QUALITY TEACHING OF LITERACY AND NUMERACY IN SELECTED PRIMARY SCHOOLS IN KONGWA DISTRICT TANZANIA

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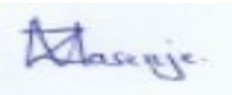
ABSTRACT

The study intended to investigate Quality teaching of literacy and numeracy in Selected Primary Schools in Kongwa District. It examined all the factors that contribute to pupils' inadequate literacy and numeracy skills. Explicitly, the study focused on; identifying the techniques used by Teachers in teaching literacy and numeracy, examining strategies for Teachers in teaching literacy and numeracy and identifying the challenges that Teachers face in teaching literacy and numeracy. Participants (N= 31) in the study included: 1 District Education Officer, 3 Head Teachers which were selected through census inquiry as well as 27 Teachers were selected through simple random sampling. Instruments for Data collection adopted were the questionnaire, observation, and the interview guides. Qualitative data were analyzed using the verbatim method where direct quotes relevant to the study objectives were captured from data set while Quantitative Data were entered into SPSS version 23 and then ran tallies which generated percentages, frequencies, mean and standard deviation. The results were analyzed thematically and presented Verbatively. The study findings suggested that there were literacy and numeracy issues in these particular Primary Schools since most of the Teachers lacked the skills needed to impart these abilities where by 61.3% of the Teachers never used the brainstorming technique, 64.5% of the Teachers never used cooperative learning to teach literacy and numeracy, (77.4%) of the Teachers never used remedial teaching, 64.5% of the Teachers never used a talking class. Furthermore (71%) of the Teachers expressed interest in being retrained to teach literacy and numeracy, 93.3% of the Teachers agreed that there was no developed pedagogy to enable the proper teaching of literacy and numeracy, and 80.1% of the Teachers said mixing Learners with special needs was affecting the teaching. Also the study recommends retraining of Teachers, separating Learners with special needs from the normal Learners, building more infrastructures to solve the high population of Learners, and increasing Parental involvement in the education of their Children.

DECLARATION

I**,** Zilpa Gaceford Masenje (RM21M06/002) certify that the work included in this Dissertation is original and has never been presented for awards to any Academic or Higher Education Institution.

Signature: 

Date: 24th May 2024

DEDICATION

This work is dedicated to my lovely mom, my lovely son Ricardo Mhagama, and my young brothers Gift Masenje and Emmanuel Masenje.

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I truly appreciate God's providence in keeping me well throughout my academic career, for which I am eternally grateful. I would like to say thanks to my supervisor Dr. Muweesi Charles, and other lecturers who taught me especially Dr. Masagazi Joel Yawe, Dr. Mary Kagoire Mr Patrick Lugemwa, Prof. Andrew David Omona, Mrs Bernadette Babishangire, Dr Sozzi Samuel Kafuma, Madam Prim K. Tumuramye, Dr. Stella Ameri Eduan, Dr. Eduan Wilson, Mr. Mwaseba Gordon, Rev Jasper Tumuhimbise and the Department of Education at Uganda Christian University for the encouragement they gave me to carry out the research and the guidance they gave me through their study guides, books and professional guidance. Their advice is highly appreciated.

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All of the individuals mentioned here make me happy and proud. I wish you all of God's blessings. I also pray that I will always be able to use my talents to help others in order to return the favors that have been shown to me.

APPROVAL

This is to certify that this Dissertation titled: **"Quality Teaching of Literacy and Numeracy in Selected Primary Schools in Kongwa District"** has been submitted with my approval as the candidate's supervisor.

DR. MUWEESI CHARLES, Ph.D

Signature: 

Date: 27th May 2024

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LIST OF ACRONYMS

MoEST	Ministry of Education, Science and Technology
MoEVT	Ministry of Education and Vocational Training
NECTA	National Examinations Council of Tanzania
SACMEQ	Southern and Eastern African Consortium for Monitoring Educational Quality
STEM	Science, Technology, Engineering and Mathematics
ESDP	Education Sector Development Plans
DEOs	District Educational Officers
HTs	Head Teachers
UWaWa	Ushirikiano Wa Walimu na Wazazi (Cooperation of Teachers and Parents)
CPD	Continuous Professional Development
MEWAKA	Mafunzo Endelevu ya Walimu Walioko Kazini (The Continuous Training of Teachers at Work.
TCPD	Teachers Continuous Professional Development

CHAPTER ONE

GENERAL INTRODUCTION

1.0 Introduction

This chapter focused on several parts which pave a way for a successful study to be conducted. It presents background to the study, statement of the problem, purpose and objectives of the study and research questions. Moreover, it explains justification, significance of the study, scope of the study, and conceptual framework.

1.1 Background to the Study

According to the Windisch, H. C. (2015), literacy and numeracy are two fundamental skills for success in life and the modern global economy. Every child has to be literate and numerate because it is essential to their participation in school, their capacity to develop to their full potential, and their ability to contribute fully to society. The development of more complex abilities is supported by literacy and numeracy, (Tout, D. 2020). Tanzania has significantly increased the number of children registered in primary school, although the majority of children do not achieve competency in the early grades; for instance, just one in five (1/5) students in Grade 3 can read at the Grade 2 level, (Busingye, J. & Najjuma, R. 2015). Sifuna, D. N. (2007). asserts that since Tanzania gained political independence from the British in the 1960s, increasing access to basic education has been a priority for a number of stakeholders. The number of pupils enrolling in grade one (1) grew after the Universal Primary Education (henceforth UPE) policy was implemented in the 1970s. This was greatly facilitated by the nation's villagization program, which required the establishment of at least one elementary school in each village (for rural areas) and street (for urban areas), (Ndijuye, L. G & Rao, N. 2018). The United Republic of

Tanzania's government began creating various educational methods known as Education Sector Development Plans (ESDP) for five years in 1997. These plans aimed to give all people the chance to learn fundamental literacy and numeracy skills so as to improve their contributions in the society they live (Fute, A., Wan, X. L., Oubibi, M., & Bulugu, J. B. 2023). Alcock, K.S. (2000) asserts that inadequate literacy and numeracy skills have affected Tanzania's primary school system and continue to do so. This implies that most schools especially government schools experience this problem. According to Mrutu, A. Ponera,G and Nkumbi, E .(2005) analysis of the Southern and Eastern African Consortium Education Quality (henceforth SACMEQ nations, indicated that Tanzania had one of the lowest rates of primary school literacy and numeracy. Students are still illiterate and innumerate despite the fact that the subjects are taught in all schools and that efforts to handle the issue are supported by the international community. On January 24 and 25, 2022, the National Examination Council of Tanzania (NECTA) administered a literacy and numeracy evaluation to Standard 2 students with the intention of determining the students' proficiency in those skills (literacy and numeracy). For each set of skills, the students' competencies were evaluated based on different concepts. For instance, the student's literacy skills were evaluated based on their capacity to read a given passage quickly and effectively as well as respond to the comprehension-testing questions. Also, pictures were used to recognize the words written in capital and small letters. In numeracy skills, the pupils' competency was assessed based on the ability to identify the missing numbers in the sequence, add or subtract numbers that do not exceed 999, and solve word difficulties. This assessment involved twenty-six (26) Regions of Tanzania Mainland including Dodoma, Arusha, Katavi, Mbeya, Mwanza, Njombe, and Mara, just to mention a total of 186 District Councils. The results show that, in reading skills, the analysis of pupils' responses indicates that 33.16% had a

weak performance. In writing skills, the analysis shows that 37.79% of the pupils had weak performance whereas, in numeracy skills, the performance was weak 60.72% in identifying the missing numbers subtask (Kigwilu, P. C., & Mokoro, D. K. 2022). Children can learn fundamental life skills that are satisfactory and of high quality if they receive the full support and guidance of dedicated and qualified instructors. To be able to convey knowledge, skills, and attitudes to students, a teacher must grow technically and intellectually (Horton, F. W. 2008). A variety of policies have been formed by the Tanzanian government, such as the 2014 education and training policy, which emphasizes the value of Teachers' career development. It strives to raise the value of education and training by improving in-service Teacher training programs and offering teaching and learning resources (Masamba, E. M. 2023). However, the Ministry of Education Science and Technology (MoEST) in 2020 mandated all grade (A) instructors to upgrade their academic levels. The aim is to improve their ability to instruct students in literacy and numeracy, Teachers must pursue additional education, nevertheless the majority of Tanzanian Regions, including Dodoma Region, particularly in Kongwa District, seems to have low levels of children's literacy and numeracy abilities.

