concepts and revise appropriately.

## 4.5 Frequency of Formative Assessment and Learner's Achievement

To determine the extent to which frequency of formative assessment influence achievement of learners in Business studies, the respondents were kindly requested to tick Yes or No on the various statements on influence of frequency of formative assessment on learner achievement in Business studies.

**Table 9: Finding of the study.** 

STATEMENT	FREQUENCY	PERCENTAGE
Do you employ formative assessment	20	100
approach in teaching Business studies?		
Through formative assessment approach have	19	95
you realized learner's improvement in		
academic achievement in Business studies.		
Does frequency of formative assessment	18	90
demonstrate improved academic achievement		
in Business studies.		
Does the frequency of formative assessment	19	95
provide learners with an opportunity to		
monitor their progress and take corrective		
measures?		

The study findings show that, almost all the respondents (teachers) 95% agreed that, frequency of formative assessment demonstrate improved academic achievement in Business studies. 100% of the agreed that they employ formative assessment approach in teaching Business studies,95% of the respondents agreed that frequency of formative assessment provide students with opportunities to monitor their progress and take corrective measures to improve their understanding.

This depicts that frequency of formative assessment enables teachers to know individual needs among students and provide remedy. It also helps teachers to vary teaching strategies to meet student's needs.

Many formative assessments enable learners to know what they know and to what level and their deficiencies and then improve on their weaknesses through peer teaching, teacher's guidance and self-regulation. Learners are fully engaged with authentic activities during the learning process hence they develop skills that enable them to learn better to reach high standards. In classes where teachers frequently offer formative assessment, learners register better scores in Business studies.

## 4.6 Formative feedback and learner's achievement.

To determine the influence of formative feedback on learner's achievement in Business studies, the respondents were kindly requested to tick Yes or No on various statements on influence of formative feedback on learner's achievement in Business studies.

Table 10 Illustrates the study findings.

Table 10: Learners.

STATEMENT	FREQUENCY	PERCENTAGE
Are you given feedback after assignments?	78	95.1
Do you want teachers to con continue giving	76	92.7
you assignments and immediate feedback?		

The study findings established that majority 95% of learners agreed that teachers provide feedback after marking assignments, 92.7% agreed that, they want teachers to continue giving them assignments and provide immediate formative feedback.

Feedback help learners to know what they can do well and areas they need to put more effort. Suggestion provided by feedback help learners to revise wisely leading to improved performance.

Table 11: Teachers.

STATEMENT	FREQUENCY	PERCENTAGE
Does immediate feedback on formative assessment motivate learners.	19	95
Quick feedback on formative assessment inform learners about their progress.	18	90
Effective feedback should be timely, specific and inclusive of suggestion to improve future academic performance.	16	80

Majority of teachers 95% agreed that, immediate feedback on formative assessment motivate learners, 90% of teachers concurred that quick feedback on formative assessment is very important because it is informative. It informs the learners about their progress. Also 80% indicated that, effective feedback should be descriptive, timely and specific. It should provide suggestions or advise on strategies to use to promote mastery of concepts to improve future academic performance.

This implies that formative feedback is important because it motivates learners. The teacher positively points out the weak areas and gives suggestions for further improvement. It should also be timely and specific indicating strengths and areas of improvement. Effective feedback should be formative.

Feedback should be informative to students; it should inform them how well they are progressing and indicate areas of improvement. If feedback is effectively used by teachers it leads to higher achievement in Business studies.

#### 4.7 learner performance in Business studies continuous assessment tests.

Table 9A and 9B shows performance of learners in business studies CATs. Table 9A shows the performance of experimental group while table 9B shows performance of control group. The learners did two CATs. The first CAT was conducted to determine the entry behavior of the students. The other CAT was conducted after the students were exposed to frequent assignments, authentic tasks and formative feedback to determine the extent to which assignments, authentic tasks, frequent formative assessment and formative feedback influence learner's achievement in Business studies.

