THE EFFECT OF INSTRUCTIONAL MATERIALS ON PUPIL'S ACHIEVEMENT IN MATHEMATICAL ACTIVITIES IN LOWER PRIMARY IN LUNYO SUB-COUNTY, BUSIA DISTRICT, UGANDA

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A RESEARCH PROPOSAL PRESENTED TO THE DEPARTMENT OF EDUCATION IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A BACHELOR OF EDUCATION PRIMARY DEGREE OF BUSITEMA UNIVERSITY

OCTBER, 2024

DECLARATION

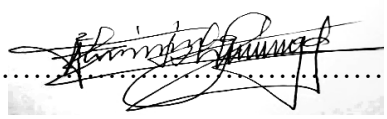
I, Bwire David Odongo, hereby declare to the best of my knowledge that, this report has never been submitted to any other institution of higher learning for any award save for where foreign knowledge used has been clearly acknowledged as indicated.

Sign:  Date: …12/10/2024…

BWIRE DAVID ODONGO

APPROVAL

This research report has been carried out under my supervision and is now ready for submission to the department of education of Busitema University.

Sign:  ……Date……17/10/2024……

MR. MUGOYA LIVINGSTONE

(University Supervisor)

DEDICATION

I earnestly dedicate this research report to parents; Rev. Odongo and Lucy Odongo, my wives Nekesa Betty and Natocho Betty and children who could go without my support and care while I was on course.

ACKNOWLEDGEMENT

I am indebted to all people whose contributions have led to successful completion of this work. My sincere thanks go to Mr. Mugoya Livingstone my supervisor whose guidance was valuable in the production of this work.

I wish to extend my gratitude to my uncle Julius for his financial support during my course of study. Head teacher and staff members I thank them for his parental piece of advice whenever I was in problems.

Head teachers, staff and pupils of the selected primary schools in Lunyo Sub- County and greatly thanked for their support at the time of date collection.

May God bless everybody who rendered any help for the success of this work.

ABSTRACT

The study was intended to find out the impact of instructional materials on pupils' Achievement in mathematics in the lower primary in selected schools in Lunyo Sub-county.

The research being a person from Lunyo Sub-county, a teacher by profession and one who had taught in the same Sub-county for a number of years, on realizing that the Academic standard of lower classes had drastically declined in the Sub-county felt concerned and ventured to find out the causes responsible for the decline.

The researcher reviewed the work of other researchers, psychologists and educationists about the use of instructional materials.

Myers, (1975) wrote that a wide variety of instructional materials helps both the teachers maintain a consistent formative evaluation of each learner's progress and learners are accessed to material that fit their individual level of ability and interest.

The respondents used in this study were head teachers, mathematics teachers and pupils. These were chosen from five primary schools, one of which was community based while the rest were government aided.

The descriptive research design was used because the study aimed eliciting responses from the respondents. Responses were recorded and interpreted using percentages to required results.

Findings of the study revealed that head teacher and teachers recognize the importance of instructional materials in teaching/learning process. Similarly, pupils recognize that learning by use of instructional materials enables them achieve a lot in given lessons.

Consequently, only one hypothesis was rejected.

Conclusions were drawn and recommendations made to help improve upon the already appalling situations in the chosen schools of study.

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CHAPTER ONE

INTRODUCTION

1.0 INTRODUCTION

This chapter presents the; background to the study, statement of the problem, purpose of the study, objectives of the study, scope of the study

In this area of study, there were only four government schools before 1980s. Mathematical activities were taught.

Recently when U.P.E was introduced in 1996, the numbers of schools raised up to thirteen and many teachers were now trained in Primary Teachers' Colleges on how to handle and use instructional materials in mathematical activities.

The government then provided instructional materials to government aided schools. In this Sub-county of study teachers were called for refresher courses and trained by Centre Coordinating Tutors on how to handle and use instructional materials.

1.1 BACKGROUND INFORMATION

The teaching/learning process in mathematics depends to a large extent on mathematical activities also called "number activities". Learners at the number stages may know the number names but have no ideas about the number concepts of given quantities of items.

Nair and Pool (1991:1) observed that: "you need to guide pupils through several steps of learning before they can begin to count.''

It is the teachers' task to guide pupils through several stages before they can be able to transfer concepts of given numbers to correspond with respective quantities. For example, ensuring that 'five' stands for 5 objects requires careful training of the learners through several stages during the first year of their Primary Education Skemp (971:36), asserts that in learning mathematics.

We try to create all the new concepts but depend on concepts already arrived at by past mathematicians and it all depend on good teaching if one has to learn properly. This makes the

learning of mathematics especially in its early stages and for the average students, very dependent on good teaching.

Having good mastery of mathematical activities helps the learner to begin counting numbers effectively and it also makes learners become familiar with mathematical operations and deal with them easily. Unless there is good teaching, the learner may not achieve the intended outcomes.

Nair and Pool (1991) suggest two major number activities sorting and identifying groups.

Matching and comparing group.

They further suggest that for a child to be able to start number-work they should go through four basic stages which include mathematical activities thus: Sorting and identifying groups,

matching and comparing groups, beginning number work and conserving number.

Availability and use of instructional materials at number stage is of paramount importance to the leaners if they are to gain the concept so intended for them. Lack of instructional materials or insufficient use of them hampers the learners' effort in trying to achieve intended goals during the teaching/learning process.

It is evident that learners who go through concrete experience (i.e. having a practical experience) where they involve themselves in intended concepts quickly and they are helped to start abstracting ideas. Nair and Pool (1991:2) supported the idea that pupils should go through concrete experience before abstract experience can be introduced to them.

You have to use a teaching method which will bring pupils from concrete experience to abstract thought. The method uses pupils' concrete experience first. You have to allow your pupils to touch and talk about things then you guide them through a concrete stage where you encourage your pupils to think about ideas without any concrete representation. In using such a method, it is believed many parents benefit a lot because their pupils are well handled and encouraged to know by practice.

The teacher's attempt to help learners develop abstract thought as a result of thinking about numbers, which they cannot touch, gives them an insight into the intended concepts.

Mathematical activities lay a foundation stone in the learning of mathematics and should be carefully handled. Williams and Shuard (1991:19) confirm this by saying.

During lower years of school, a child has a range of experiences building up familiarity with great variety of things and the ways in which they change. These are sorted out and related to one another. All children have experiences of this kind and it is out of this body of natural early mathematical activity that the future learning of mathematics must grow.

Teachers need to emphasize the use of instructional materials during the mathematical activities. Elizabeth and Shuard (1994:20) assert that. It is through handling an object and discovering what can be done with it that a child comes to notice some of its properties. Children soon discriminate between some things that are very similar and recognize certain ways in which they differ.

Such kind of experience will help learners to recognize likeness and differences among objects they work with. The government white paper quoted a number of problems that the government of Uganda considered to be confronting the Education system.

Among the major problems were: -

The wars and civil strife during the seventies and eighties have taken their tell and led to the neglect of educational instructions and erosion in the quality of education at all level.

Despite the massive expansion that took place in the number of schools and enrolments both at the primary and secondary levels during the early eighties the expansion was without proper planning. Resources were not made available for the provision of necessary facilities, instructional materials and trained teachers for the fast-growing population of students.

Changes in the curricula have been introduced without ensuring proper training of teachers and increasing provision of instrumental materials for the implementation of the new curricula. Such are some of the problems that induced the researcher to find out what exactly is on the ground in primary schools in Lunyo Sub- County. If the situation is so appalling that teaching could be done with a few and sometimes no materials than what is it like now?

With assistance from the International Development Agency (IDA), government of Uganda was able to provide some instructional materials to primary. Schools in 1993 and 1991, some of the

schools in Lunyo Sub-county benefited from aid while others did not. Regardless of whether a school received any aid or not, teaching has to be carried out normally.

The ministry of education and sports strives to provide more scholastic materials under programs like support for Uganda materials to primary education reform (supper). In 1994 supper (1) supplied some schools and in the 1996 supper (2) was received in the same schools. Recently in 2002, the ministry of education and sports was able to supply non-book, materials to government aided primary schools. A number of the schools in Lunyo Sub-county benefited from this arrangement.

Unfortunately, some schools are just beginning under the initiatives of the parents, World Vision and local councils, and have therefore not been able to benefit from the government programs by ways of receiving scholastic materials.

Interestingly some of the schools that have been lucky to receive scholastic materials but don't have proper storage facilities for the resources they got. It was in the light of this that the researcher carried out this study in order to find out whether there was any impact by the use of instructional materials on the pupils' achievement.

1.1 STATEMENT OF THE PROBLEM

The researcher was prompted to carry out the study in Lunyo Sub-county in order to find out how much the learners were gaining from the instructional materials in the selected primary schools.

The researcher was also interested in finding out what was being done to facilitate the teaching/ learning process in schools where instructional materials were in short supply or were completely lacking.

The researcher was interested in finding out how much instructional materials have influenced learning of mathematics in selected schools in Lunyo Sub-county.

The questions prompted the researcher to carry out the investigation in Lunyo Sub-county to establish how effective the teaching/learning of mathematics in lower primary was being done.

The researcher also hoped to investigate related problems in the selected schools. These problems are a menace and hindrances to effective achievement by learners. The researcher thus

wished to find out empirically the impact of instructional materials in lower primary in Lunyo Sub-county, Busia district.

1.2 PURPOSE OF THE STUDY

The purpose of this study was done to find out the impact of instructional materials on pupil's achievement in mathematical activities in Lunyo Sub- County and identify various ways of helping teachers handle mathematics lessons effectively with the use of instructional materials.

1.3 JUSTIFICATION OF THE STUDY

This study is important in a way that it is a requirement to be fulfilled by the student in order to be a warded a Degree in Education primary of Busitema University.

1.4 OBJECTIVES OF THE STUDY

1.4.1 General objective

The general objective of the study was to find out the impact of instructional materials on pupil's achievement in mathematical activities in Lunyo Sub- County, Busia district.

1.4.2 Specific objectives

The study was carried out to;

i) find out whether the extent to which instructional materials are used to teach mathematics in the lower primary classes in Lunyo sub – county, Busia district.

ii) establish the challenges of using instructional materials to teach mathematics in the lower primary classes in Lunyo sub – county, Busia district.

iii) suggest mitigation measures for the challenges of using instructional materials to teach mathematics in the lower primary classes in Lunyo sub – county, Busia district.

1.5 RESEARCH QUESTIONS

The study was carried out to answer the following questions:

i) To what extent are instructional materials are used to teach mathematics in the lower primary classes in Lunyo sub – county, Busia district.

ii) What are the challenges of using instructional materials to teach mathematics in the lower primary classes in Lunyo sub – county, Busia district.

iii) What mitigation measures can be put in place to solve the challenges of using instructional materials to teach mathematics in the lower primary classes in Lunyo sub – county, Busia district.

1.6 SCOPE OF THE STUDY

1.6.1 Geographical scope

Lunyo Sub- County is found in Samia Bugwe county, Busia district in eastern Uganda. It is bordered by Lumino Sub-county in the east, Masaba Sub-county in the north, Namayingo district in the west and Busime Sub-county in the south.

There are thirteen government aided primary schools in Lunyo Sub- County; five of them are private schools. The research was carried out in five primary schools in Lunyo Sub- County four of which were government aided while one of them was private. These were randomly selected and included; Busiabala Primary School (school A), Lunyo Primary School (School B), Butenge Primary School (School C), Bulondani Primary School (School D) and Nekuku Primary School (School E). Considering that there are several schools in the Sub- County, the findings of the study were generalized for the whole Sub- County.