1.1.2 The Development of Literacy and Numeracy

Globally, children with fundamental literacy and numeracy skills contribute successfully in future learning (UNESCO, 2015). The schools that focus on reading, writing, and arithmetic abilities, literacy and numeracy are seen as the cornerstones of essential skills-oriented education program. In the United States, literacy and numeracy were implemented in the 1980s. The relative difficulty of reading and math activities was shown to be largely a function of the cognitive demands of the task rather than the text or operation being completed. These advanced the idea that literacy and numeracy abilities were continuum rather than dichotomies (Gal, I. Grotlüschen,

A., Tout, D., & Kaiser, G. 2020). Understanding literacy and numeracy is a common issue in most primary schools around the globe. Some students complete their primary education but still struggle to comprehend literacy and numeracy, making it difficult for them to participate in society effectively. Children who do not acquire reading skills early enough frequently struggle in school or on the job market (Magnusson, P. 2020). While nations and the global community work together to combat the epidemic, learning should continue for every child, adolescents, and adults. According to Hayes, J. D. Flanagan, J. U. & Jowsey, I. R. (2005) argued that the basic skills of literacy and numeracy in America have evolved into the "hard skills" of fundamental mathematics, problem-solving, advanced reading, as well as the "soft skills" of working well in groups, crafting persuasive oral, written presentations, and effectively using computers. Sub-Saharan African nations continued to have the lowest rates of literacy in the entire world. Conflicts that disrupted education caused literacy and numeracy rates to plummet recently in some areas; the low rate of 35% in 2018 fell to only 31% in 2020. Together with South Sudan's rate of 35% and Afghanistan's rate of 37%, this is the lowest rate in the world. In general, Sub-Saharan Africa's literacy and numeracy rate was 66% in 2020 (UNESCO 2020). According to the World Bank (2020), Africa still has the worst rates of illiteracy and innumeracy compared to other continents, with thirty-seven (37) percent of males and fifty-six (56) percent of women having these skills. Several steps have been made in East Africa to widen access to primary education. According to The UN Special Reporter on the Right to Education (UNSR report 2020) children in Uganda are exposed to a variety of learning settings, they struggle with literacy and numeracy. This is especially true for children who attend rural schools, where there are often shortages of instructors and instructional materials. In Tanzania, Kumburu, S. (2011) maintains that this country confronts the same difficulties. In 2009, the Tanzanian government began to

give reading, writing, and arithmetic abilities improvement a great deal of attention. On the other hand, the 2010 evaluation of reading proficiency reveals that the reading skills of young students were extremely subpar. Tanzania divides primary schooling into two phases. The lower primary education lasts for four years that is from classes 1 through 4 whereas the upper primary lasts for three years, from classes 5 through 7. In the prior one, it was found that the majority of learners lacked the fundamental literacy and numeracy abilities that would have enabled them to listen, speak, read, write, and perform simple math. Numerous studies conducted in Tanzania reveal that the majority of students finish their primary education standard (1) to standard seven (7) without or with insufficient numeracy and literacy abilities (Ndijue, L.G., and Rao, N. 2020; NECTA, 2020; Sumra, S. & Katabaro, J. 2015). UWEZO (2021), argued that literacy and numeracy is a very serious issue because fifty (50%) percent of standard seven students cannot read a standard two English textbook, twenty-four (24) percent cannot read a standard two Kiswahili textbook, and fifty-six (56) percent of standard three students are unable solve a standard two arithmetic problems. According to the Standard Seven National Examination results, some students finished without having the necessary reading, writing, and math abilities, (Twaweza, 2014 and Uwezo 2013). According to The Ministry of Education, Science and Technology (MoEST, 2017), stated that Tanzania's education system faces a major challenge due to the country's poor learning outcomes, which are demonstrated by the low pass rate for the basic education national test and the low literacy and numeracy levels of the students who take part in it. In this digital age, it has become clear that a lot of kids at the end of Standard I and II were not capable to comprehend the necessary literacy and numeracy skills. Poor reading and writing skills have negative effects not only an individual's well-being but also the nation as a whole, particularly in the digital age (Greene, J. 2000).

1.1.3 Contextual background

Since 1948, learning fundamental skills like reading and writing has been seen as an essential human right, nevertheless one of society's biggest problems continues to be the continuation of illiteracy and innumeracy (Moretti, S, & Frandell, T. 2013). Literacy and numeracy are an integral part of everyday life at home and in the community (Rickleuman, RJ. and Henk, WA. 1991). According to Ndijuye, L.G. & Rao, N. 2018; NECTA, 2020; RTI, 2014; Sumra, S. & Katabaro, J. 2015; UIS, 2021; Uwezo, 2015 stated that majority of pupils were reportedly leaving primary school without knowing how to use basic math concepts and some of these semi-illiterate children went on to enroll in secondary schools. Due to their difficulties in secondary school and lack of literacy and numeracy, students often opt to drop out. Students must learn the fundamentals of basic literacy and numeracy skills in order to succeed in education. Individuals run the risk of being unable to completely contribute in society, and society as a whole runs the risk of having worse outcomes. A solid basis in literacy and numeracy is crucial for every child and adolescent because it promotes their capacity to participate fully in learning, develop their potential, and make contributions to society. Additionally, it establishes a positive feedback loop that benefits qualities like the capacity for critical thought and experimentation, which all help people to become more proficient in reading and math, as well as the capacity to look after one's health and wellbeing, participate in the workforce, and have a positive impact on a democratic society. The degree of language and arithmetic proficiency required of children and adolescents must continually increase. Therefore, due to the importance of literacy and numeracy, the researcher decided to investigate quality teaching of literacy and numeracy in selected primary schools in Kongwa District.

1.1.4 Conceptual background

Teaching

Edmund, A. (1967) explains that teaching involves classroom talk between the teacher and students and it takes place during specific defined activities. Actions made with the purpose of facilitating another person's learning are referred to as teaching as normative behavior. (Green, TF. 1968) stated that it is typical to refer to an act as teaching when a person transfers knowledge or abilities to another. Teaching can refer to imparting knowledge or sharing experiences, such as a lecture. Without instruction, pupils will struggle to communicate and fully engage in society because they will not understand literacy and numeracy. It is believed that education requires either art or science. It emphasizes the teacher's capacity for creativity and artistic expression in order to establish a beneficial learning environment in the classroom. It makes clear the logical, mechanical, or procedural steps that must be performed for goals to be efficiently accomplished as a science.

Quality teaching

According to Nelsen, D., & Daniels, S. E. (2007), said that a product's or service's quality refers to its attribute that have an impact on its capacity to meet explicit or implicit demands. The qualifications that a teacher possesses for instructing students are correlated with quality teaching. This idea comes up frequently when people debate whether or not all pupils have been taught by instructors who are licensed to practice in the professions they are teaching. In discussions on whether the teaching profession has to be opened up for simple access, it is also a topic of discussion (Cochran-Smith, M,. & Fries, M.K. 2001; Darling-Hammond, L. 2000). From the standpoint of cognitive resources, effective teaching is predicated on the knowledge, abilities,

and dispositions of instructors (Ball, D.L., Wang, J., Lin, E., Spalding, E., Klecka, C. L., & Odell, S. J. (2011). Promoting student self-control and critical thinking in a teacher's pedagogical strategies is a sign of quality teaching. Gaining students' self-control and learning orientation has a positive effect on their academic performance (Alton-Lee, A. 2003). It is commonly believed that effective instruction has a significant impact on students' academic achievements, if not the most significant one (Darling-Hammond, L. & Youngs, P. 2002). Furthermore, it is claimed that in order to level the playing field for marginalized groups in education and to eliminate achievement gaps, quality teaching is desperately needed but inadequate, particularly in urban school contexts (Hollins, E. R., & Guzman, M. T. 2005).