Table 10A: EXPERIMENTAL GROUP

CAT	MEAN
PRETEST	44.54
POSTTEST	58.35

The study findings imply that, the mean score of experimental group increased after the learners were exposed to assignment, formative feedback and authentic tasks. The mean increased from 44.54 (CAT 1) to 58.35 (CAT 2) a positive index of 13.81 marks.

**TABLE 10B: CONTROL GROUP** 

CAT	MEAN
PRETEST	46.06
POSTTEST	47.85

The mean of control group increased from 46.06 (CAT 1) to 47.85 (CAT 3) a positive index of 1.31 marks which is lower compared to experimental group.

Table 11: comparison between experimental group and control group.

EXPIREMENT	CAT1	CONTROL	CAT1
GROUP	VS	GROUP	VS
	CAT2		CAT2
Improved	46	Improved	30
No improvement	0	No	2
		Improvement	
Dropped.	2	Dropped	16
Total	48		48

Ninety-six (96) students participated in doing the CATs. Forty-eight (48) learners were involved in experimental group while 48 learners were involved in control group. The study finding shows that out of 48 learners in the experimental group when CAT1 is compared with CAT2, 46 learners (95.83%) improved with many marks compared to control group but 2 learners (4.17%) dropped with few marks.

The study findings also show that out of 48 students who participated in control group when CAT1 is compared to CAT2, 30 learners (65.23%) improved but with very low marks, 2 learners (4.17%) did not improve while 16 learners (33.33%) dropped.

When performance of the two groups (experimental group and control group) are compared, the experimental group performed better than control group. The posttest means are 58.35 and 47.85 respectively. A difference of 10.5 marks. Many students improved in experimental group compared to control group. Also, more learners dropped in the control group compared to experimental group. Still more learners in experimental group registered high improvement while few learners in the control group slightly improved.

The study findings imply that, when assignments, CATs and feedback are administered well during and after instructions students achieve more. When formative assessment strategies are frequently practiced in classroom, the learner's achievement steadily improve.

The findings show that, when formative assessment strategies were administered to the students their performance improved steadily with the highest scorers getting 88, 86,84 respectively. Teachers should always administer formative assessment tools to improve learner's achievement in Business studies.

#### **CHAPTER FIVE**

## SUMMARY, CONCLUSIONS AND RECOMMENDATION

#### 5.1 Introduction

Chapter five comprises the summery of the data findings on influence of formative assessment on learner's achievement in Business studies in public secondary schools in Mumoni sub county, Kitui County, Kenya. The sub topics are structured in to three levels; summery of findings, conclusions and recommendations.

## **5.2 Summary of Findings**

It is evident from the study findings that, assignment as a form of formative assessment is practiced in Business studies classrooms. It is also evident that, assignment improves learner's achievement in the subject. Assignments with remediation help leaners to practice and retain learnt concepts. Assignments give learners equal opportunity to learn and practice concepts in real world situations leading to construction of knowledge. When learners do assignments in groups it encourages peer teaching and also learners are given an opportunity to learn from each other as they accomplish the task.

Teachers should provide plenty of assignments and give prompt feedback to enable learners to identify gaps, correct themselves and provoke learners to do research to solve tough questions in Business studies. Formative assessment through assignments motivate students to learn Business studies hence improved achievement.

Assignments integrates teaching, learning and assessment. As leaners solve Business studies questions, they are learning and as the teacher guides and clarifies concepts he or she is teaching. When learners offer solution to questions they are being assessed. It is also evident that, frequent assignments improve learner's achievement because they are actively involved in accomplishing the task.

It is concluded from the study finding that, continuous assessment test is a critical tool for improving learner's achievement. It is evidenced that, CATs enhance teaching and learning by providing a more focused application of knowledge and skills in real world situations. The study further shows that when CAT results are well interpreted can be used to plan for measures to improve learner's achievement. CATs can be used to monitor learner's progress and provide evidence concerning learner's achievement in Business studies.

From the study it is evidenced that, when learners do CAT at the end of every unit, they are able to monitor their progress. They are able to identify their strengths and weak nesses in order to find ways of improving their weak areas. As learners do many CATs, they get an opportunity to apply learnt concepts in construction of knowledge in real world situation hence high retention rate.