1.6.2 Content Scope

This study was focused on the use of instructional materials and pupils' academic achievement in mathematics in selected primary schools of Lunyo sub – county, Busia District. Specifically, it focused on determining the extent instructional materials are used in Mathematics teaching in primary schools, examining the challenges of using instructional materials in Mathematics teaching in primary schools and suggesting possible mitigation measures to address the challenges in the use of instructional materials.

1.6.3 Time Scope

The study was carried basing on the publications about the subject ranging from 2009 to 2024
And it was conducted in the period of March to September, 2024.

1.7 SIGNIFICANCE OF THE STUDY

This study was intended to help teachers, parents, the local council and stakeholders in the education system in Lunyo Sub- County and the nation at large to recognize the importance of using instructional materials and hence emphasize their use in mathematics and other subjects of the curriculum.

1.8 DEFINITION OF IMPORTANT TERMS

Respondents: These are the population (People) whom the research intends to deal with during the study.

A researcher is a person who is carrying out the study.

Instructional materials are things which facilitate the learning during a lesson i.e. visual.

Visual instructional materials are materials which can be seen and touched during the lesson.

Questionnaire: These are written for the respondent to answer (Fill in).

Investigation: This means inquiring a respondent and respondent and recording his/her responses.

Mathematical activities: These are activities given to learners during real number concepts.

1.9 LIMITATIONS OF THE STUDY

The study encountered the following challenges:

Lack of Control for Confounding Variables**.** The study somehow failed to account for confounding variables that could influence the relationship between instructional material use and pupils' academic achievement. Factors such as teacher effectiveness, classroom environment, student motivation, parental involvement, and extracurricular activities could confound the relationship and affect the study's findings.

Resource Constraints**.** Resource constraints, such as limited funding, time, or personnel, somehow restricted the scope and depth of the study. There were delays in returning the questionnaires from the respondents.

1.10 DELIMITATIONS

The researcher leveraged her personality as a social person to encourage her respondents respond and return the questionnaires in time.

The proximity of the study area to the researcher' residence helped her to reach out to her respondents easily.

1.12 LIST OF ABBREVIATIONS

BTVET	-	Business, Technical and Vocational Education and Training.
CVI	-	Content Validity Index
CDC	-	Centre for Disease Control
DV	-	Dependent Variable
ECD	-	Early Childhood Development
EV	-	Extreneous Variable
FAL	-	Functional Adult Literacy
ID	=	Independent Variable
MOES	-	Ministry of Education and Sports
MVPA	-	Moderate – Vigorous - Physical Activity
NCDs	-	National Centre for Disease Control
PA	-	Physical Activity
PAAC	-	Physical Activity Across Curriculum
PE	-	Physical Education
PPP	-	Public Private Partnership
SDT	-	Self Determination Theory
SLT	-	Social Learning Theory
UNESCO	-	United Nations Educational, Scientific and Cultural organization
UPE	-	Universal Primary Education
UPOLET	-	Universal Post-O-Level Education and Training
UPPET	-	Universal Post-Primary Education and Training
USA	-	United States of America
USE	-	Universal Secondary Education
WHO	-	World Health Organisation

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.0 Introduction

In this chapter, the report presents the theoretical overview and an objective-by-objective consideration of works published about the topic of study

2.1 Theoretical Overview

The principle structuring this study is that teacher's use of instructional materials, among other strategies, determines the quality of instruction in mathematics. A teacher is central to the effectiveness of instructional materials. Hence, some studies have strongly argued that the delivery of instructional materials should always be accompanied by teacher training on the use of the materials (Verspoor, n.d.; Montero-Sieburth, 1989).

The above idea concurs with Verspoor's view that the use of instructional materials by teachers is developmental, dependent on resources available and professional support teachers receive. In terms of raising quality in education in developing countries - where there is no sign of any textbooks or materials, where teachers are often not trained, poorly motivated, isolated and have no professional support - the availability of textbooks is the fundamental step towards improvement in quality (Fuller, 1987). Once the materials are there the second stage is to pay attention to introducing some diversity in instructional techniques (Verspoor, n.d.). This is crucial because the delivery of textbooks and materials in the classrooms does not necessarily lead to their effective use by teachers.

Verspoor says the second stage is the "mechanical stage", where the teaching techniques used by teachers can be described as: Memorization: slavish adherence to curriculum, short-term activities and objectives: rigid application of one instructional technique (Verspoor, n.d.: 54). Verspoor further argues that when teachers have developed sufficient subject mastery and self-confidence to attain the upper levels of the mechanical stage, objectives to improve quality can become more ambitious... The availability of textbooks and instructional materials will also need to become much more diversified (Verspoor, n.d.: 54).

Philosophies of education underpinning the use of materials: the theory of constructivism.

“Classroom practice is informed by constructivist methodologies” The common brand of constructivism among all is their belief that knowledge is not transmitted from a teacher to a

learner, but is actively constructed by a learner. The theoretical underpinnings of constructivist theory of learning are epistemological and are advanced by von Glasersfeld (Cobb, 1994).

In radical constructivism learners, as individuals, are perceived as active constructors of knowledge and, in this case, constructors of mathematical concepts. Within this theory, the role of a teacher is that of "becoming less of a dispenser of knowledge, but rather a facilitator of learning, supporting and guiding the child to construct his own" (Olivier quoted in Parker, 1994: 23). Socio-constructivism perceives learning as effectively occurring where learners actively construct and share learning in a social setting. From this perspective the role of the teacher is that of creating an environment conducive to "social (group) interaction which mediates cognitive (individual) reflection through discussion and negotiation of meaning... " (Olivier quoted in Parker, 1994: 27).

Constructivism, in its broadest sense, has become widely accepted as an authentic innovation by most contemporary mathematics researchers. I believe that the search for better theories of teaching and learning are driven by the need to improve the quality of instruction, and in turn the quality of education. Informed by their belief that children need to manipulate materials in order to construct knowledge, discover and learn mathematical concepts, constructivists do not simply emphasize the need for textbooks, but perceive instructional materials as a whole forming an essential tool for instruction in every classroom. The question is how do teachers use these instructional materials to create an environment in which learners can actively construct their knowledge and demonstrate their creativity.

A theory of how teachers should use instructional materials has been advanced by Dougherty and Scott (1993), and is perceptively and fully developed by Huberman (1993). Dougherty and Scott maintain that textbooks or any other printed materials, should be used as resources, from which a teacher selects material that is relevant and appropriate in terms of content and context. The danger in using any textbook like a bible or as a source of the entire classroom curriculum is that "the philosophy of the textbook [becomes] the driving force of the classroom curriculum in both content and instructional aspects" (Dougherty and Scott, 1993: 298).

Montero-Sieburth (1993) argues that instructional materials developed by education departments or commercial publishers to meet national goals of education or the syllabus, may not necessarily

meet the personal needs of teachers. For this reason, she and other educators recommend that teachers develop their own materials, which will reflect their perceptions, beliefs and expectations of their children.

To develop and illustrate his theory, Huberman compares a teacher to an independent artisan. I find his model fascinating:

> *Let us imagine, for a moment, the classroom teacher as a tinkerer or an instructional handyman, a do-it-yourself craftsperson who can put to use a host of materials lying around at various stages of a construction or repair job. ...As our tinkerer accomplishes a succession of different tasks with ever-varying combinations of the materials made to fit the purposes of each job, he or she develops an increasingly differentiated and integrated set of procedures, representations, and algorithms for reading the next task to be accomplished and for knowing which materials will be required at the outset (Huberman, 1993: 14)*

Indeed, the teacher's profession is unique in that teachers interact and work with children who come from different home backgrounds, economically and culturally; who are at different developmental stages; and who also bring with them different life experiences.

From this perspective, no single philosophy, principle or approach is guaranteed to work in , all situations, or to solve a particular problem that may arise. Similarly, predetermined lesson plans containing a series of sequenced activities are not guaranteed to work. From this perspective, the role of a teacher becomes very challenging, and demanding. In Huberman's model a teacher is envisioned:

> *as creating or repairing learning activities of different kinds with a distinctive style or signature. He or she adapts on the spot the instructional materials that have been bought, given, or scavenged, as a function of the time of day, the degree of pupil attentiveness, the peculiar skill deficiency emerging in the course of the activity, the little unexpected breakthrough on a grammatical rule, and the apparent illogic to the children of mathematical bases other than 10. In doing this, the teacher relies heavily on concrete bits of practice that have proved successful in the past but that must be reconfigured as a function of the specific situation in the classroom, in order to make them work (Huberman, 1993: 15, emphasis mine).*

Dougherty and Scott (1993) are firm believers of the need for a teacher to take control of the classroom curriculum. They maintain that teachers must decide how to teach a topic, what topic should be covered in a day, how much time to spend on a topic, what supplementary materials to use, and what the objectives of a lesson are. It is important to note that this approach should not be understood to mean that teaching will not be child-centred; but it simply means that teachers are better enabled to create an environment conducive for child-centred teaching. Dougherty and Scott argue that this approach places responsibility on teachers and emphasizes professionalism needed in making decisions. Indeed, teachers who develop this professionalism in their careers can only be the ones to meaningfully contribute to broader debates about the improvement of the quality of education 2.2 The extent instructional materials are used in mathematics teaching
In primary schools, instructional materials used in teaching mathematics can vary widely depending on factors such as resources, curriculum requirements, and teaching approaches.

Textbooks are a fundamental resource in mathematics education, providing structured lessons, explanations of mathematical concepts, examples, and practice exercises. They often align with curriculum standards and are designed to support teacher instruction and student learning. In U.P.E schools most of the reading materials are textbooks which are mainly procured to support academic achievement of pupils, but it is sad to note that children are not familiar with individual reading thus weakening the reading ability as individuals (New vision, Nov 21,2017). New vision (2017) went ahead to note that some schools lack these textbooks because of lack of infrastructure (space) / libraries to store these textbooks. The New Vision also noted that some textbooks provided have advanced language and structure use which does not favour learners hence affecting the use of textbooks in teaching mathematics in class.[1]

Manipulatives are physical objects that students can manipulate to explore and understand mathematical concepts concretely. Common manipulatives used in primary mathematics education include base-ten blocks, pattern blocks, geometric solids, fraction bars, counters, and tangrams. A recent meta-analysis (Carbonneau, K.J., Marley, S.C. & Selig, J.P. 2013) of studies compared the use of manipulatives, or hands-on practical apparatus in teaching mathematics, with teaching that relied only on abstract mathematical symbols. They found statistically significant evidence that manipulatives had a positive effect on learning with small to moderate effect sizes. This is compelling evidence in favour of using manipulatives, based as it was on

data collected from 55 studies involving over 7,000 students from kindergarten to school-leaving age. However, Jenni, (2019) noted that even though this study suggests that using manipulatives is good for mathematical learning, it is the ways in which they are used that are also hugely important. But the researcher notes that the use of manipulatives in U.P.E schools is limited.

Visual aids, such as posters, charts, diagrams, and graphs, are used to represent mathematical concepts visually and enhance students' understanding. Visual aids can help make abstract concepts more concrete and accessible, supporting visual learners and facilitating discussions in the classroom. Lakot, (2014), undertook a study on the history of visual aids and their impact on student-teachers' performance at the School of Education Makerere University. Unpublished master's thesis. Makerere University, Kampala, Uganda. The results revealed that some visual aids are not available for students in the course of learning history at the School of Education especially pictorials and this is something that is likely to hamper the performance of history at the school. The study also revealed that although there is a library and the syllabus coverage is adequate other visual aids are inadequate to meet the demands of the students and it is important for the school to source for more learning materials. The researcher assumes that inadequacy of visual aids in a core institute like Makerere, means the situation is worse elsewhere.