Literacy

UNESCO (2006) argued that literacy is the capacity to create, communicates, and interprets meanings for a variety of reasons and in a variety of contexts. By improving your speaking, hearing, reading, and writing abilities, you can accomplish this. The development of literacy skills does not end once a child has attained basic literacy skills; rather, it is the beginning of a journey throughout life. Having a solid foundation in literacy allows learners to continue learning. It is essential that reading skills be applicable in a range of contexts and be useful. It contains a continuum of learning in order to assist people in achieving their objectives, increasing their knowledge and potential, and actively participating in their community and greater society. Reading and writing are the two components of literacy. According to the CDSE (2016), literacy includes the knowledge and abilities kids need to access, interpret, analyze, and evaluate information as well as to make sense of it, communicate their thoughts and feelings, convey ideas and opinions connect with others, and take part in both school-related and extracurricular activities. Success in every learning area requires the capacity to use the significant, identifiable,

and distinctive literacy that is necessary for learning and representative of the subject matter of that learning area. Learners gain the ability to modify their language in order to satisfy the needs of more diverse audiences, purposes, and situations. They study how information and opinions are presented and evolved in texts in a variety of ways, as well as how abstraction and complexity can be represented in a variety of ways using language and multimodal representations. As a result, in both print and digital settings, the skills of listening, looking, reading, speaking, writing, and producing are all deliberately and simultaneously developed (Murphy, S. 2018). Everybody has a different level of knowledge. Each person's output in his existence differs as a result. Good literacy skills also translate into excellent output from individuals. On the other hand, those who are illiterate will produce subpar work (Vágvölgyi, R. 2016). Once a child has mastered fundamental literacy skills, the growth of reading skills does not stop; rather, it is the start of a journey that lasts throughout life. The ability to continue learning is granted by having a strong literacy foundation. Functional literacy skills, or those that can be applied to numerous activities in numerous contexts, are essential.

Numeracy

Numeracy is defined by Murphy, S. (2018) as the knowledge, abilities, and dispositions that students need to utilize mathematics effectively under a variety of conditions. As well as having the mindset and capacity to effectively use mathematical knowledge and competence, it necessitates being aware of and comprehending the function that mathematics plays in society. The majority of people frequently utilize mathematics in their daily lives, whether for leisure, academic study, or employment. People can better understand the natural and social worlds and how they interact by using algebra, functions and relations, logic, mathematical structure, and working mathematically, among other things. The mathematical reasoning, problem-solving,

fluency, and knowledge that students encounter are more advanced and sophisticated. Through the use of math to make quick judgments and complete activities, these abilities enable students to respond to both normal and rare circumstances. The knowledge, skills, attitudes, and behaviors needed by students to utilize mathematics in a variety of circumstances are referred to as numeracy, according to the CDSE (2016). Students must understand and comprehend the function that mathematics plays in the world in order to be able to use their mathematical knowledge and skills purposefully. Most students find it challenging to be able to count to a certain degree. The community's disinterest in studying math may be the root of this. The most crucial aspect of numeracy is mathematical abilities like addition and subtraction, but as you progress to multiplication and division calculations, the degree of difficulty rises. The quality of living is significantly impacted by numeracy impairments. Numeracy abilities are required in order to interact and conduct everyday business (Salminen, J., Khanolainen, D., Koponen, T., Torppa, M., & Lerkkanen, M. K. 2021). Not only counting is a crucial reference for academic schools' final evaluations, but it has also evolved into a skill that is necessary in daily life. People's poor math abilities can hinder an area's development. Making deals, figuring out time and distance, measuring objects, and performing basic math operations like addition, subtraction, multiplication, and division can all be made easier with the ability to count. The capacity to solve challenges can aid people in finding answers to a variety of issues (Sa'dijah, C., Purnomo, H., Abdullah, A. H., Permadi, H., Anwar, L., Cahyowati, E. T. D., & Sa'diyah, M. 2023), Additionally, numeracy enhances one's capacity for thinking (Hadi, S,. & Zaidah, A. 2021). Numeracy entails breaking down and understanding a proposition through tasks that require manipulating mathematical symbols or plain English, then articulating the statement in writing or vocally (Perdana, R., & Suswandari,, M. 2021). People who need to analyze problems' answers can

benefit from having strong thinking abilities. Literacy and numeracy are two of the most important living skills that schools try to foster. The pillars of fundamental skills-focused education programs in schools are literacy and numeracy. The skill to read, write, count, and answer problems is very important. Literacy and math levels vary greatly from person to person. People with bad literacy will produce poor results (Vágvölgyi, R.2016). How a person responds to his or her existence depends on the development of these skills. Reading proficiency can give people deeper understanding so that their reference knowledge can be used to find answers to issues. Writing proficiency can aid people in communicating their ideas. The capacity to solve challenges can aid people in finding answers to a variety of issues. Reading, writing, and mathematics are three prior literacy skills that serve as motivation for this ability (Abidin, Y.2021). In addition to being a requirement for daily life, the ability to read, write, and count has benefits for the growth of civilization as a whole (Gal, I. 2020).

1.2 Statement of the problem

Numerous studies in Tanzania reveal a severe issue with literacy and numeracy in many primary schools (Janus, H., & Keijzer, N. 2015). According to Mmasa, M. (2016) said that reading, writing, and numeracy skills are lacking in primary school in Tanzania. Soon after achieving independence in 1961, Tanzania began to emphasize the value of primary education. Various campaigns were initiated during this time to encourage adult participation in literacy and numeracy courses. The students' success on tests and exams is impacted by their low literacy and numeracy proficiency levels. Additionally, as showed by the outcomes, Tanzania's primary educational issue is linked to the country's poor learning outcomes. Although, currently, the government of Tanzania has introduced various campaigns and mottos including free education as established by the Ministry of Education, Science and Technology but the problem persists.

The pupils fail to understand literacy and numeracy as some of the students repeat the classes twice due to inadequacy in reading, writing and doing simple mathematics. Organization for Economic Co-operation and Development, hereafter referred to as OECD (2015), states that literacy and numeracy are thought to be the learners' foundation for thinking, listening, asking questions, analyzing information, and communicating with confidence. Furthermore for job preparation and application, foundational abilities like literacy and math are crucial, and employers are placing an increasing amount of value on them. Pupils who leave school before acquiring an adequate level of literacy and numeracy skills find it challenging to join the labor market. As a result, this study investigated quality teaching of literacy and numeracy in Primary Schools specifically in Kongwa District.

1.3 Purpose of the Study

The purpose of this study was to investigate quality teaching of literacy and numeracy in selected Primary Schools in Kongwa District.

1.4. Objectives of the Study

The study was guided by the following objectives: -

i) To identify the techniques used by teachers in teaching literacy and numeracy
ii) To examine strategies for teachers in teaching literacy and numeracy
iii) To identify the challenges that teachers face in teaching literacy and numeracy

1.5 Research Questions

The study was guided by the following research questions: -

i) What are the techniques used by Teachers in teaching literacy and numeracy?

ii) What are the strategies for Teachers in teaching literacy and numeracy?

iii) What are the challenges faced by Teachers in teaching literacy and numeracy?

1.6 Justification

Poor literacy and numeracy skills, according to Alcock, K.S. (2000), have been and continue to be an issue for Tanzania's primary education system. Various studies related with quality teaching of literacy and numeracy have been carried out in Tanzania in different geographical locations but insufficiency in pupils' in literacy and numeracy levels is still a problem. If the issue is not resolved right away, students will continue to lack basic literacy and numeracy skills. Furthermore in developing countries, the issue of literacy and numeracy is not as severe. People can acquire the core abilities required for success in life by learning to read, write, and do math. In addition, no study has previously looked into the quality teaching of literacy and numeracy in selected Primary Schools in the Kongwa District, according to the reviewed literature. The research investigation is still justifiable as a result. Therefore this required thorough investigation.

1.7 Significance of the Study

The research findings of this study could be of significant to the following parties:

The schools are finding ways to help pupils to understand literacy and numeracy. This study could be beneficial to educational planners, policy makers and educational managers such as DEOs, WEOs and HTs. Firstly, they could understand the importance of quality teaching of literacy and numeracy. Teachers might make strong strategies for teaching literacy and numeracy also could know the importance of using different techniques for pupils to understand quickly literacy and numeracy without forgetting.

Secondly, the finding of the study could also be significant to the parents; they might understand the importance of cooperating with teachers for the development of their children.

Thirdly, the findings of the study could be significant to the students, the study could help them to know the disadvantages of truancy and they could attend at school every day in order to understand well literacy and numeracy.

Fourthly, educational planners might understand the importance of training preprimary teachers because schools have few teachers who are teaching pre-primary and they are not qualified.