The study also indicates that, to improve learner's achievement in Business studies teachers should frequently give CATs in different contexts to help learners understand concepts and revise appropriately. When learners are exposed to assignments, formative feedback and authentic tasks the mean of Business studies increase steadily. Continuous assessment tests are given to students at the end of a topic in order for learners to demonstrate how much they have learned and teachers to know areas which needs remediation and also check the effectiveness of the teaching strategies. CATs are fundamental during the learning process because they greatly help learners to improve their learning.

From the study findings it was also found that, when assignments, CATs and feedback are well administered during and after instruction, students achieve more. When formative assessment strategies are frequently practiced in classroom, the learner's achievement steadily improves because the results help teachers to vary instructional strategies to address learner's individual differences.

The study concludes that, providing many formative assessments demonstrate improved academic achievement. Many formative assessments provide learners with an opportunity to monitor their progress and take corrective measures. It helps them to revise and improve their thinking leading to understanding of concepts. It helps learners to master concepts in order to apply them in real world situation. The study also concludes that, providing many formative assessments enables the teachers to know individual differences among the learners and provide timely remedy. It also helps teachers to vary teaching strategies to meet learners needs.

The study established that, formative assessment enables the learners to discover what they can do better and at what level and what they are not able to do and also to improve their weaknesses through peer teaching, teacher's guidance and self-regulation. It also established that, learners are engaged with authentic learning activities during learning process hence they develop skills that enable them to learn better to reach high standards

in terms of academic achievement. In classes where teachers frequently offer formative assessment, learners register better scores in Business studies.

From the study it is evidenced that, teachers provide feedback to learners after marking the assignments and learners want teachers to continue providing assignments and immediate feedback. Immediate formative feedback on formative assessment motivate learners because it informs them about their progress.

The study concluded that, Effective feedback should be timely, specific and inclusive of suggestion to improve future academic performance. The teacher positively points out the weak areas and gives suggestions for further improvement. Feedback should be informative to learners; it should inform learners how well they are progressing and indicate areas of improvement. It was also established from the study that, if feedback is effectively used by teachers it leads to higher performance in Business studies.

#### **5.3 Conclusion of the Findings**

The study concludes that formative assessment tools as ways of measuring learner's progress in Business studies form integral part in teaching learning process. When learners are given plenty of formative assessment, they demonstrate improvement in academic achievement in Business studies. Formative assessment in Business studies classrooms positively correlates with learner's achievement in Business studies.

It is concluded that assignment with remediation help learners to practice learnt concepts and increase retention. Formative assessment gives learners equal opportunity to learn and practice concepts in real world situation leading to application of skills and knowledge solving real world problems hence construction of knowledge.

The study concludes that teachers should provide plenty of assignments and give prompt formative feedback to enable learners to identify gaps and correct themselves through their own research, teacher's guidance or peer teaching. It also concludes that; continuous assessment test is a vital tool for improving learner's achievement because it enhances teaching and learning by providing a more focused application of knowledge and skills in real world situation.

If CAT results are well interpreted can be used by teachers to plan for measures to be taken to improve learner's achievement. The results will prompt the teacher to offer

remedial lessons, giving more authentic tasks, forming discussion groups to promote peer teaching and changing teaching strategies.

The study also concluded that, when continuous assessment tests are frequently offered to learners after completion of every unit, it helps learners to demonstrate skills and knowledge learnt in solving real world problems hence teachers can evaluate the effectiveness of instructional strategies and know whether the learners have understood the concepts or not. Teachers can also know areas which needs remediation.

It is also concluded that, when CATs, assignments and formative feedback are correctly administered to learners, their academic performance in Business studies improve steadily. The study concluded that, plenty of formative assessments provide learners with an opportunity to practice learnt skills and knowledge leading to mastery of concepts. This enables learners to apply learnt skills and knowledge in real world situations enabling them to construct new knowledge.

The study findings conclude that, prompt formative feedback motivates learners because they can monitor their progress. It also enables them to identify concepts they have not understood well and plan for measures to take in order to improve their weak areas. It is also concluded that, effective formative feedback should be provided at the right time, be specific and should also provide suggestions for future improvement.