Technology tools, including calculators, computers, tablets, interactive whiteboards, and educational software, can be used to enhance mathematics instruction. They provide opportunities for interactive learning, simulations, virtual Manipulatives, multimedia resources, and personalized learning experiences. Cherry (2023) asserted that all over the world, no less Uganda, digital technologies are becoming an integral part of the education experience. There has been a clear mind-shift from traditional teaching methods to more practical methods involving ICTs in teaching, although their use was still low most especially in rural schools. According to Ertmer et al. (2012), the most commonly cited reason for lack of technology implementation in the classroom is inadequate professional development and training.

Mathematics games, puzzles, and hands-on activities can make mathematics learning enjoyable and engaging for students. These activities encourage active participation, collaboration, problem-solving and critical thinking skills while reinforcing mathematical concepts and skills. Some studies have specifically shown that teaching in community secondary schools is poor as these schools lack necessary teaching facilities such as furniture for staff and students, books, science equipment, games and sport equipment

(Benell and Mukyanuzi, 2005). Masha (2020) gave an example of games like the **Math Jam**. This works for any age that is old enough to understand it and is challenging to kids of all ages. The teacher picks a topic, for example, multiplication tables. All students stand up by their desks. The teacher then picks a simple rhythm to clap/snap/tap out. A simple one is to clap twice and snap twice. The teacher practices this rhythm with the students…clap, clap, snap, snap. Clap, clap, snap, snap. Now, while clapping/snapping/tapping a rhythm, the teacher calls out a math problem, waits a beat, and then calls on a student to answer the question. If the student gets the answer correct while keeping the rhythm, she keeps standing; otherwise, she sits down. The last person standing is the winner. On this note, the researcher assumes that some teachers lack the relevant competences and skills in teaching mathematics using these games.

Workbooks and worksheets provide additional practice and reinforcement of mathematical concepts and skills. They can be used for independent practice, homework assignments, or small group activities, allowing students to apply what they have learned and receive feedback. Kothari R.G. and Patel Rachana N. (2009) made a study on the Diagnosis and Remediation of Learning Difficulties in Geometry of Standard Eight Students and proved that remedial measures helped students to reduce the learning difficulties through the use of interactive method and teaching materials. Mascarenhas, S. L. (2020) observed a study on teaching of Geometry at secondary school level aimed at assessing the state of teaching Geometry in schools, the investigator concluded that the teaching and learning of Geometry in secondary schools is poor and attributes this to examination systems which was not coordinating with the practical worksheet examples. The review of literature has given an insight to the researcher to study to conduct research in the area of Use of worksheets to develop the skill of using Geometrical instruments.

Integrating real-life contexts and applications into mathematics instruction helps students see the relevance and importance of mathematics in everyday life. Teachers may use real-world examples, word problems, and practical activities to connect mathematical concepts to students' experiences and interests. For example: Preparing food. Figuring out distance, time and cost for travel. Understanding loans for cars, trucks, homes, schooling or other purposes. Understanding sports (being a player and team statistics) (Northern Illinois University, 2022). The study intends to assess whether teachers use a number of real-life examples while teaching mathematics in primary schools in Lunyo Sub County.

Teachers often create their own instructional materials, such as lesson plans, teaching aids, task cards, and flashcards, to supplement textbooks and meet the specific needs of their students. These materials can be tailored to address learning objectives, instructional strategies, and student interests. Thulisile (1995) in her study observed that despite the many positive aspects of teacher usage of instructional materials, the one disappointing thing was their heavy reliance on MK materials. No other books or materials were used to supplement MK materials. No other examples or stories were used other than those suggested in the booklets. During interviews teachers seemed confident that as a result of being involved in the MK program they could develop their own lesson plans, and design their own materials, based on the MK approach. However, this was not confirmed during the observations. No single teacher was observed using her own lesson plan or using materials other than those of MK. Teachers did not create their own materials that could be salvaged from their environment. It is perhaps an unrealistic expectation that teachers should create their own materials, given the lack of resources, and skills necessary to create these materials. However, if they did their materials would be most appropriate in terms of relevance of content and context. But on the other hand, Asaku (2021) made a related study and found out the as much as some books were available for use in primary school, some teachers were not using them due to factors like, safety with children, administration cases, etc.

By incorporating a variety of instructional materials into mathematics teaching, primary school teachers can cater to diverse learning styles, abilities, and interests, fostering a supportive and inclusive learning environment that promotes student engagement, understanding, and achievement in mathematics.

2.2 The extent of instructional materials use in mathematics teaching

In primary schools, instructional materials used in teaching mathematics can vary widely depending on factors such as resources, curriculum requirements, and teaching approaches.

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Visual aids, such as posters, charts, diagrams, and graphs, are used to represent mathematical concepts visually and enhance students' understanding. Visual aids can help make abstract ssible, supporting visual learners and facilitating discussions in the classroom.

Lakot (2014), undertook a study on the history of visual aids and their impact on student-teachers' performance at the School of Education Makerere University. The results revealed that some visual aids are not available for students in the course of learning history at the School of Education especially pictorials and this is something that is likely to hamper the performance of history at the school. The study also revealed that although there is a library and the syllabus coverage is adequate other visual aids are inadequate to meet the demands of the students and it is important for the school to source for more learning materials. The researcher assumes that inadequacy of visual aids in a core institute like Makerere, means the situation is worse elsewhere.

Technology tools, including calculators, computers, tablets, interactive whiteboards, and educational software, can be used to enhance mathematics instruction. They provide opportunities for interactive learning, simulations, virtual Manipulatives, multimedia resources, and personalized learning experiences. Cherry (2023) asserted that all over the world and not only in Uganda, digital technologies are becoming an integral part of the education experience. There has been a clear mind-shift from traditional teaching methods to more practical methods involving ICTs in teaching, although their use was still low most especially in rural schools. According to Ertmer et al. (2012), the most commonly cited reason for lack of technology implementation in the classroom is inadequate professional development and training.

Mathematics games, puzzles, and hands-on activities can make mathematics learning enjoyable and engaging for students. These activities encourage active participation, collaboration, problem-solving and critical thinking skills while reinforcing mathematical concepts and skills. Some studies have specifically shown that teaching in community secondary schools is poor as these schools lack necessary teaching facilities such as furniture for staff and students, books, science equipment, games and sport equipment (Benell and Mukyanuzi, 2005).

Masha (2020) gave an example of games like the **Math Jam**. This works for any age that is old enough to understand it and is challenging to kids of all ages. The teacher picks a topic, for example, multiplication tables. All students stand up by their desks. The teacher then picks a simple rhythm to clap/snap/tap out. A simple one is to clap twice and snap twice. The teacher practices this rhythm with the students…clap, clap, snap, snap. Clap, clap, snap, snap. Now, while clapping/snapping/tapping a rhythm, the teacher calls out a math problem, waits a beat, and then calls on a student to answer the question. If the student gets the answer correct while keeping the rhythm, she keeps standing; otherwise, she sits down. The last person standing is the winner. On this note, the researcher assumes that some teachers lack the relevant competences and skills in teaching mathematics using these games.

Workbooks and worksheets provide additional practice and reinforcement of mathematical concepts and skills. They can be used for independent practice, homework assignments, or small group activities, allowing students to apply what they have learned and receive feedback. Kothari R.G. and Patel Rachana N. (2009) made a study on the Diagnosis and Remediation of Learning Difficulties in Geometry of Standard Eight Students and proved that remedial measures helped

students to reduce the learning difficulties through the use of interactive method and teaching materials. Mascarenhas, S. L. (2020) observed a study on teaching of Geometry at secondary school level aimed at assessing the state of teaching Geometry in schools, the investigator concluded that the teaching and learning of Geometry in secondary schools is poor and attributes this to examination systems which was not coordinating with the practical worksheet examples. The review of literature has given an insight to the researcher to study to conduct research in the area of Use of worksheets to develop the skill of using Geometrical instruments.

Integrating real-life contexts and applications into mathematics instruction helps students see the relevance and importance of mathematics in everyday life. Teachers may use real-world examples, word problems, and practical activities to connect mathematical concepts to students' experiences and interests. For example: Preparing food. Figuring out distance, time and cost for travel. Understanding loans for cars, trucks, homes, schooling or other purposes. Understanding sports (being a player and team statistics) (Northern Illinois University, 2022). The study intends to assess whether teachers use a number of real-life examples while teaching mathematics in primary schools in Lunyo Sub County.

Teachers often create their own instructional materials, such as lesson plans, teaching aids, task cards, and flashcards, to supplement textbooks and meet the specific needs of their students. These materials can be tailored to address learning objectives, instructional strategies, and student interests. Thulisile (1995) in her study observed that despite the many positive aspects of teacher usage of instructional materials, the one disappointing thing was their heavy reliance on MK materials. No other books or materials were used to supplement MK materials. No other examples or stories were used other than those suggested in the booklets. During interviews teachers seemed confident that as a result of being involved in the MK program they could develop their own lesson plans, and design their own materials, based on the MK approach. However, this was not confirmed during the observations. No single teacher was observed using her own lesson plan or using materials other than those of MK. Teachers did not create their own materials that could be salvaged from their environment. It is perhaps an unrealistic expectation that teachers should create their own materials, given the lack of resources, and skills necessary to create these materials. However, if they did their materials would be most appropriate in terms of relevance of content and context. But on the other hand Asaku (2021) made a related study and found out the as much as some book were available for use in primary school, some teachers were not using them due to factors like, safety with children, administration cases, etc.

By incorporating a variety of instructional materials into mathematics teaching, primary school teachers can cater to diverse learning styles, abilities, and interests, fostering a supportive and inclusive learning environment that promotes student engagement, understanding, and achievement in mathematics.

2.3. The challenges of using instructional materials in mathematics teaching

Killen (2006:276) had made an observation on the shortage of instructional materials in schools by indicating that; "the issue of resources may not be easy to resolve, but the important thing is that teachers should not use lack of resources as an excuse for not teaching well". The implication here is that alternatives are available and teachers should refrain from being solely dependent on the Local Council for readymade materials, they should reach out for local materials and improvise whenever the need arises. The current study seeks to find out the alternatives for instructional materials and whether they can be definitely substituted for instructional materials.

Okonkwo (2002) averred that teacher's laziness is one of the factors that hinder the use of instructional aids in teaching. This is because preparation is very much intensive when visual aids are to be used as a result; many lazy teachers abandon the use of visual aids soon after they have graduated from their trainings. A conscientious teacher should be able to improvise some of the unavailable instructional materials. The study seeks to investigate the level of laziness that makes a teacher avoid the use of instructional materials while teaching mathematics.

Nwachukwu (2002) noted that the problem of finance seems to be the most nagging challenge facing the improvisation use of instructional materials. He observed that the cost of establishing the educational industry has clearly assumed a critical dimension. This is why the state government finds it very difficult to fund the schools sufficiently. Agbo (2001) asserted that some teachers who are interested in using instructional materials in their instruction complain of lack of fund. The current study seeks to find out whether the schools in the area lack funds for enough instructional materials.

Mkpa (2004) maintained that the major challenge in the use of projected teaching materials is the cost of procuring the equipment. Most of the equipment are costly to buy. Evidently, most schools lack the internal means of generating sufficient fund to procure some of the necessary but expensive instructional materials, such as projected films, projectors, film strips.Asaku

(2021) objected this observation when he noted his observation of UPE schools being sent text books and workshops carried out for teachers on termly basis.