Fifthly, other stakeholders, such as non-governmental organizations (NGOs), faith-based organizations (FBOs), and community-based organizations (CBOs), might use the findings to refocus their resources and efforts on offering high-quality educational programs that are easily accessible and designed to give all pupils the skills and competencies.

Additionally, it is anticipated that this study might add to the body of knowledge already available on the issue of quality teaching of literacy and numeracy in primary schools.

Also the findings might probably cause people to reevaluate and better understand the importance of providing young students with the head start they need to succeed in the lower primary curriculum.

Lastly, the study conclusions and recommendations might help the researcher in determining any gaps that must be filled in order to develop the investigation and advance the body of knowledge. The study could bring useful insights on how to build, modify or improve the way of learning in Tanzania.

1.8 Scope of the Study

1.8.1 Geographical scope

This investigation was done in Dodoma Region particularly in Kongwa District in Tanzania, because District is among the areas that face the identified problem. Furthermore, the study was conducted in selected schools which are: Norini Primary School, Mlanje Primary School, and Mkoka Primary School in selected respondents. This helped the researcher to study and obtain accurate information from the respondents.

1.8.2 Content scope

The study was addressed the views (District Educational Officer, Teachers and Head teachers) and Parents on quality teaching of literacy and numeracy in primary school in Kongwa District. Only educators (Teachers and Head Teachers), and The District Educational Officers were involved as respondents because they are familiar with the existing situation.

1.8.3 Time scope

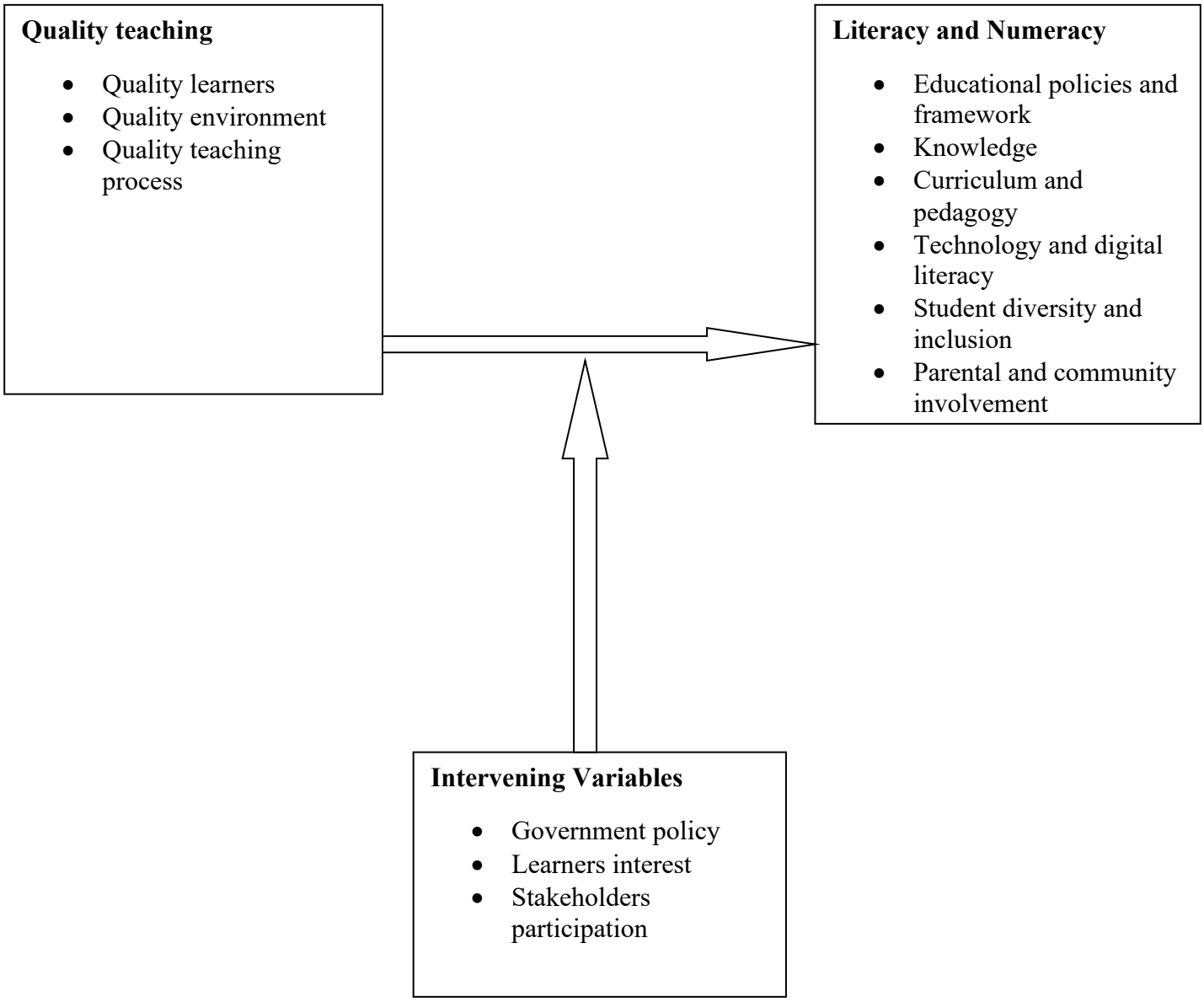
The study covered a period of two (3) years ranging from 2021 to 2024. This time is adequate to provide a thorough knowledge of quality teaching of literacy and numeracy in selected Primary Schools in the Kongwa District.

1.9 The conceptual Framework

According to Kombo, K.D. & Tromp, L.A.D. (2006); LoBiondo, G., & Haber, J. (2002); Mazaki, K. E. (2014), a conceptual framework is a tool used to assist the researcher in creating and presenting the context for studying the research problem. It also serves as a road map for understanding the relationships between and among the study's variables and communicating

those relationships. When research variables and their relationships are translated into a visual image to demonstrate the connections between and among the study variables, a conceptual framework is a diagrammatic presentation of a theory that is presented as a model (Kombo, K.D. & Tromp, L.A.D. (2006); Oso, W.Y & Onen, D. (2009). In order to accomplish the stated objectives, the study employed the conceptual framework, which is a pattern of concepts. Quality Teaching literacy and numeracy was included in the conceptual framework as the study factors. There are intervening variables as well as independent and dependent variables. The conceptual framework's diagram is shown below;

INDEPENDENT VARIABLES **DEPENDENT VARIABLES**



Source: *Self-constructed by the researcher, emphasized by (UNESCO, 2000).*

Dependent Variables

A) Education policies and framework: Education policies and frameworks that regulate curriculum development, evaluation, and instructional practices have an impact on how literacy and numeracy are taught in primary schools. For instance, there are national standards or frameworks in many nations that outline what is expected of pupils in the areas of literacy and numeracy. (NEP. 2020).

B) Knowledge: Teachers need to be subject matter experts who can communicate their knowledge in ways that are understandable to pupils. Increasing subject understanding is crucial for the students (Darling-Hammond, L. 2001). Teachers need to comprehend how research is done in a particular subject and what reasoning entails, such as what constitutes "proving" in mathematics as opposed to "proving" in history (Cohen, D. K., & Ball, D. L. 1999). In order to successfully connect new knowledge with prior knowledge and provide significant connections and foundations for ideas, teachers must possess a solid understanding of the subject matter. A teacher can give their students the foundation for real learning by choosing and utilizing instances, issues, and applications from daily life.

C) Curriculum and pedagogy: The ability to "represent that information in ways that learners will comprehend" is another quality of an effective teacher (Shulman, M. D. 1987). Therefore, the school should work to give students a solid understanding of pedagogical content as well as when and why particular teacher actions are acceptable. Objectives, instructional strategies, and evaluations must be aligned for teaching to be effective and to

support learner learning. Teachers should be able to do this (Marzano, R. J., & Kendall, J. S. 1997). The pedagogy and curriculum used in elementary schools have a big impact on how literacy is taught. To teach these abilities, teachers can employ a variety of strategies, including direct instruction, inquiry-based learning, and project-based learning. In addition to the requirements and abilities of pupils, cultural and social variables may also have an impact on the curriculum and pedagogy chosen. People think that while having a broad and deep understanding of a subject topic is crucial, it is not sufficient to guarantee good education.