The study concludes that, many formative assessments provide learners with diverse opportunities to practice and revise learnt concepts hence improved achievement. Many formative assessments are beneficial to teachers and learners because they monitor progress and effectiveness of teaching strategies. It also helps teachers to identify individual differences between the learners and offer required assistance.

It is also concluded that, formative assessment tools when well administered learners discover their weaknesses and improve through peer teaching, own learning or teacher guidance. Feedback should be informative to learners. It should inform them how well they are progressing and indicate areas of improvement.

## **5.4 Recommendations of the Study**

The study recommended the following based on the finding that, teachers should vary their teaching strategies and also give authentic tasks to meet learners' differences. They should provide well designed engaging activities which integrates teaching, learning and assessment. The engaging activities promote learning because learners become active participants in the learning process. When learners become active participants in the learning process, they understand the concepts easily hence being able to apply them in solving real world problems facing the society.

Teachers should offer timely feedback with suggestions for further improvement to help learners identify their abilities and deficiencies to take required remedy and also check on their progress. Feedback should impact positively to the learning of students. It should highlight what the learners have done well, what needs improvement and suggest ways for improvement. Feedback—should be able to motivate and provoke students to learn.

Assignments and continuous assessment tests should consist of authentic tasks which gives learners an opportunity to practice learnt concepts. Assignments and CATs should provide learners with an engaging opportunity to apply learnt skills and knowledge in solving real life problems faced in the society in order to construct new knowledge.

Assignments and CATs should be offered in a friendly environment to enhance motivation of learners to study Business studies. Business studies teachers should offer variety of formative assessment techniques to motivate learners and enhance learning process by providing a more focused application for learners. Teachers should provide a well-designed assignments and CATs with carefully planned authentic tasks to motivate learners to learn Business studies.

To be effective all formative assessment tools should be informative. They should help the teacher to monitor learner's progress and point out areas which students did not grasp the concept well. They should identify student's individual differences for the teachers to vary instructional strategies to meet learner's differences.

Offering many formative assessments gives students an opportunity to practice learnt concepts leading to mastery of the concepts hence improved academic achievement. As students perform authentic tasks in solving problems in real world situation, they construct new knowledge.

#### 5.5 Recommendation for Further Study

The study investigated the influence of formative assessment on learner achievement in Business studies in public secondary schools in Mumoni sub county, Kitui County,

Kenya. The study suggests that further study to be conducted to investigate how home-based factors influence learner achievement in Business studies in public secondary schools focusing other counties. Further home-based factors be compared with formative assessment in order to have a wide perspective of factors influencing academic achievement in Business studies. Further research can also be done with large sample and on various subjects to a make a conclusive conclusion on formative assessment and academic achievement.

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## **APPENDICES**

## Appendix I: Questionnaire for the Business Studies Teachers

Please tick the appropriate box or write your answer for the questions below on the spaces provided.

PART ONE: General Information				
1. Name (optional)				
2. Name of your school (optional)				
3. Designation: Teacher [ ] Deputy Principal [ ] Principal [ ]				
4. Education qualifications? Diploma [] Degree [] Masters []				
5. Length of service? 1 to 5 years [] 6 to 10year [] 11 to 15 [] 16 years and above []				
6. Indicate the classes that you teach Business Studies?				
7. Do you employ formative assessment approach in teaching Business Studies?				
Yes [ ] No [ ]				
8. Through formative assessment approach have you realized learners' improvement				
in academic achievement in Business Studies? Yes [] No []				
9. Do you give assignments to students daily? Yes ( ) No ( ).				
10. Does diagnostic assignments with remediation enhance the acquisition and				
retention of learning tasks among students? Yes ( ) No ( ).				
11.Does the frequency of formative assessment demonstrate improved academic				
achievement in Business Studies? Yes ( ) No ( ).				
12.Does the frequency of formative Assessments provide students with opportunities				
to revise and improve their thinking, and help students monitor their own progress				
over time? Yes ( ) No ( ).				
13.Do Continuous assessment tests provide evidence concerning students'				
achievements in Business Studies? Yes ( ) No ( ).				