Lack of appropriate materials for the intellectual level of the students denies them active participation in their learning. Jotia (2006) observed this and posits that," lack of students' involvement in the teaching process makes teachers the subject of the learning process while students are dissolved to the level of objects that are just receiving deposits and their critical awareness is compromised". The study seeks to find out which instructional materials like text books are common.

Garuba, A. (2003) the allocated time for lessons seems not to be sufficient enough for the theory aspect of the lessons, and when the allocated time is not enough for the theory, and then the instructional materials cannot be used during lessons. Therefore, time is among the problem of using instructional materials in the teaching of social studies.

Ezegbe, M.O. (1999) Lack of Funds for Educational Excursions.Educational excursions as an instructional material help to bridge the gap between the classroom and outside world and provide students with real life situations. School heads and teachers equally mentioned lack of funds for educational trips as one of the major problems faced by teachers in the teaching of Social Studies. This also contributes to poor performance among the students.

Moore (1997) stated that the less teaching experience a teacher had the better the attitude of the teacher toward the use of instructional materials like television in the classroom. However, Dirr (1997) found that the teacher's experience in teaching was not associated with the number of times a teacher used ITV in instruction. The current research on this note seeks to find out whether teaching experience gives a teacher a better attitude towards the use o instructional materials.

Guilliom and Zimmer, (1993:93) acquiring knowledge, skills, and confidence needed to choose and use instruction that was televised so students could learn from it was a major challenge of teachers. Teachers' lack of knowledge and preparation in the correct utilization of equipment and programs were major factors in the decision not to use instructional television in a school (Raecke, 2002). Teachers believed they needed more help to use television effectively.

Suvaree (2000) claimed that the effectiveness of instruction, convenient usage and producing, responsibilities and knowledge were affected the usage of media. In addition, Thitiya (2003)

found that the factors affect the acceptance of instructional media usage are workload, need of training, supported materials, and guideline. In contrast, Woranat (2004) found that age and education level related to the usage of instructional media.

Acharu and Solomon (2014) supported the above assertion and stated that, one of the major challenges facing the Polytechnics is inadequate infrastructural facilities and the continuous breakdown and deterioration of existing facilities for teaching of OTM courses which has affected students' achievement and academic performances.

Ayelotan and Sholagbade (2014), they mentioned that physical facilities and equipment are inadequate in the Polytechnics offering office technology and Management. They further maintained that availability of appropriate infrastructural facilities will enhance students learning by allowing them to be involved in demonstrations and practices which will build and concretize their skills.

Aina (2000) identified dearth of teachers and equipment as one of the challenges in teaching and learning. That the provision of equipment and other teaching/learning materials is of paramount importance in teaching and learning of office technology and management. It is only when this needed equipment provided and adequately maintained, that products will become proficient in the world of work, through the acquired skills, without necessarily being retrained when employed. Aina further argued that teaching and learning will become theoretical and ineffective where the needed equipment/materials are not provided or available.

Obasi (2005) maintained that a student will become more focused in his academic pursuit without much distraction, if the environment is conducive and the facilities are available and utilized for studies. The provision of instructional materials is supposed to cut across the four sensory organs: sight, hearing, touch and feeling. Unfortunately, instructional facilities are always provided at a very low level thus, affecting the standard of teaching and learning.

According to Udin and Uwaifo (2005), most equipment and infrastructure are in despair and decay due to poor maintenance culture. Absence of maintenance culture in our school systems has caused a major setback. Equipment that breaks down in public organizations is sometimes difficult to repair. In such case damaged equipment continue to depreciate till it finally become dead. Miller and Akume (2009) noted in their work that all stakeholders in the educational sectors are expected to be partners in the maintenance of school equipment while parents and

government are to provide finance for maintenance activities. In the same way, school authorities are to detect fault and utilize fully the available equipment.

Hamzah et al. (2014, p. 158) reiterated that among the challenges that are plaguing the effectiveness of Instructional and Multimedia Materials in teaching as applicable to countries including Uganda as regards teaching are the lack of infrastructure multimedia equipment, inadequate numbers of multimedia software, and difficulty in accessing multimedia laboratory.

According to Azeb (1975), study on the use of community resources in elementary schools in Ethiopia indicated that most schools lacked adequate and appropriate instructional material. Teachers used the books assigned to the class as the only instructional resource.

2.4 Mitigation measures in addressing the challenges in the use of instructional materials in mathematics teaching:

To combat the challenges in the use of instructional materials in mathematics teaching, in-service training of mathematics teachers in the Country is strongly encouraged. This is because changes in curriculum bring about a need for re-examination of pedagogical aspects. New teaching methods/approaches may be required to teach new curricula. Other than new curricula, there is continuous research on effectiveness of teaching/learning methods/approaches and as such practicing teachers need to be updated on the current trends. For example, there has been a strong recommendation by educators for a shift from teacher-centered approaches to student-centered approaches to teaching. Without in-service training during which such developments are articulated teachers may find it difficult to discard old practices for the new.

Much of the good practices taught and learned in pre-service Teacher Training Colleges are soon undone because of lack of follow-up mechanisms. Newly posted teachers very soon after entering the profession resort to outdated teaching practices most likely due to discouragement by colleagues who are older in the profession who may believe that much of what is taught in colleges is theoretical and does not work in actual practice. Another factor could be frustrations encountered in the course of duty. The use of a wide variety of instructional media is one pre-service practice that is slowly abandoned and most teachers end up using only the textbook. This poses a challenge to mathematics teachers because the subject is abstract and requires the use of concrete materials in teaching and learning. In-service training thus provides a good opportunity to make a follow-up and undo the retrogressive acts, attitudes and practices.

In-service training is also important for professional development through sharing of experiences and continuous exposure to new ideas to keep abreast with new developments in the teaching profession of teachers' work, engagement in sustained efforts to improve their mathematics instruction

Effective programs of teacher preparation and professional development help teachers understand the mathematics they teach, how their students learn that mathematics, and how to facilitate that learning (Educ. Act, 2008). Just as students‟ opportunities to learn mathematics effectively have been made insufficient, so have teachers‟ opportunities to learn more about mathematics, students‟ learning and thinking, and their teaching practice. In a world where advanced Information Communication and Technology seems to have gained ground, it is critical that teachers are regularly kept abreast with information that can impact in their pedagogical skills as well as being kept on board with the current information to be at par with their counterparts in the world and to maintain pace with the learners who could be privy to technological innovations (Wilson, 2014).

The use of need based seminars and workshops contribute greatly to the professional growth of teachers. Teachers need access to resources and expertise that will assist them in improving their instruction, including access to mathematics specialists in primary schools (NCDC, 2000). They add that improving students‟ learning depends on the capabilities of classroom teachers. Although children bring important mathematical knowledge with them to class, most of the mathematics they know is learnt in school and depends on those who teach it to them. The fact that teachers cannot automatically know how to teach more effectively means that learning to teach well cannot be accomplished once but it is a career-long challenge.

Kilpatrick, (2001) noted that teachers who possess strong mathematical knowledge at a greater depth and span are more likely to foster students‟ ability to reason, conjecture, and problem-solve, while also being able to more accurately diagnose and address students‟ mathematical misconceptions and computational (dis)fluencies. The National Council of Teachers of Mathematics, 2006 and the National Mathematics Advisory Panel (2008) came up with two challenges that have been associated with ensuring that teachers have the adequate content knowledge to teach mathematics effectively. First, because mathematics education research has been fraught with philosophical differences, defining the content or subject matter that teachers

should master has been a matter of some debate. Ball (2008) commented, “defining a precise body of mathematical knowledge that would effectively serve teachers and would guide teacher education, professional development, and policy has proved challenging”. Second, the use of indirect indicators or proxies for teacher knowledge, such as teacher certification, coursework, and teacher licensing exams, rather than more robust and direct measures of teachers‟ mathematical knowledge, has made the study of content knowledge and its link to student learning difficult.

Research on the relationship between teachers‟ mathematical knowledge and student achievement has offered some evidence of the impact of mathematical knowledge on teaching effectiveness and student learning. The research focused on primary mathematics teaching and suggests general positive influences of teachers‟ studying mathematics on student achievement. These positive effects, however, varied by skill level of student (e.g., whether the students were enrolled in advanced or remedial classes) and number of undergraduate mathematics courses taken by the teacher (Monk, 1994). Although results in studies of teachers‟ mathematical knowledge and student achievement are mixed, the evidence does suggest teachers‟ knowledge of mathematics content as a contributor to instructional quality and student achievement (Wilson, Floden, and Ferrini-Mundy, 2001).

According to the Report of Parliamentary Committee on Education, 2022, the role and quality of teachers must be given the most critical consideration. The report noted that the qualitative improvement of education can only occur if there is a major improvement in the quality of teachers and teacher training. Kathuri (2006) point to a general agreement that the qualification of teachers is of crucial importance in students‟ performance in mathematics. Teacher training should therefore stress quality and effective mathematics instruction which should be stressed further through in-service training.

Schools may not always be in a position to provide all the teaching materials that a mathematics teacher would require. In education, we are in the business of learning and it is mandatory for teachers to do whatever is needed using whatever materials and resources they can to best meet students‟ needs, whether it involves technology or not. As the proverb goes „necessity is the mother of invention‟ mathematics teachers have to use their innovative skills to improvise instructional resources for effective teaching/learning. A teacher using a learning activity should

be well versed with knowledge on how to back it up with the right and relevant media. Concrete examples should always be provided if possible. The teacher also needs to know how every media used enhances learning (Jones,2009)

To cope with the challenge of inadequate instructional resources, the researcher suggests that mathematics teachers can use improvised media to teach abstract mathematical concepts. Some common types of improvised media include; playing cards, geo boards, students' shoes, school tank, coins and currency notes, dice, school's flag post, strings, match sticks, marbles, beans and maize seeds, stair cases, classroom floor and walls and many others. Strings may be used to teach sequences in the following manner: learners are divided into groups of four each and each group given one piece of string. They are then asked to fold and cut the pieces of string at the centre successfully and fill in a table of two columns the number of folds and the number of pieces of strings generated. The teacher may then bridge to the concept by asking the students to make a deduction from the list of numbers generated by the number of pieces. He/she may then define a sequence using the pattern formed.

Coins and dice may be used in teaching combined events in probability where students are put into groups of three. In one group a student tosses the coin once, one reads the observation while the third records. In another group, one student rolls a die the other reads the observation and the other records. Using the sample space, students find the probability of getting a head and a six. Coins may also be used to teach Binomial expansion where students toss a coin four times and record 16 different ways in which a sequence of heads (H) and tails (T) could occur. Four heads may occur once, 3 heads 4 times, 2 heads 6 times, 1 head 4 times and 0 head once. The pattern formed is thus 1, 4,6,4,1. The number of arrangements corresponds to the fifth row of Pascal‟s triangle. The teacher may then ask the students to investigate arrangements with a coin tossed twice, thrice and five times and repeat the procedure. (Kamau, 2004).

Indirect proportionality may be taught using manila sheet, masking tape and meter rules. Learners subdivide a manila sheet strip into six equal parts. They shade one part to show a person's fraction of work in one day. They then subdivide another manila sheet same size as the first one into six equal parts. They shade two parts to represent a second person's fraction of work. Finally, they combine the two persons‟ fractions of work to find amount of work they do in one day. Learners may use the combined answer to find the time taken to complete the task.