D) Student diversity and inclusion: Primary school student populations are becoming more and more diverse, with students coming from a range of linguistic and cultural origins as well as having a variety of abilities and disabilities. Teachers must use methods and techniques that are considerate of the various needs of their students in order to guarantee that all students have equitable access to educational opportunities.

E) Technology and digital literacy: In order to successfully use technology in the classroom, teachers must first have a solid understanding of the subject matter, pedagogy, and the various learning styles of their students. Students must be able to integrate technology into all facets of teaching and learning. Understanding how technology pertains to pedagogy and content is necessary for effective teaching. Technology should not determine courses, according to Curry, E. A., & Burke, J. J. (1995). According to Roblyer, M. D. (2006), "technology is, above all, a channel for assisting instructors with pupil communication. However, it cannot turn bad teaching into excellent teaching; it can

only improve it. Technology-using teachers never can be a force for better education unless they are first and foremost educated, informed shapers of their craft.

F) Parental and community involvement: The success of the literacy and numeracy lessons taught in Primary Schools depends on the support of parents and communities. They can get engaged in a number of ways, such as by lending a hand in the classroom, donating supplies, or participating in the management of the school. (Carroll, S.J., & Fox, R.L., 2017 & Dittmar, K. (2021). demonstrate that parents must take an active role in promoting reading. Print motivation is the first thing parents can do to promote early reading. In this instance, it relates to activities that help children develop their reading skills, such as purchasing books for them and giving parents and children leisure time to engage in literacy-related activities (reading, writing, and counting). Phonological perception can be used for other tasks.

Independent Variables

A) A) Quality Learners (QL): The word "learner" can be used to express a person who is learning something, such as students/pupils at a school, university, college, or even inside an organization. In order to provide education services, school systems work with the students who join them, you can't build a school without learners. The type of learner that children can be is highly influenced by their lives outside of school. An excellent learner requires a variety of factors, such as good health, positive early-childhood experiences, and parental support (UNESCO,2000). A place offering educational services is a school. Children, however, are the ones who use the service. Children attend school in order to receive the best education therefore; the first step in preparing a youngster to study effectively is to ensure their health and nutrition. A healthy child has a

positive impact on their ability to learn in school, particularly in the academic sense. "Healthy progress in early childhood, particularly during their first three years of life, plays a significant role for them in order to provide their basis for a healthy life and a successful formal school experience," claim McLain, J. 1999.

B) Quality Learning Environment (QL): According to Loukas, A., & Robinson, S. (2004) "school environment" refers to the school's social, academic, and emotional surroundings as well as the character of the learning environment and how it is viewed by the community, faculty, and students. Numerous basics, including disciplinary procedures, the standard of the curriculum, and the morale of the students and teachers, have an impact on the atmosphere or climate. Physical learning environments are the settings where formal education takes place. These settings could be anything from brand-new, well-equipped buildings to outdoor meeting spaces. Despite the fact that it is challenging to measure the effect of a positive learning surroundings on learning, other scholars disagree. After taking into account the student's background, Fuller, B., Dellagnelo, L., Strath, A., Maia, M. H., Portela, A. L., & Vieira, S. L. (1999) found a correlation between the condition of school buildings and higher student achievement. Another crucial component of educational institutions is the school setting. Along with family variables, variations in school environments can impact learning outcomes (such as academic achievement) and are more amenable to modification through policy changes. According to UWEZO (2017), school circumstances include a wide range of elements, such as general infrastructure like the availability of electricity, clean water, and restrooms as well as more specialized student-focused resources like school lunch programs and textbooks.

C) Quality teaching process (QTP): Students need qualified instructors to teach them in the classroom. The best teachers are those who are best competent to aid in learning. The teacher that wins the school's best teacher award actually has their own method of assisting their kids with their academics. The academic performance of the kids could be enhanced (Worjin, M. 2017). Before beginning a lesson in class, teachers must also prepare. The purpose of the preparation is to assist and direct the instructor with regard to the activity they wish to conduct in class. According to the findings of earlier studies, teachers who prepare their lessons before starting it can aid students in learning effectively (Mullens, J. E., Murnane, R. J., & Willett, J. B. 1996). In addition, the best teachers have the most influence on the teachers' ability to deliver high-quality instruction. Next, a great teacher should assist other educators in honing their teaching techniques and gaining fresh insights into how kids learn.

Relationships between observed variables, such as independent and dependent variables are explained by intervening factors. Government policy, Learners interest, and Stakeholders participation. Therefore intervening variables demonstrate the link between independent and dependent variables.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

The section below provides a summary of the theories and the previous studies relevant to the study of quality teaching literacy and numeracy in Primary Schools and in line with the objectives of the study. A search for empirical literature using electronic databases, articles, journals, and textbooks has been done. In addition, this chapter presents the research gap.

2.1 Theoretical review

The thoughts for the research are formed on the foundation of theories. According to Kombo, D.K. - Tromp, D.L.A. (2006), a theory is a body of ideas that explain how a phenomenon develops and how it might be categorized and used. This study was guided by constructivism theory because it is more appropriate for literacy and numeracy teaching, learning, and achievement. The majority of modern learning psychology was developed using Piaget, Vygotsky, and Bruner's work from the 1980s, which is the foundation of Constructivism theory (CT) (Perry, J. L.1996). It is a psychological theory of learning that explains how structures, language, activity, and meaning-making develop as opposed to one that merely identifies the structures and phases of thought or one that isolates behaviors learned through reinforcement. It is the theory predicated on intricate models of evolution and development. Bokhari, U., Shoaib, U., Tariq, S., Khan, S. K., Syed, F., Amin, B., Ijaz, F., & Aftab, R. K. (2021) stated that learning should be based on the learner's prior knowledge. According to constructivists, children build their own understanding in a setting that supports learning rather than relying solely on teachers to impart knowledge. Teachers must adopt the transforming roles of facilitators in order to motivate

students and help them become confident learners. Constructivist theory is a highly individualized endeavor that enables the application of internalized concepts, conventions, and overarching ideas in a useful, real-world context. Every human learning process involves the use of tools, signs, and other forms of mediation, according to Jimoh, A. (2016) Members of a society might create a tool or symbol to remedy an issue, but doing so changes how they participate in the culture. The computer, the automobile and other instances are examples of tools that people in a culture create with a certain goal in mind, but after utilizing them, the culture is altered. Language is also a tool for mediation, turning the process of learning (or the creation of information) into a communal activity. Therefore, CT has two major important aspects for generation, analysis, and discussion of the findings in this study. Firstly, how the environment that is context shape pupils' learning. Secondly, the position of culture toward pupils' performances and problem solving.

2.2 Empirical Literature Review

This sub-section focused on different studies related to the objectives of this current study done by various scholars.

2.2.1 Techniques of teaching literacy and numeracy

According to Sitanggang, A. N., Pratama, D., Saragih, E., & Madina, M. (2022) stated that kids memorize information rapidly and understand it very early through play, symbols, and pictures. Children acquire a variety of skills that aid in their reading and writing, because children have different levels of understanding, it cannot be assumed that all of them will be capable to read, write, also to perform fundamental mathematics problems with ease. As a result, literacy and numeracy require effort. Different teaching techniques are encouraged teachers to use when they

teach. Reading, writing, and basic math skills do not typically develop; instead they must be learned through various techniques. Furthermore, Dhand. H (2008) argued that teachers as an expert are expected to use appropriate teaching and learning techniques that will help children to learn literacy and numeracy, those techniques are the use of pictures, independent practice, numbers, figures, storytelling, brainstorming, charts, diagrams, flashcards, mind map, simulation, role play, and sound can easily help pupils to understand literacy and numeracy.

Ahmadi, F., & Ahmadi, N. (2018), stated that techniques drawn from a number of methods/approaches are frequently used by students to learn modern languages in class. Depending on the unique needs of their students, teachers choose techniques from a range of approaches. A teacher should be able to identify the instructional techniques which will best support a given learning objective. This alignment is necessary for it to be effective. The teacher should take into account learning objectives, student needs, and the learning surroundings to make the best decision.