14.Does Formative assessment help to get the best possible evidence about what students have learned and then using this information to decide what to do next?					
Yes ( ) No ( ).					
15.Does immediate feedback on formative assessment motivate learners?					
Yes ( ) No ( ).					
16. Quick feedback on formative assessment inform students how well they are progressing? Yes() No().					
17.Feedback needs to be timely and specific and should include suggestions for ways to improve future academic achievement? Yes ( ) No ( ).					
18. Formative continuous assessment tests, when interpreted helps the assessors to take measures for further improvements? Yes ( ) No ( ).					
19.Formative continuous assessment tests can enhance teaching and learning by providing a more focused application of knowledge and skills? Yes ( ) No ( ).					
20. Assignments test as a formative assessment approach is used to measure student's progress in Business Studies academic achievement? Yes ( ) No ( ).					

Thank you for your cooperation & participation

## APPENDIX 11: QUESTIONARE FOR LEARNERS.

## **Questionnaire for the Business Studies students**

Please tick the appropriate box or write your answer for the questions below on the spaces provided.

PART ONE: General Information
1. Name (optional)
2. Name of your school (optional)
3.Your class/form.
PART TWO
1.Do you do assignments daily? Yes ( ) No ( ).
2.Are the assignment marked daily? Yes ( ) No ( ).
3.Do you do CATs at the end of every unit? Yes ( ) No ( ).
4.Are you given feedback after doing CATs? Yes ( ) No ( ).
5.Does class exercises enhance retention of learnt concepts? Yes ( ) No ( ).
6.Do CATs help you to monitor your academic progress? Yes ( ) No ( ).
7.Does classroom assessments motivate you to learn? Yes ( ) No ( ).
Reason
8.Is doing many CATs helpful to you? Yes ( ) No ( ).
Reason
9.Do you want teachers to continue giving you assignments and immediate feedback?
Yes () No ().
Reason.
10. Do you do class exercises regularly? Yes () No ().

# APPEDIX 111: Performance of learners in three CATs. EXPIREMENTAL GROUP

CODE	CAT1	CAT2	IMPROVEMENT
			CAT2
001	40	50	10
002	19	48	29
003	49	68	18
004	30	51	21
005	17	40	23
006	38	34	-4
007	42	44	2
008	8	23	15
009	52	72	20
010	64	86	22
011	12	42	30
012	39	48	9
013	60	72	12
014	49	57	8
015	59	80	21
016	9	24	15
017	56	54	-2
018	44	52	8
019	72	84	12

020	7	26	19
021	66	79	13
022	38	61	23
023	27	43	16
024	57	78	21
025	65	88	23
026	42	47	5
027	30	49	19
028	18	22	4
029	59	79	20
030	6	29	23
031	60	76	16
032	68	81	13
033	40	48	8
034	48	62	14
035	62	74	12
036	74	80	6
037	21	47	26
038	47	63	16
039	63	83	20
040	72	79	7
041	61	68	7

MEAN	44.54	58.35	
G/TOTAL	2138	2801	
048	54	58	6
047	24	37	13
046	71	74	3
045	64	76	12
044	45	52	7
043	32	46	14
042	58	67	9

## CONTROL GROUP PERFORMANCE

CODE	CAT1	CAT2	DEVIATION
1	18	20	2
2	29	30	1
3	42	41	-1
4	42	48	6
5	7	16	9
6	44	44	0
7	62	68	6
8	68	74	6
9	70	68	-2
10	51	60	9
11	44	38	-6
12	46	48	2
13	54	50	-4
14	38	40	2
15	46	48	2
16	70	68	-2
17	64	78	14
18	24	20	-4
19	62	58	-4
20	48	40	-8
21	18	24	6
22	42	38	-4
23	56	60	4
24	38	45	7
25	64	66	2
26	52	64	12
27	40	42	2
28	72	78	6
29	69	62	-7
30	28	29	1
31	50	46	-4
32	33	28	-5
33	54	60	6
34	62	60	-2
35	12	24	12
36	32	34	2