It is difficult to compare fractions with different denominators directly. A mathematics teacher may demonstrate this by asking three students to run round a track as the others record their speeds. One student makes 3 laps in 6 minutes, the second one makes 4 laps in 10 minutes while the third one makes 5 laps in 15 minutes. The students are then asked to write down the ratio of the number of laps to the number of minutes for each in form of fractions. The teacher may then ask the students to say who jogged fastest and who jogged slowest. The students will find it difficult to answer the questions and teacher may capture their curiosity and teach comparison of fractions using equivalent fractions (Kamau, 2004)
of instructional materials was inadequate and this study sought to fill this gap.

2.5 Conclusion

This chapter presented relevant literature on the use of instructional materials in the teaching of mathematics, challenges facing teachers in the use of instructional materials in teaching mathematics and the possible intervention measures of addressing the challenges. There is a wide range of instructional resources including text books, chalkboard, models, pictures and charts, calculators, computers and improvised materials like coins, strings, shoes, match sticks, stairs and many others. The use of a wide variety of these instructional resources was quite limited in most classrooms. The challenges facing mathematics teachers in utilizing these resources included the limited information on ICT integration in teaching and learning mathematics. The lack creativity and innovation among teachers, the inadequate instructional resources in schools and the attitude of teachers towards the use of instructional materials were some of the challenges identified. On the other hand, the chapter identified the need for teachers regular in-service training, improvisation of instructional materials and improvement in the quality of teachers as possible mitigation measures to address the challenges in the use of instructional resources in teaching Mathematics.

2.6 Literature Gap

Despite the growing body of research on mathematics education, there is a dearth of studies examining the use of instructional materials and pupils' academic performance in Mathematics in Lunyo Sub County, Busia District. Existing studies have primarily focused on urban areas or different regions, neglecting the unique challenges and needs of rural schools in Lunyo Sub County.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter explains the methodological techniques to be used to conduct the research. It specifically consists of research design, study area, study population, sampling size, sampling techniques, methods of data collection, data collection instruments, sources of data, reliability and validity measures, measurement of study variables, procedure of data collection, data presentation and analysis and ethical consideration.

3.1 Research design

Abim (2005) defines a research design as a plan for carrying out research. This study adopted a cross sectional research design in which data was collected over a short and fixed period of time. Both qualitative and quantitative approaches were employed because the study comprised of numerous respondents who fall in different categories.

3.2 Area of Study

The study was carried out in Lunyo Sub County in Busia District.Lunyo S/C is located in Busia District with 8 parishes, namely Busiabala, Bwahiha, Nalwire,, Lunyo, Nekuku, Busime, Mundindi, and Rukaka parishes and 94 villages. Having a population of about 17,800 people according to UBOS Projection, 2020. LunyoSub County was selected because many students in the area have challenges in Mathematics performance besides being the researcher's area of work. This study however, was limited to five primary schools, namely; Nekuku, Busiabala, Lunyo, Butenge and Bulondani Primary school.

3.3 sample size and selection

The study population was comprised of 3 head teachers, 21 teachers, and 84 pupils from the three selected schools.

Teachers were selected through purposive sampling technique while learners were randomly selected to participate in the study. Head teachers were selected through census.

Table 3.1 Sample Size and selection

S/No	School	Head teachers	Class Teachers	Pupils	Total
1	A	01	07	28	36
2	B	01	07	28	36
3	C	01	07	28	36
Total		**03**	**21**	**84**	**108**

3.4 Methods of Data Collection

3.4.1 Questionnaire

Questionnaires are a set of questions to which respondents provide answers based on their knowledge and experiences. Open ended questionnaires were prepared and availed to head teachers and teachers to answer.

3.4.2 Interviewing

This involves face-to-face interaction between the researcher and the respondents. This method was preferred because it is time saving and flexible. Interviews were organized with selected learners at different schools.

3.4.3 Observation

Observation is a research method that involves systematically watching and recording behaviors, events, or interactions without directly interfering with or manipulating the subjects being observed. The researcher observed the teacher during the teaching/ learning process and how they used the instructional materials.

3.5 Data Collection Instruments.

The research instruments used were questionnaire guides, interview guide, and observation checklist.

3.5.1 Questionnaire guide: The study used semi-structured open questionnaires to collect data from head teachers and teachers. McMillan and Schumacher (2001) recommend a

questionnaire if the researcher knows that the respondents will be in position to answer the questionnaire.

3.5.2 Interview guide: An interview guide was drawn consisting of questions related to the study under the guidance of the supervisor which was used for interviewing pupils.

3.5.3 Observation checklist: A well designed observation check list was used by the researcher to collect data from respondents.

3.6 Procedure of Data collection.

The researcher first got an introductory letter from the University in charge researcher department. The researcher then went to the selected schools and delivered an introductory letter to the relevant authorities and the arrangements were made for the researcher to have convenient time with the respondents. After data was collected, analysis, discussions and conclusions were made.

3.6.0 Validity and reliability of instruments

3.6.1 Validity

This is the extent to which the instrument measures an intended attribute or subject scope efficiency. The instruments were given to three experts to check if they were valid and then the supervisor confirmed.

3.6.2 Reliability of instruments

Reliability is the ability of test to produce results, which are consistence, and accurate on repeated administration after interval to the same population. Here the instruments were first approved by the supervisor, and then pretested on twelve respondents to ensure that the results produced were consistent.

3.7 Data analysis.

The descriptive statistics such as frequency, percentages, averages and variances distributions were used to analyze numerical data while content analysis techniques were used to analyze qualitative data.

3.7 Ethical Considerations

The researcher first sought the consent of the respondents before their involvement. He also upheld the virtue of confidentiality as no attempts to disclose the information given by the respondents was permitted.

There will be respect of respondents as no embracing questions will be asked.

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.0 Introduction

The purpose of the study was to determine the use of instructional materials in Mathematics teaching and pupils' academic performance in selected primary schools in Lunyo Sub County, Busia District. Tables and Percentages were used to describe the data as they could easily communicate the research findings to majority of readers. Qualitative analysis was used to analyze the views respondents gave on the different questions. Discussions were then done from the information obtained from both qualitative and quantitative analysis which led to the drawing of conclusions and recommendations.

4.1 General information of the respondents

In this section, the respondents' demographic back grounds as well as the instructional materials used in the teaching of mathematics and their relevance were analyzed and discussed. Findings are presented in the following sub-sections.

4.1.1 Sex of the respondents

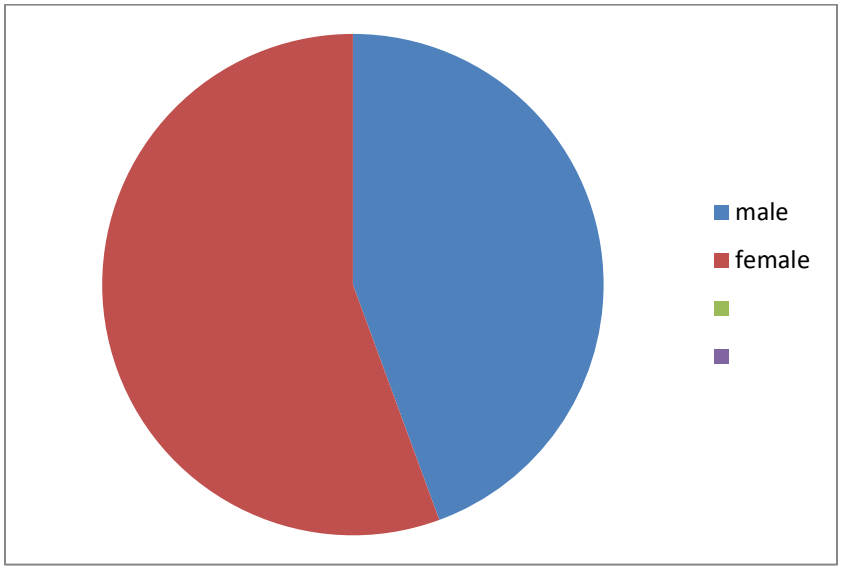
Table 1: Sex of the Respondents

Sex	Frequency	Percentage
Male	48	44.4
Female	60	55.6
Total	108	100.0

Source: Primary data, 2024

From the study it was found out that most of the respondents were females with 55.6% and the rest were males with 44.4%. It appears like the study area had more females than males and the study therefore, involved more females than males.

Figure 1 sex of respondents



4.1.2 Age

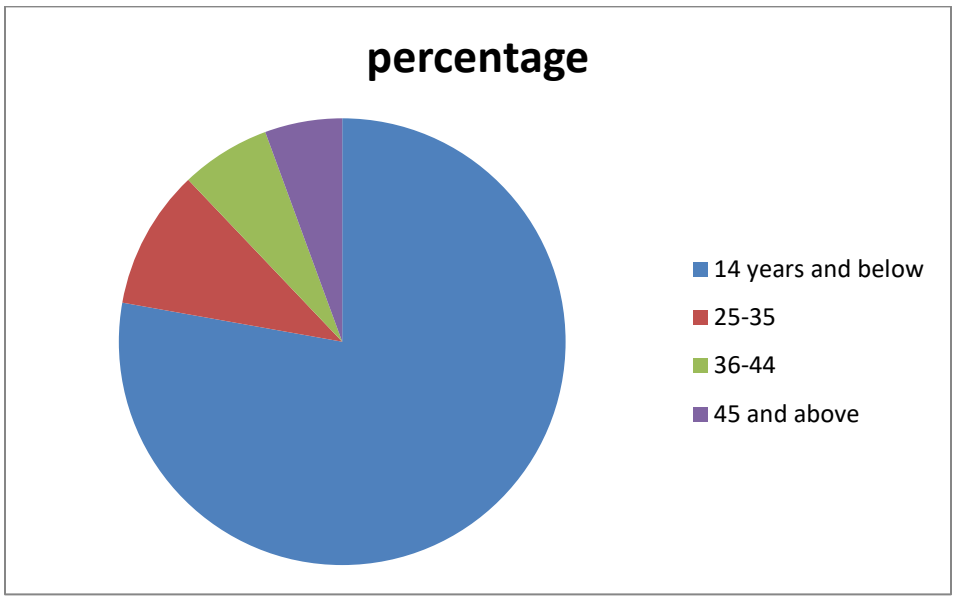
Table 2: Age of the Respondents

Age	Frequency	Percentage
14 years and below	84	77.8
25-35	11	10.1
36-44	7	6,5
45 and above	6	5.6
Total	**108**	**100.0**

Source: Primary data, 2024

From the table above it was established that most of the respondents were below 14 years of the age with a percentage of 77.8% followed by those between 25-35 and 36-44 of age which occupied a percentage of 10.1 and 6.5% respectively. Those above 45 years were only 6 which represented a percentage of 5.6%. Below 14 years were the most since it comprised the young children who were pupils from the three selected primary schools.

Figure 2: Age of the Respondents



4.1.3 Education Level

Table 3: Education level of the Respondents

Level	Frequency	Percentage
Primary level	84	77.8
Secondary level	00	00
Tertiary	20	18.5
University	4	3.7
Total	108	100.0

Source Primary data, 2024

From the study it was found out that most of respondents were in primary pupils with 77.8% followed by those who had tertiary/ college training 18.5%. and those with university education were 4 representing 3.7% of the respondents.

Those who had university level education included head teachers since it's a requirement now for one to head a primary school. Those with at tertiary/ college education were mostly teachers.