Furthermore, according to Darling-Hammond, L., & Lieberman, A. (2013), modern teaching techniques have become widely used around the globe and are convenient for teachers. Children are well-educated and have excellent understanding thanks to modern teaching techniques. Internet use for educational purposes has increased in the modern era, which may specify that learners and teachers will use technology more frequently in open and flexible learning environments. Our educational system must be enhanced and broadened through the use of technology. It is important to investigate both the intended and unintentional effects of adopting modern teaching techniques for teacher professional development. Both students and teachers must possess a certain set of knowledge, talents, and skills in order to use various modern

teaching technologies. Children may be permitted to debate the picture, repeat the story, share their favorite activities, draw diagrams, and ask for multiple re-readings. Children connect with literacy and numerical concepts such as magnitude, enumeration, and spatial relations among others when they play (Ginsburg, R. B. 2004 as quoted in Osana, H. P., & Rayner, V. 2011). All of this encourages learning in kids, which makes it easier for them to learn reading and math; in addition, kids will love the lesson because of the teaching methods used.

Furthermore, according to Khatoon, M. (2023), a teacher must choose the teaching technique that he or she believes would work best for the students in their class. Knowing a variety of teaching techniques will help a teacher make the best choice. In accordance with the previously stated, Dhand. H (2008) asserted that successful planning is a prerequisite for effective teaching, and that subsequent planning entails understanding how to enable a pleasant learning experience for all pupils. To determine which approach, plan, or technique will be most effective in a given circumstance, the teacher must apply his or her best professional judgment. This will assist teachers in the classroom with the enormous task of being familiar with a range of teaching technique. The success or failure of each technique depends on a wide range of variables. The teacher must be alert to the appropriateness of the techniques to the topic.

Moreover, the study by Tennial, R. E., Hackathorn, J., Solomon, E. D., Garczynski, A., & Blankmeyer, K. (2011) declared that techniques are anticipated to support a different level of learning because each offers unique advantages to the teacher and students. They said that every teaching technique has its own special advantages and works well for students at different levels of learning. Additionally, they claimed that using techniques for active learning does help to improve learning. Compared to other techniques for instruction, in-class activities produced the highest overall scores, whereas lecture methods produced the lowest overall scores. (Benek-

Rivera, J., & Mathews, V. E.2004; Black, B., & Bonwell, C. 1991; Guthrie, J. T., & Cox, K. E. 2001; Wingfield, S. S., & Black, G. S. 2005). Teaching techniques are creative strategy to increase student involvement, motivation, excitement, and perception of the value and relevance of the lesson. They also change the classroom's pace. Children who learn by experience are more likely to employ higher-order thinking abilities like analysis, synthesis, and assessment, according to cognitive theory (Krathwohl, D. R., & Anderson, L. W. 2010; Blyth, W. A., Bloom, B. S., & Krathwohl, D. R. 1966; Hannan, C. E., & Hackathorn, J. 2022). They are also more adept at understanding concepts in context, manipulating phenomena for their own purposes, thinking conceptually and creatively about the subject matter, and better able to recall, retain, and memorize it (Donovan, M. S., Bransford, J. D., & Pellegrino, J. W. (Eds.). 1999; Rubin, L., & Hebert, C. 1998; Serva, M. A., & Fuller, M. A. 2004).

2.2.2 Strategies for teaching literacy and numeracy

According to Wiyono B.B (2022), said that learning through play is the primary strategy for developing reading and numeracy skills. This is due to the fact that play in early childhood is learning in and of itself, making play-based learning activities is a crucial component of learning growth. In order to recognize the world around them, children learn to explore and examine their surroundings. Open-ended play is one of the play strategy that can assist in the accomplishment of the objectives (Zhang, Y., Liu, Y., & Liu, X. S. 2021)

Zainudin M. & Fatah, D. A. (2022) explain some strategies, such as literacy corners and a setting that supports differentiated learning, in the study of supporting strategies of the recovery for students' literacy and numeracy in the elementary school environment. Teachers must conduct research regarding student literacy in the classroom, work with other teachers to strengthen literacy in the co-curricular domain, and classrooms should be equipped with tools related to

numeracy. Teachers can use a variety of strategies to support students reading at various levels. Effective literacy instruction strategies include the following components, according to a 2015 report by the US National Reading Panel: first, explicit phonemic awareness instruction; second, systematic phonics instruction; teaching approaches that support students' fluency; and third, teaching that enhances students' comprehension. (Roskos, K. A., Christie, J. F., & Richgels, D. J. 2003) suggested eight strategies for teaching literacy. These include phonemic awareness, shared book experiences, rich teacher discussion, storybook reading, alphabet activities, and support for emergent writing. It is essential to apply strategies for teaching in the classroom. Without the use of a strategy, teachers would be randomly projecting information that doesn't relate to or interest students. Strategies encourage participation, kinship, and zeal in the content delivery.

In line with the above, in study of an assessment of literacy skill development between rural primary school students, Msangi, M. M. (2018) clarifies the strategies frequently used by teachers in the development of literacy skills, including remedial teaching, use of teaching materials, participatory methods, and helping slow learners. Assist sluggish pupils is a group of students known as slow learners has limited cerebral capacity, which hinders their learning Murawski, W. W., & Dieker, L. A. (2004). The slow learners have to be assessed for their difficult areas and offered extra tutorial help in those areas. This could be done after school or in the final session of the day. Give the kid access to a peaceful workspace where they can be observed and inspired. Minimize homework time and allow for exercise before and after homework (Borah, R. 2013).

Furthermore, Shalapurwala, R.F. (2017) explains the Use of Simple Language. When teaching a student who is a slow learner, the instructor should use a straightforward strategy of communication and should use a language that is appropriate for that student's level (Gardner, P.

2014). Additionally, teachers ought to speak in simple language, attempt to speak more slowly, and offer explicit instructions rather than implied ones. No matter the age of the pupils, teaching techniques are effective in any classroom. Strategies must be put into practice; when a teacher employs a variety of efficient teaching strategy, their pupils will have the chance to comprehend literacy and numeracy in the classroom. Depending on the class you instruct, there are a variety of strategies you can employ.

Performing a teaching activity, according to Kuamr A. (2022), is merely a network or series of decisions the teacher makes to connect the key elements of his job and produce the greatest solution for the educational scenario once more. In order to maximize the potential of the subjects being educated, the person instructing must combine logical and appropriate methods, procedures, techniques, means, and organizational structures (Neacşu, I. (1990). The process of choosing methods for instruction with consideration for the trained subject is known as the teaching strategy. The teaching strategy combines and optimally arranges the means, forms, and methods of the grouping of the participants, resulting in an instructional approach to teaching and learning (Oprea, C. L. 2018). This is an established fact. These elements, based on a systemic vision, have been implemented into the operational structures and were developed to ensure active and creative learning of the material as well as to rationalize the training procedure. The term "strategy" is used at the macro, intermediate, and micro levels. The micro level is closely related to the learning pedagogy, training theory, and training practice. Everyone acknowledges that teachers have a great deal of artistic license when it comes to constructing their assignments. They can create graphs, charts, value tables, or even simple mental schemes to aid in decision-making and to make the greatest use of different techniques, tools, and training materials (Stan, E., Suditu, M., & Safta, C. 2011; Richardson, G. L. 2013). Experience has also

demonstrated that each educational activity differs from others according to the configuration of its component factors and interactions. Therefore, consistently altering certain previously considered strategies may make things more difficult or may produce advantageous outcomes.

2.2.3 Challenges that teachers face in teaching literacy and numeracy

A study on the evaluation of literacy skill improvement in rural primary schools was undertaken by Msangi, M. M. (2018). The results show that there is a shortage of teachers, a poor society's perception of education, infrastructure issues, the use of mother tongues, overcrowding in the classroom, student absenteeism, and a long commute from home to school as challenges that teachers must deal with when teaching literacy and numeracy. Due to the large number of students in most classrooms, it is challenging to organize activities for kids on an individual basis (Kumburu, S. (2011). Blatchford, P., Russell, A., Bassett, P., Brown, P., & Martin, C. (2007). also observed that there is little involvement from each student in a large class, which is consistent with the aforementioned point of view. According to them, it gets even harder to meet each student's needs or individual differences, so indiscipline will inevitably show, particularly when kids start to feel like outsiders.