37	48	48	0
38	56	54	-2
39	66	60	-6
40	39	44	5
41	44	48	4
42	26	32	6
43	17	20	3
44	52	46	-6
45	37	43	6
46	55	60	5
47	72	76	4
48	48	49	1
GRAND TOTAL	2211	2297	
MEAN	46.0625	47.8542	

## **CAT ONE**

- **QN 1**. Explain **three** factors to consider when determining the goods and services to produce (**6mks**).
- QN 2. Explain two advantages of delocalization on firms (4mks)
- **QN 3**. Discuss **two** implications of production activities on the environment and community health **(4mks)**
- QN 4. Explain four factors that determine the size of a firm (8mks).
- QN 5. Explain four factors that determine the location of a firm (8mks)

## **CAT ONE MARKING SCHEME**

# QN 1. Factors to consider when determining the goods and services to produce.

- Profitability
- Level of competition
- Availability of resources
- Government policy
- Demand/market
- Cost of production

#### 3\*2=6mks

## QN2. Advantages of delocalization.

- Provides employment opportunities to people living in rural areas.
- Reduces rural-urban migration.
- Encourages balanced regional development.
- Provides a market for locally produced raw materials.
- Local communities are able to get the produced goods without necessarily travelling very far.

#### 2\*2=4mks

# QN 3. Implication of production activities on the environment and community health.

- Air pollution.
- Water pollution.
- Noise pollution.
- Destruction of the environment.
- Solid waste pollution.

## 2\*2=4mks

## QN 4. Factors that determine the size of a firm.

- The number of employees.
- Volume of output.
- Floor area covered by the premises.
- Capital invested.
- Production methods.
- Market served.
- Sales volume.

## 4\*2=8mks

## QN 5. Factors determining the location of a firm.

- Availability of raw materials.
- Availability of market.
- Availability of labour or human resource.
- Appropriate transport and communication network.
- Adequate power and water supply.
- Government policies.

## 4\*2=8mks

## **CAT TWO**

- QN 1. (a)Define the term localization 2mks.
  - (b) Explain five factors that encourage localization of firms. 10mks.
- QN 2. Despite the economies of scale, small firms have continued to exist.

  Highlight four reasons which explain the survival of the small firms. 8mks.
- **QN 3**. Explain the **factors** which influence the decision of a firm on what goods and services to produce. **10mks.**
- QN 4. Discuss four ways through which we can maintain a healthy environment. 8mks.
- QN 5. Highlight the difference between excess demand and excess supply. 2mks.

## CAT TWO.

## Marking Scheme.

**QN 1 (a) localization** of firms means the concentration of similar firms in one particular area or region.

## (b) Factors that encourage localization of firms.

- a well-developed infrastructure in an area which attracts firms in to that area.
- availability of large population which may provide both labour and market for its products.
- Need for interdependence among various firms.
- Government policy requiring firms to be located in a certain area.
- Availability of raw materials in a certain area.
- Availability of support industries such as banks.

#### 5\*2=10mks

## QN 2. Reasons for survival of small firms.

- -size of the market.
- -Nature of the product.
- Simplicity of organization.
- Flexibility of small firms.
- Quick decision making.
- Belief that a small firm is more manageable.
- Legal constraints.

#### 4\*2=8mks.

## QN 3. Factors that determine the type of goods to be produced by a firm.

Profitability

- Level of competition
- Availability of resources
- Government policy
- Demand/market
- Cost of production

5\*2=10mks.

## QN4. Ways of maintaining a healthy environment.

- Air pollution.
- Water pollution.
- Noise pollution.
- Destruction of the environment.
- Solid waste pollution.

4\*2=8mks.

## QN 5. Factors that influence supply of goods.

- Price of the commodity
- Cost of production
- Availability of factors of production
- Prices of other related products
- State of technology
- Government policy
- Future expectation of changes in prices
- Natural factors
- Time

5\*2=10mks.

## QN6. Difference between excess demand and excess supply.

Excess demand is situation whereby customers want more goods than supplied whereas excess supply is when goods supplied are more than quantity demanded by customers.

1\*2=2mks.