4.1.4 Availability of different Instructional Materials

Table 4: Different Instructional Materials

Instructional material	Pupils' view	Teachers view	% Mean
Mathematics text books	98%	100%	99
Supplementary materials	70%	78%	74
Manipulative (charts and graphs)	50%	65%	57.5
Mathematical sets	70%	60%	65
Models	20%	40%	30
Chalk boards	100%	100%	100
Mean percentage	**61.6**	**68.6**	**65.1**

Source: Primary data, 2024

From the table above, 98 % of pupils confirmed that textbooks are always available as instructional materials during teaching/ learning of mathematics. On the other hand, 100% of teachers asserted that text books as often available for use during mathematics teaching. About the availability of supplementary materials, 70 % of the learners confirmed their availability at school a fact that was shared by 78% of the teachers. The availability of Chart, graphs and manual paper was rated at 50% and 65% by pupils and teachers respectively while the availability of mathematical sets were rated at 70% and 60% by both pupils and teachers. Availability of models was rated at 20% and 40% while the Chalkboard was rated at 100% by both teachers and learners. This study therefore reveals that chalkboards and Mathematics text books are the most available instructional material used in the teaching/ learning of Mathematics. The findings therefore, underscore the great need for teachers to consider the use of other Mathematical materials especially Models and the Manipulative to improver learners' performance.

4.1.5 Relevance of Instructional Material in mathematic instructions

Table 5. Relevance of instructional materials

Relevance	Pupils' view	Teachers 'view	Percentage mean
Facilitates pupils critical thinking	70%	100%	85%
Increases pupils' motivation and performance	100%	98%	99%

Makes content real	90%	100%	95%
Encourages collaboration among pupils	100%	94%	97%
They are time saving	80%	80%	80%
Promotes effective learning	100%	100%	100%
Enhances both teacher and pupils' interest	80%	90%	85%
Mean percentage			

Source: Primary data, 2024

According to table 2, instructional materials help in developing critical thinking and logical reasoning skills. This was confirmed by 100% of teachers and 70% of pupils respectively. 100% of teachers and 98 of pupils agreed that instructional materials increase students' motivation and performance. 90% of the teachers argued that instructional materials make content real a view that was supported by 100% of the teachers. 97% of the respondents asserted that instructional materials encourages collaboration among pupils while 80% of the respondents argued that instructional materials are time saving. All teachers and pupils supported the view that instructional materials promotes effective learning while 85% of the respondents asserted that instructional materials enhances both a teacher and pupil's interest in learning.

These finding are in line with Abdu (2015) who argued that instructional materials enhance full participation in the lessons, provide room for a quirky-based learning and problem solving, help in discussion and clarification of issues and ideas among learners and the teacher.

4.2 Extent of utilization of instructional materials in teaching mathematics

Objective one of the study sought to establish the extent of utilization of instructional materials in teaching of Mathematics. Findings are indicated in the table below

Table 6 Extent of utilization of instructional materials in teaching mathematics

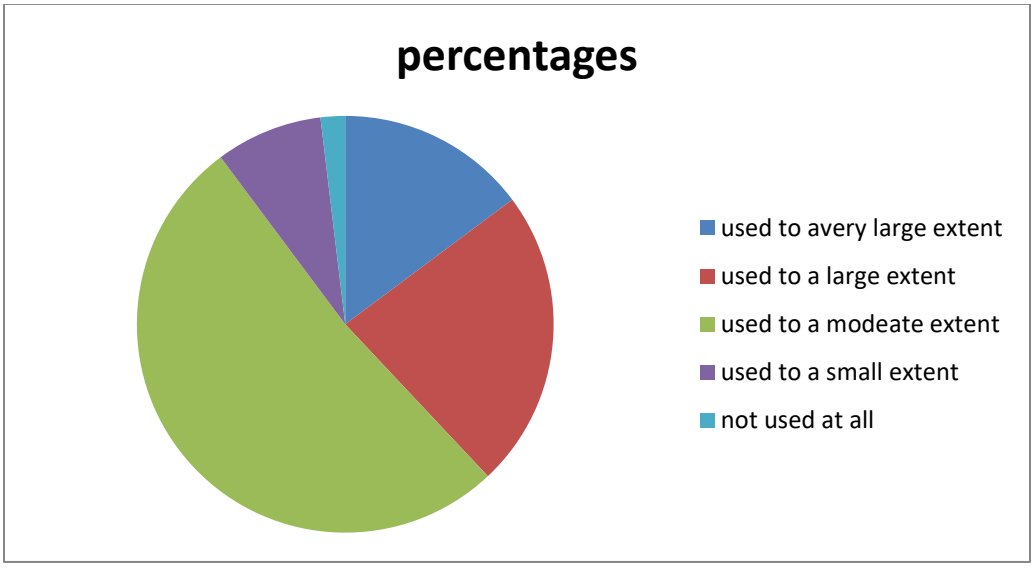
Table 6 : Extent of Instructional materials' utilization

Responses category	Frequency	Percentage
Used to a very large extent	16	14.8%
Used to a large extent	25	23.2%
Used to a moderate extent	56	51.8%
Used to a small extent	9	8.3%
Not used at all	2	1.9%
Total	**108**	**100.0%**

Source: Primary data, 2024

From the study, 51.8% (highest percentage) of the respondents argued that instructional resources are moderately used, 23.2% asserted that they were used to a large extent, while 8.3% of the responded said that the instructional resources are used to a small extent. Only 1.9% of the respondents indicated that instructional resources were not used at all. Observations made by the researcher indicated that there was limited use of some instructional resources like models, pictures charts and diagrams. Very few teachers used locally available materials in instruction. The use of instructional materials such as audio-visual aids were not used at all during mathematics lessons yet if used effectively can go a long way in increasing permanence of learning on addition to making the job of teaching easier.

Figure 4. Extent of utilization of instructional materials in teaching mathematics



4.3 Challenges of using instructional materials in Mathematics teaching

Object two of the study aimed at assessing the challenges of using instructional materials in Mathematics teaching in selected primary schools of Lunyo Sub County, Busia District. The findings were summarized in Table 7 below;

Table 7: Challenges of using instructional materials to teach Mathematics

Challenge	Frequency	Percentage
Wide syllabus and pressure to cover	18	16.6%
pupils' negative attitude towards mathematics	15	13.9%
Limited funding by government to buy instructional materials	30	27.8%
Poor infrastructure at schools for safety of the instructional materials	08	7.4%
Lack of enough teacher motivation	37	34.3%
Average percentage	**108**	**100%**

Source: Primary data, 2024

From these findings, the key challenges facing teachers in utilizing instructional resources in designing activities for teaching mathematics were; i) Lack of enough teacher motivation as agreed by 34.4% of the respondents ii) Limited funding by government to buy instructional materials as asserted by 27.8% of the respondents iii) Wide syllabus and pressure to cover it as suggested by 16.6% of the respondents iv) pupils' negative attitude towards mathematics as suggested by 13.9%n of the respondents while 7.4% of the respondents argued that Poor infrastructure at schools for safety of the instructional materials also pose a great challenge in the use of instructional materials for mathematics lessons.

The findings resonate with Wasiche, (2006), who argued that teachers' heavy work load affect a teacher's preparation especially in the use of teaching resources and may prevent a teacher from helping learners perform better in mathematics.

The researcher also observed that many schools in Lunyo Sub County have big classes that seem to make it difficult for the teachers to get enough instructional materials to support their teaching. The Lack of access to electricity in some of the schools also was observed as a great challenge to the use of instructional materials especially those that require power for example computers. However, mathematics teachers have to know how to use available and limited teaching/learning resources in the classroom and outside the classroom. They have to use their innovative skills to improvise instructional materials. Mathematics teachers can change students' negative attitude

towards mathematics by using instructional media to cater for different moments such as to start or conclude lessons, to illustrate a point and to extend a lesson.

4.4 Possible solutions to the challenges facing teachers in utilizing instructional resources in teaching mathematics

Object three of the study aimed at suggesting possible mitigation measures of addressing the challenges in the use of instructional materials in mathematics teaching. Findings indicate that;
There is need for a policy by the Ministry of Education to regulate class size in public primary schools to a more manageable size. Schools should also enroll students in relation to available facilities and resources.

More mathematics teachers should be employed in schools to curb the problem of heavy work load and also to cope with increased enrollment in schools. This will allow more time for teachers to plan and develop instructional materials.

Government should avail the necessary instructional resources required for teaching mathematics by setting aside mathematics rooms and regularly equipping them with appropriate and relevant mathematical equipment's.

Mathematics teachers should regularly go for in-service training to upgrade their skills on the use of instructional resources in teaching mathematics. This will help them learn how to change the negative attitude of students to mathematics which in turn improves the performance of students in Mathematics.

Mathematics teachers should always try to improvise instructional resources. This enhances students" understanding of mathematical concepts. Mathematics teachers should be trained on integration of ICT as a modern tool in teaching and learning. This will reduce the effort devoted to tedious computations and increase students focus on more mathematical activities. ICT will also make mathematics more interesting to the students and eventually lead to good performance in the subject. The need for training resonates well with the Report of Parliamentary Committee on Education, 2022, that highlighted the need for quality teachers in an effort to improve

performance. The report noted that the qualitative improvement of education can only occur if there is a major improvement in the quality of teachers and teacher training.

Kathuri (2006) point to a general agreement that the qualification of teachers is of crucial importance in students' performance in mathematics. Teacher training should therefore stress quality and effective mathematics instruction which should be stressed further through in-service training.

Government needs to improve the teachers' conditions of service through enhancing their wages, providing free accommodation as a way of motivating them. This will boost their concentration on material production and creativity.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The primary objective of this was to examine the use of instructional materials in Mathematics teaching in selected primary schools of Lunyo Sub County, Busia District. The study was guided by the following objectives: to determine the extent to which instructional materials are used in Mathematics teaching in selected primary schools of Lunyo Sub County, Iganga District, to assess the challenges of using instructional materials in Mathematics teaching in selected primary schools of Lunyo Sub County, Busia District and to suggest possible mitigation measures of addressing the challenges in the use of instructional materials in mathematics teaching. The study adopted a cross sectional research design for data collection over a short and fixed period of time. Both qualitative and quantitative approaches were employed. Data was collected using a questionnaire guide, interview guides on addition to the researcher's observation guide.

5.1 Summary of Findings

The following is a summary of the findings based on the general research questions of the study;

51.1 Extent to which instructional materials are used in Mathematics teaching

The study found out that mathematics instructional materials are moderately used as asserted by 51.8%. of the respondents. Only 23.2% confirmed that they were used to a large extent, while 8.3% of the responded said that the instructional materials are used to a small extent. The researcher' Observations indicate that there is limited use of some instructional resources like models, pictures charts and diagrams. Very few teachers use locally available materials in instruction. Audio visual aids were not used at all during mathematics lessons yet if used can go a long way in increasing permanence of learning on addition to making the job of teaching easier

5.1.2 Challenges facing teachers in utilizing instructional materials in teaching mathematics

The study revealed the following key challenges facing teachers in utilizing instructional materials in designing activities for teaching mathematics; Lack of enough teacher motivation as agreed by 34.4% of the respondents, Limited funding by government to buy instructional

materials as asserted by 27.8% of the respondents, Wide syllabus and pressure to cover it as suggested by 16.6% of the respondents, pupils' negative attitude towards mathematics as subject as suggested by 13.9%n of the respondents while 7.4% of the respondents argued that Poor infrastructure at schools for safety of the instructional materials also pose a great challenge in the use of instructional materials for mathematics lessons. The Lack of access to electricity in some of the schools also was observed as a great challenge to the use of instructional materials especially those that require power for example computers

5.1.3 Possible mitigation measures of addressing the challenges in the use of instructional materials in mathematics teaching

In regard to the possible mitigation measures of addressing the challenges in the use of instructional materials in mathematics teaching Findings indicate that there is need for a policy by the Ministry of Education to regulate class size in public primary schools to a more manageable size. Schools should also enroll students in relation to available facilities and resources. More mathematics teachers should be employed in schools to curb the problem of heavy work load and also to cope with increased enrollment in schools. This will allow more time for teachers to plan and develop instructional materials. Government should avail the necessary instructional resources required for teaching mathematics by setting aside mathematics rooms and regularly equipping them with appropriate and relevant mathematical equipment's. Mathematics teachers should regularly go for in-service training to upgrade their skills on the use of instructional resources in teaching mathematics. This will help them learn how to change the negative attitude of students to mathematics which in turn improves the performance of students in Mathematics.