(Ndijuye, L. G 2020; Rawle, F., Thuna, M., Zhao, T., & Kaler, M. 2018; Uwezo, 2020) indicate that family's socioeconomic status is a big challenge that face teachers in teaching literacy and numeracy. The available empirical data shows that children from lower SES families exhibit poor learning and developmental outcomes, including in mathematics, in the sub-Saharan area, and Tanzania in particular Parents who had more money sent their kids to private preschools and elementary schools, which had superior educational resources. The majority of children, particularly in rural areas, were attending school but may not have been performing at grade level due to inadequate physical infrastructure and declining teaching quality (Uwezo, 2010, 2014,

2020). Students require school supplies like textbooks, pens, uniforms, and parental supervision. Students who miss class struggle to comprehend literacy and numeracy because they are unable to focus in class (Shaywitz, B. A., Shaywitz, S. E., Pugh, K. R., Fulbright, R. K., Mencl, W., Constable, R., Skudlarski, P., Fletcher, J. M., Lyon, G., & Gore, J. C. 2001). Similar to this, kids from families with a strong financial system have greater reading literacy accomplishments than children from low socioeconomic backgrounds who lack access to school resources to support their learning literacy. According to Kiernan, K., & Mensah, F. 2010; Ndunguru, N. (2016) reports indicate the body of available empirical evidence has repeatedly shown that children's development and learning outcomes can be negatively impacted by the quality of their home learning environment and their family's socioeconomic status. According to the reports, children from low-income families who reside in rural areas are more negatively impacted (Ndijuye, L. G., and N. Rao. 2020). Comparatively speaking, it affects rural children from immigrant and refugee families even more severely (Koury & Votriba-Drzal, 2014; Kuch, 2017; Ndijuye ,L.G., & Rao, N., 2018, 2019).

Mmasa, M., & Anney, V.N. (2016) conducted a **s**tudy on Exploring Literacy and Numeracy Teaching in Tanzanian Classrooms. The paper explains the difficulties/challenges teachers encounter while attempting literacy and numeracy in classes as follows: Shortage of desks and classes, shortage of qualified teachers, late enrolment of standard one pupils, and truancy and absenteeism from school.

RTI, (2014); Uwezo, (2020) explain the shortage of qualified teachers in schools. A qualified teacher can establish a personal connection with each of their pupils. They are aware of how each child learns most effectively. The performance of the students will be impacted if there is a teaching shortage at the school. In an effort to improve access to education for girls in rural Tahir,

A., Qadeer, A., & Asif, M. (2017) observe that in Pakistan, untrained local women have been hired as instructors and then schooled on the job using distance-education techniques. Teachers with the necessary qualifications understand how kids should learn, grow, and develop the social skills they need to thrive in school. The body of empirical evidence indicates that teachers in Tanzania are failing to assist students in understanding the fundamentals of numeracy (RTI, 2014, 2020; Uwezo. 2020). This failure has implications for children's learning achievement in mathematics at higher levels even later in life (Humble, S., & Dixon, P. 2017). In line with the above literacy and numeracy abilities could be improved during their elementary school years. It follows that it is very much the responsibility of primary school instructors to make sure that their pupils are given these skills. Additionally, the instructors themselves must be qualified and perspectives in reading and math. Therefore, it is useful to conduct research into the quality of teachers, their abilities, and their competency in connection to reading and numeracy skill. Moreover, according to the Northern Ireland Audit Office, (2013), improved student literacy and numeracy skills are strongly correlated with higher teacher quality. Furthermore, according to (UWEZO, 2010), family separation, particularly in poor countries, has been cited as one of the causes of problems with reading skills. The U.S. Department of Health and Human Services reports that more than 40% of American children who undergo serial divorce perform much worse academically. Children are encouraged to attend school regularly when their parents cohabit, have close supervision over them as they complete their schoolwork, and have easy access to necessities like uniforms, exercise books, and other school supplies. Children can better understand literacy and numeracy skills because to this. Two key determinants of children's learning and development are their home learning environment and having a large family

(Matafwali, B., & Chansa-Kabali, T. 2017; Ndijuye, L.,G. 2020). The separations of parents will give a pupil hard time for them to focus at school.

According to Bethell, G. (2016) & UNESCO, (2015) explain lack of teaching and learning aid.

‘’A professional teacher uses teaching aid to make pupils understand the lesson and enjoy the subject. When the teacher use teaching aids will help the students to understand easily and it will be difficult for them to forget. Teaching aids can facilitate the proper understanding of the pupils and helps to increase vocabulary.’’ According to (Altinyelken, H., K., 2010), Ugandan instructors employed teaching aids to help students' learning in their classrooms and had a favorable opinion of the advantages of learner-centered teaching strategies.

More specifically, in terms of student-based characteristics, language use, absenteeism rates, and tardiness are seen to be factors promoting low literacy achievement. Due to the widespread use of local languages, students have limited vocabulary in both English and Kiswahili. According to research by Mosha, H. (2012), the majority of pupils who engage in English or Kiswahili tend to know it better and perform well on tests and in literacy in general. As a result of having to translate language first and then learn in the context that is necessary, students who engage in their mother tongue are disadvantageous since they end up performing poorly in literacy URT (1995). According to Reche, N. G., Bundi, T. K., Riungu, J. N. and Mbugua, Z. K. (2012), one factor that may cause poor literacy performance is student absenteeism. Students who skip class frequently lose important concepts, and they may perform poorly in reading. Loss of substance and knowledge arises from ongoing class cancellations. Additionally, pupils' tardiness affects their reading achievement because they miss out on early lessons because of their absence URT (2000).

2.2.4 Literature gap

This chapter presents summary of the reviewed of literature relating to the quality teaching of literacy and numeracy in selected Primary Schools. The researcher gained insight into what has already been done in the chosen topic, identifying the strengths and weaknesses, by looking at documents such as books, journals, and dissertations that have an impact on literacy and numeracy. For instance, many scholars were able to demonstrate the challenges that teachers face when attempting to teach literacy and numeracy, such as family separation, lack of desks, teachers' lack of seminars, an inadequacy of learning resources, class size, absenteeism and a shortage of qualified Teachers. However, they left out the issue of the absence of developed pedagogies to support the teaching, as well as the difficulty of teaching literacy and numeracy when students with special needs are mixed in with the general student population. Additionally, strategies for Teachers in teaching literacy and numeracy are very important, different scholars have explained about remedial teaching, use of simple language, learning through play, literacy corners and settings that support different learning but they did not talk about the issue of a talking class. In order pupils to understand well in the class teaching aids, teaching materials must be there, the class should have a lot of pictures. For example; Pictures of alphabets such as ABC books, magnetic letters, alphabet blocks and puzzles alphabet chart. A teacher will be able to engage the pupils with learning resources which will help them to understand easy and it will be hard for them to forget. Therefore; this creates a sizable gap that calls for a study to be conducted. This study can help other scholars conducting research in their nations with contexts similar to Tanzania. For these reasons, the researcher decided to investigate quality teaching of literacy and numeracy in Selected Primary Schools in Kongwa District.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The approaches that were used to accomplish the specified goals are covered in this section. It tries to give a detailed account of each step that a researcher took in a thorough and understandable manner. The research design, area of the study, information sources, population and sampling techniques, variables and indicators, measurement levels, procedure/protocols for data collection, data collection tools, and equipment, quality error control, strategy for data processing and analysis, ethical considerations and anticipated methodological constraints are all presented in this chapter.

3.1 Research design

A research design is a set of guidelines for the data collection and analysis (Kuamr, A. 2022). In addition, Helman, G. (2016) adds that the research design aims to address the why and how of the researches conduct. Thus, in this study Cross-sectional survey design was used for the research in order to allow the researcher to gather data from multiple samples of respondents at the same time. Moreover, Mixed-study paradigms that included quantitative and qualitative approaches were applied. According to Kothari, C.R. (2014), said that qualitative research aims to learn about people attitudes toward a given topic or organization. The researcher employed qualitative approaches so as to gather data from the respondents intended to participate in the qualitative part of the study. The qualitative data collection entailed oral interviews by using an interview guide (See Appendix III). This study also employed quantitative approach for the part of the sample from which quantitative data were required. In collecting quantitative data, a self-administered

questionnaire (See Appendix II) was used. The qualitative data were analyzed according the themes of the responses, whereas the quantitative data were computed to get totals, frequencies, percentages, mean and standard deviation.

3.2 Area of the Study

The study was conducted at Norini Primary, Mkoka primary school, and Mlanje primary school in Kongwa district in Dodoma region, Tanzania. The area was conveniently chosen due to its easy accessibility and the three schools are the only primary schools in the area.