Mathematics teachers should always try to improvise instructional resources. This enhances students‟ understanding of mathematical concepts. Mathematics teachers should also be trained on integration of ICT as a modern tool in teaching and learning. This will reduce the effort devoted to tedious computations and increase students focus on more mathematical activities

5.2 Suggestions for Further Research

This study was carried out in selected primary schools of Lunyo Sub County, Busia District. The researcher recommends that;

i) A similar study in private primary schools in other sub counties in Iganga District.

ii) Research in ICT integration in teaching and learning of mathematics and its challenges.

5.3 Conclusion

From the findings of the study, it was concluded that instructional materials are moderately used during the teaching of mathematics, many challenges are faced in utilizing instructional materials for teaching mathematics which include; Lack of enough teacher motivation Limited funding by government to buy instructional materials, Wide mathematics syllabus, pupils' negative attitude towards mathematics as subject, Poor infrastructure at schools for safety of the instructional materials as well as the lack of access to electricity in some of the schools.

The possible mitigation measures of addressing the challenges in the use of instructional materials in mathematics teaching included; regulating the sizes of the class primary schools to a more manageable one. Recruitment of more Mathematics teachers in schools to curb the problem of heavy work load. Provision of necessary instructional resources required for teaching mathematics by government. In-service training by teachers to upgrade their skills on the use of instructional resources in teaching mathematics and teachers training on integration of ICT as a modern tool in teaching and learning.

5.4 Recommendations

The study recommends the following**;**

i) A policy by the Ministry of Education to regulate class size in public primary schools to a more manageable one.
ii) Enrollment of students in schools should be in relation to available facilities and resources.
iii) Employment of more Mathematics teachers in schools to curb the problem of heavy work load and also to cope with increased enrollment in schools.
iv) Government should avail the necessary instructional resources required for teaching mathematics to schools.
v) In-service training for teachers to upgrade their skills on the use of instructional resources in teaching mathematics.

5.5 Areas for further research

After executing this study, it is recommended that in future, research should be conducted to establish the effect of teacher's quality on the teaching and performance of Mathematics in Ugandan Primary schools.

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Appendix A:

QUESTIONNAIRES TO HEAD TEACHERS

Dear sir/Madam,

I, **Bwire David Odongo,** a student of Busitema University is carrying a research on the topic, **"THE USE OF INSTRUCTIONAL MATERIALS AND PUPILS' ACADEMIC PERFORMANCE IN MATHEMATICS IN SELECTED PRIMARY SCHOOLS OF LUNYO SUBCOUNTY, BUSIA DISTRICT**."

The answers you give are purely for academic purpose and the information given will be treated with utmost confidentiality. Kindly tick where applicable.

A. BIO -DATA INFORMATION

1. Sex Male ☐ Female ☐
2. Age 15-20 ☐ 21-25 ☐ 26-30 ☐ Above 36 ☐
3. education ☐

l .Primary 2.Secondary ☐ .Tertiary ☐ 4. University ☐

4. Do the teachers use instructional materials in class?

1 Yes ☐ 2. No ☐

5. Are the instructional materials relevant in classroom teaching? Yes ☐ No ☐

6b. If yes, how are they relevant? ……..

……

6. How do you rate the general performance of pupils in class where instructional materials are used?

1. Very good 2. Good 3. Fair 4.poor

7. What is the attitude of pupils towards instructional materials in your school?

1. Good 2. Bad

Section B. The Extent Instructional Materials Are Used In Mathematics Teaching

1. How often do your teachers use textbooks for teaching mathematics in this school?.....

.....

2. Do teachers access manipulative (e.g., base-ten blocks, fraction bars) for teaching mathematics?

……
……

3. Do teachers use Supplementary materials (e.g., posters, charts, diagrams) during mathematical lessons?

……
……

4. How often do teachers incorporate technology tools (e.g., calculators, computers, educational software) during mathematics teaching?

……
……

5. How frequently do teachers use models during mathematics teaching?

……
……

Section C: The Challenges of Using Instructional Materials in Mathematics Teaching

1. Do you agree that financial constraints hinder the use of instructional materials in your school?

……
……

2, Apart from financial constraints, what other challenges face the use of instructional materials in mathematics teaching

……

……

……..

Section D. **Mitigation measures to address the challenges related to the use of Instructional Materials in Mathematics teaching**

1. Do you think improvising can help to address the challenges in the use of instructional materials in Mathematics teaching?

……
……

2. How else can the challenges in the use of instructional materials for mathematics teaching be addressed.

   ……
   ……
   ……
   ……
   ……
   ……

Appendix B:

QUESTIONNAIRES TO TEACHERS

Dear sir/Madam,

I, **Bwire David Odongo,** a student of Busitema University is carrying a research on the topic, **"THE USE OF INSTRUCTIONAL MATERIALS AND PUPILS' ACADEMIC PERFORMANCE IN MATHEMATICS IN SELECTED PRIMARY SCHOOLS OF LUNYO SUBCOUNTY, BUSIA DISTRICT**."

The answers you give are purely for academic purpose and the information given will be treated with utmost confidentiality. Kindly tick where applicable.

A. BIO -DATA INFORMATION

1. Sex Male ☐ Female ☐

2. Age 15-20 ☐ 21-25 ☐ 26-30 ☐ Above 36 ☐

3. Education level

l .Primary 2.Secondary ☐ 3.Tertiary ☐ 4. University

4. Do you use instructional materials in class?

Yes ☐ No ☐

5. Are the instructional materials relevant in classroom teaching? Yes ☐ ☐

. If yes, how are they relevant? ……..

……

……

……

6. How do you rate the general performance of pupils in class where instructional materials are used?

1. Very good 2. Good 3. Fair 4.poor

7. What are some of the instructional materials available at your school?

l…… 2……

3. ……. 3. ……

Section B. The Extent Instructional Materials Are Used In Mathematics Teaching

6. How often do your teachers use textbooks for teaching mathematics in this school?.....
   .....
7. Do teachers access manipulative (e.g., base-ten blocks, fraction bars) for teaching mathematics?

   ……
   ……

8. Do teachers use Supplementary materials (e.g., posters, charts, diagrams) during mathematical lessons?

   ……
   ……

9. How often do teachers incorporate technology tools (e.g., calculators, computers, educational software) during mathematics teaching?

……
…….....

10. How frequently do teachers use models during mathematics teaching?

    ……
    ……

Section C: The Challenges of Using Instructional Materials in Mathematics Teaching

2. Do you agree that financial constraints hinder the use of instructional materials in your school?

……
……..

2, Apart from financial constraints, what other challenges face the use of instructional materials in mathematics teaching

……

……

……..

Section D. **Mitigation Measures To Address The Challenges Related To The Use Of Instructional Materials In Mathematics Teaching**

8. Do you think improvising can help to address the challenges in the use of instructional materials in Mathematics teaching

……
……

9. How else can the challenges in the use of instructional materials for mathematics teaching be addressed.

……
……
……
……

APPENDIX C

OBSERVATION CHECKLIST

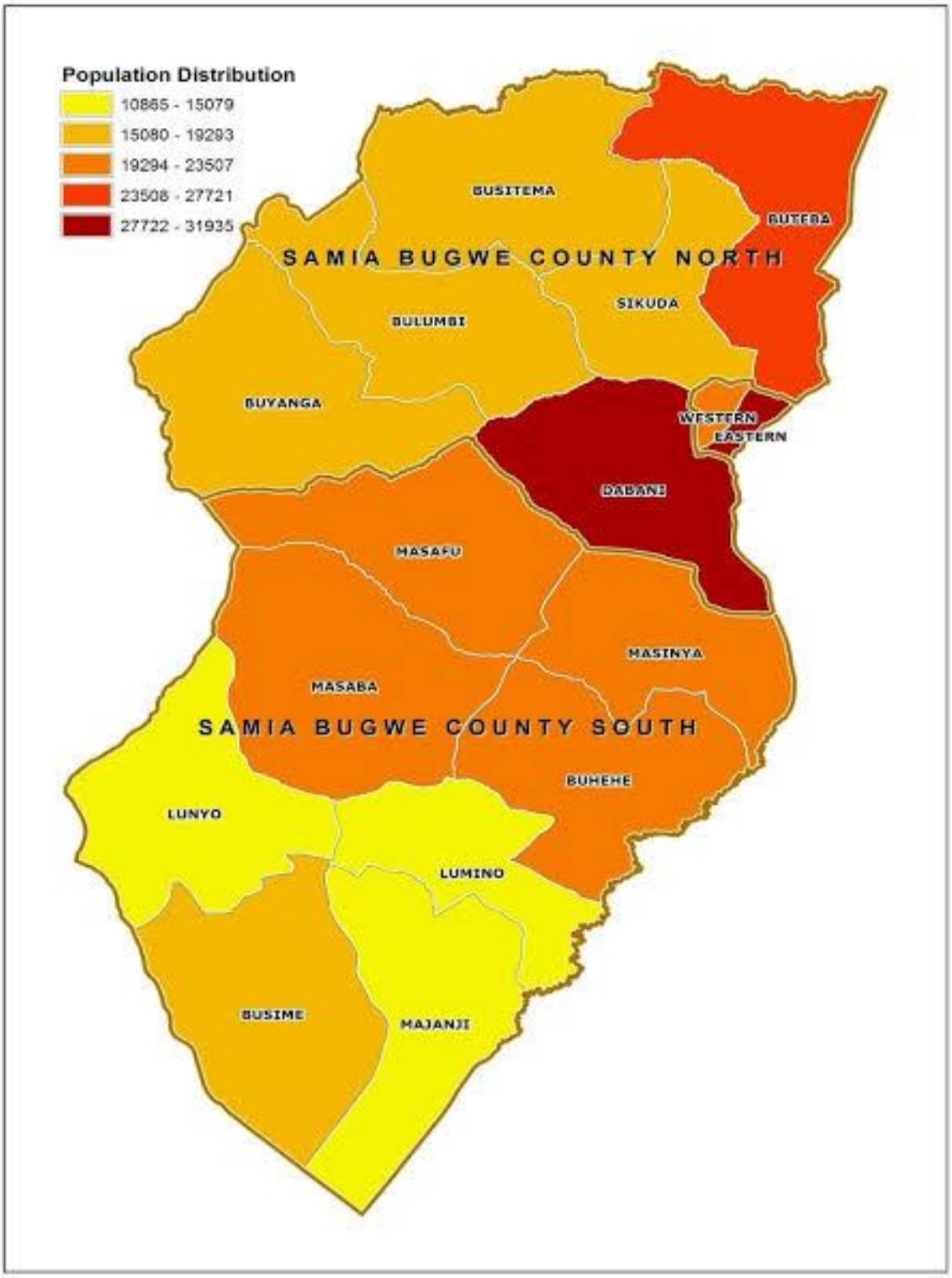
1. The teacher uses real objects
2. The teacher uses charts
3. The teacher uses audio-visual materials
4. The teacher uses text books
5. The challenges faced during the teaching of mathematics
6. A conducive class room with mathematics instructional materials displayed

APPENDIX D

A MAP OF BUKEDI SUB REGION SHOWING THE LOCATION OF BUSIA DISTRICT

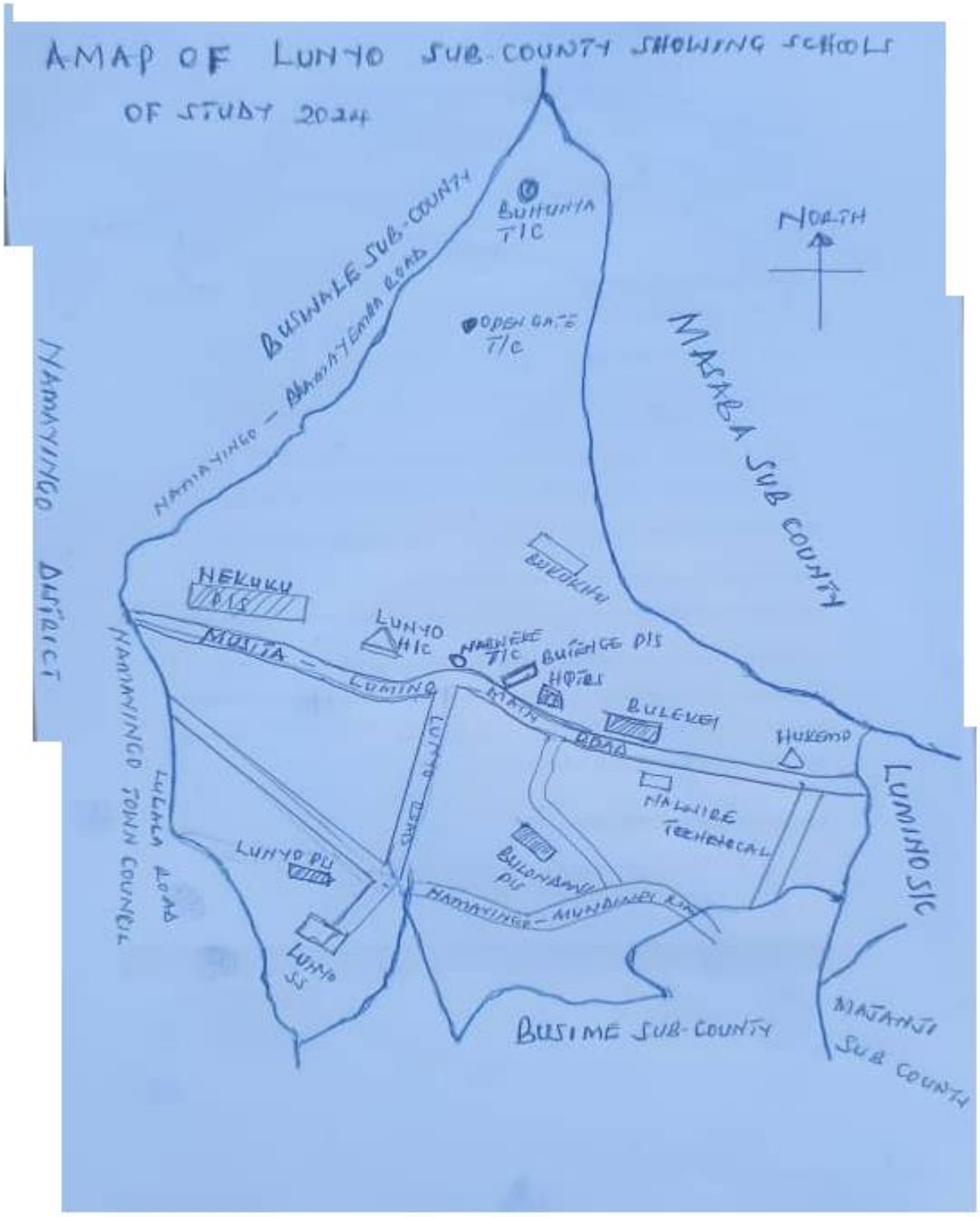
APPENDIX E

A MAP OF BUSIA DISTRICT SHOWING THE LOCATION OF LUNYO SUBCOUNTY



APPENDIX F

A SKETCH MAP O F LUNYO SUBCOUNTY SHOWING THE LOCATION OF SAMPLED SCHOOLS



APPENDIX G

TIME FRAME FOR THE RESEARCH PROJECT

S/N	Research phase	Mission	Time frame
1	Introduction	Meeting with a supervisor for initial guidelines	15th February, 2024
2	Background and literature review of the study	Building a background to the study Conducting a comprehensive review of relevant related literature. Refining research questions Developing theoretical framework	15th – 30th March, 2024
3	Research design plan	Developing a research design Designing questionnaires Identifying online and offline channels for recruiting participants. Finalizing with sampling and data analysis methods.	April, 2024
4	Submission of a research proposal	Approval of a research proposal and getting permission for data collection	May, 2024
5	Data collection	Pre-testing of questionnaires Recruiting participants Conducting interviews with selected participants. Transcribing and coding interviews and cleaning survey data.	June, 2024
6	Data analysis	Statistical analysis of survey data. Holding thematic analysis of questionnaire	July, 2024

		scripts. Drafting results and discussion chapters.	
7	Research report writing	Completing a full thesis draft. Meeting a supervisor for feedback discussion and revisions.	August, 2024
8	Revision	Drafting based on feedback Getting supervisor's approval for final draft. Proof reading. Printing, binding and submitting the dissertation.	September, 2024

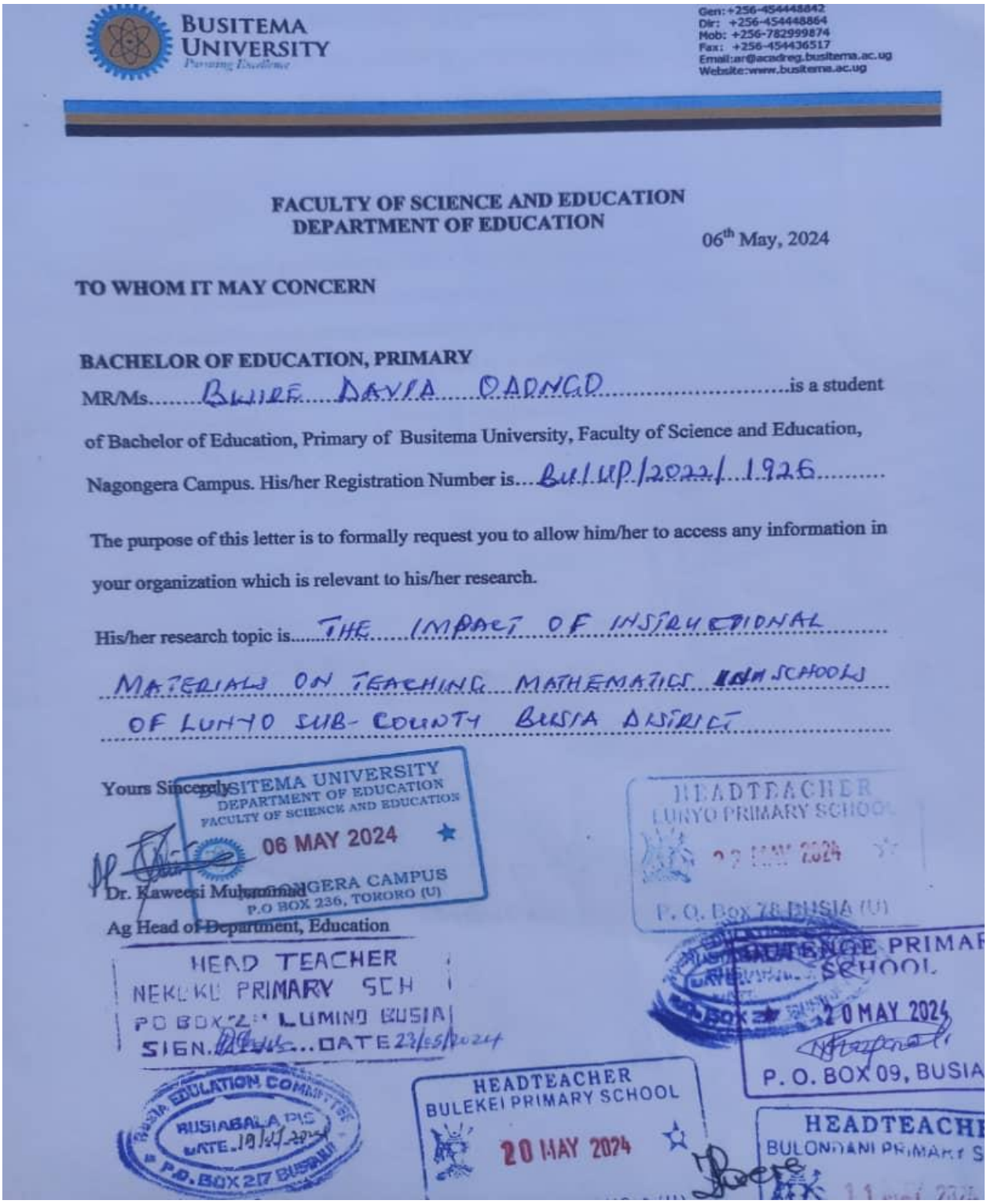
APPENDIX H

PROPOSED BUDGET FOR THE RESEARCH PROJECT

ITEM/ACTIVITY	COST ESTIMATES
Travel	240,000
Materials to use	150,000
Technical assistance	80,000
Secretarial and stationery services	180,000
Field work and data collection expenses	200,000
Telecommunications and internet costs	110,000
Statistical data analysis costs	50,000
Final report production costs	130,000
TOTAL COST	**1,140,000**

APPENDIX I

INTRODUCTORY LETTER



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FACULTY OF SCIENCE AND EDUCATION
DEPARTMENT OF EDUCATION

06th May, 2024

TO WHOM IT MAY CONCERN

BACHELOR OF EDUCATION, PRIMARY

MR/Ms.....BWIRE DAVIA OADNGD.....is a student of Bachelor of Education, Primary of Busitema University, Faculty of Science and Education, Nagongera Campus. His/her Registration Number is...BU1/UP/2022/1926.....

The purpose of this letter is to formally request you to allow him/her to access any information in your organization which is relevant to his/her research.

His/her research topic is.....THE IMPACT OF INSTRUCTIONAL MATERIALS ON TEACHING MATHEMATICS IN SCHOOLS OF LUHYO SUB-COUNTY BUSIA DISTRICT.....

Yours Sincerely,

Dr. Kaweesi Muhammad
Ag Head of Department, Education

BUSITEMA UNIVERSITY
DEPARTMENT OF EDUCATION
FACULTY OF SCIENCE AND EDUCATION
06 MAY 2024
NAGONGERA CAMPUS
P.O BOX 236, TORORO (U)

HEADTEACHER
LUHYO PRIMARY SCHOOL
P. O. Box 78 BUSIA (U)

HEAD TEACHER
NEKEKE PRIMARY SCH
PO BOX 27 LUMINO BUSIA
SIGN. ..... DATE 23/05/2024

BUSIA EDUCATION COMMITTEE
BUSIABALA DIS
DATE 19/4/2024
P.O.BOX 27 BUSIABALA

HEADTEACHER
BULEKEI PRIMARY SCHOOL
20 MAY 2024

SCHOOL
20 MAY 2024
P. O. BOX 09, BUSIA

HEADTEACHE
BULONDANI PRIMARY S