3.3 Sources of information

According to John, M. (2002), information sources in research are places or phenomena from which data can be obtained. This study used both primary and secondary data. In addition secondary sources involve published and unpublished work. Through interviewing of some respondents and administering questionnaires to respondents, primary data were obtained. Reviewing documents, books, journals, articles, internet information, and other published literature was done as part of the literature review.

3.4 Population

According to Mugenda, A.G. (2003), study population is a sizable collection of human beings or items that are chosen from which the study sample is selected. The population of the study comprised three (3) primary schools in Kongwa District, twenty seven (27) teachers, three (3) head teachers, from those schools, and (1) one District Education Officer. The sample for the study was derived from the study population.

3.4.1 Sample Size Determination

Sample size, as defined by Katamba, P., & Nsubuga , T. (2014), is the part or subset of the entire study population. Krejcie, R. V., & Morgan, D. W. (1970) developed a table for selecting the appropriate sample size for a particular study population when predicting population proportions (or percentages) with a certain probability and level of precision. By using the table developed by Krejcie and Morgan, the sample sizes for the study were determined, as shown in Table 3.1.

Table 3.1: Population, Sample Size and Selection

Types of respondents	**Number of respondents**	**Sample size**	**Sampling technique**	**Instrument**
District Education Officer	1	1	Census inquiry	Interview
Head Teachers	3	3	Census inquiry	Interview
Teachers	30	27	Simple random sampling	Questionnaire
Total	34	31		

Source: Krejcie and Morgan (1970) sample size determination table.

Teachers were chosen by simple random sampling so that every respondent gets an equal opportunity to take part in the study while taking into account fair distribution according to gender and numbers. District Educational Officer and Head Teachers were chosen by using census inquiry.

3.4.2 Sampling techniques

Sampling technique refers to the different procedures of selecting a smaller number of the members of the population to represent the entire population in providing data (Mugenda, A.G., 2003). The approaches of simple random sampling and census inquiry were employed to choose respondents.

3.4.3 Simple random sampling

Lanctot, M., Waugh, K., Zinkevich, M., & Bowling, M. (2009) assert that simple random sampling is the best type of sample since it demonstrates no bias under normal circumstances. Every person in the population has an equal probability of being picked, and the likelihood of one person's selection has no influence on the possibility of another person's selection. The samples for the Teachers and Parents were chosen by simple random sampling. The researcher had planned to write the name of every Teacher on a piece of paper, mix the papers with the names of the Teachers up and randomly pick the 30 Teachers required for the sample size for the Teachers. This plan had been made based on the assumption that there would be a big number of teachers. However, on the day of data collection there were a total of 27 Teachers for the three selected schools. The researcher decided to include in the sample all the Teachers present at the schools on the day of data collection, hence the 27 respondents from the teachers. Also the researcher planed to mix the papers with the names of the Parents and randomly pick the 76 Parents required for the sample size but the plan had failed because it was so difficulty to gather Parents together, therefore the researcher decided to pick randomly and interviewed 64 Parents.

3.4.4 Census Inquiry

Census inquiry was used because the entire population of the Head teachers and District Education Officer (DEO) were considered. The census inquiry is an attempt to gather information from every member of the population. Creswell, J. W. (2012), considers census inquiry as a complete count and it is also referred to as complete enumeration which applies to a situation where the "researcher requires no sampling effort". In this study, census inquiry applied to the Head teachers and DEO because there was no need to undergo any sampling procedure for these population categories.

3.5 Variables and indicators

Indicators are methods of measuring or quantifying variables, whereas variables are the traits or attributes of the notion. There are two distinct types of variables: dependent variables (DV) and independent variables (IV). According to (Creswell, J.W. 2014), a variable is a measurable trait that regularly takes on different values based on the study subjects. In this study, literacy and numeracy were examined as dependent variables, with quality teaching as an independent variable. This study investigated Quality teaching of literacy and numeracy in Primary School Pupils in Kongwa District Tanzania.

3.6 Measurement levels

In order to provide data, variables had to be measured. Nominal measurement scales, interval, and ratio, were chosen by the researcher since they were appropriate for this particular study.

3.6.1 Measurement using the nominal scale

According to Sekaran, U. (2003), a nominal scale is a list of categories into which things can be grouped in order to form an exhaustive set that is mutually exclusive. This were measured

by the researcher to establish the distribution of respondents who are male and female, as well as their marital status, age, and level of experience.

3.6.2 Measurement using an interval scale

In order to classify the questionnaire's study topic questions using the Likert scale, an interval scale was applied. The percentages of positive and negative responses to the questionnaire questions were used to determine the importance of the responses. Example 1: strongly disagree, 2: disagree, 3: neutral, 4: agree, and 5: strongly agree.

3.6.3 Measurement using a ratio scale

The ratio scale, which measures differences in terms of their size and proportion on a scale with an absolute zero origin, is used. The distinct zero beginnings enable the employment of sophisticated statistical and mathematical techniques on the response outcomes. In order to analyze ratios, this was applied to the data that will be created from measurements using the nominal and interval scales.

3.7 Procedure for data collection

The researcher obtained a letter of introduction from (UCUREC) and an introduction letter from Kongwa District authorities. The project was presented to the university supervisor for approval before being submitted to the school of education for review by the Uganda Christian University Research Ethical Committee (UCUREC). A pilot research was carried out. The tools for gathering data were ready and pre-tested. Then, the researcher had brief conversation with the respondents to explain the study's purpose, aims, and importance. Respondents' informed consent was requested prior to data collection. The researcher printed consent forms to the responders via the head teachers of these chosen schools.

3.8 Data collection instruments and equipment

To gather data, the researcher used questionnaires, observation, and interview. These methods were chosen because they are believed to be suitable for gathering in-depth information about quality teaching of literacy and numeracy.

3.8.1 Questionnaires

A questionnaire, according to Kothari, C.R. (2014), is a group of related questions that the researcher develops based on the objectives of the study and the research issues under investigation. The surveys were created because they quickly elicit replies from many participants over the course of a short period of time. Teachers were received a questionnaire. This instrument was used to measure on a 5- Likert scale stating: strongly agree (5), Agree (4), Not sure (3), Disagree (2), strongly disagree (1).

3.8.2 Interview

Seale, C. (2004) defined an interview as a social interaction in which participants work together to create recollections or versions of their previous, present, or potential future actions, encounters, emotions, or thoughts. Due of the versatility of interview questions, interviews were used in this study. District Education Officers, Head teachers and Parents were undergo interviews. They were able to utilize it to convey their feelings, ideas, and personal experiences. Because it enables respondents to freely express their experiences

3.8.3 Observation

The researcher observed how teachers teach in the classrooms. The researcher found that teachers were not using techniques of teaching, though they said that they are teaching by using

techniques. Also the researcher observed unqualified teachers who were teaching literacy and numeracy.

3.9 Quality control

Data quality entails accuracy, validity, reliability and completeness of the data. Utilizing the approaches selected for the study, the researcher ensured the quality of the data being collected. Towards ensuring the quality of the data, both the oral interviews and the questionnaires administration were carried out by the researcher. This was in view of the fact that it was not feasible to get individuals who were suitable to serve as research assistants. Furthermore, the scope of data collection process was such that research assistants were not necessary.

3.9.1 Validity

Validity determines the degree to which the results are truthful depending on what the instrument is designed to measure the concepts under the study. In this study, content validity is used to determine the validity of the questionnaire.

Content validity of items intended to collect quantitative data was tested by availing them to three research supervisors who checked whether the items on the questionnaire conform to the objectives of the study. The research supervisors were asked to comment on each question as relevant, irrelevant, or needs improvement. And the content validity of the questionnaire was confirmed by the three research supervisors from the Department of Education to evaluate the questions. The content validity index (CVI) as recommended by Lynn's (1986) criteria where any CVI greater than 70% is considered excellent and items are passed as relevant if they were tested by three experts minimum and were all in perfect agreement (Polit, D.F., Beck, C.T. & Owen, S.V. 2007) was computed and evaluated as below;

$$\text{Content validate index} = \frac{\text{Number of questions considered relevant}}{\text{Total No. of questions}}$$

$$= \frac{18}{21}$$

$$= 0.857$$

Therefore, the content validity index of 0.857(85.7%) was found be higher than 0.7(70%) as recommended by Amin, M.E. (2005) meaning that the instrument was valid.

3.9.2 Reliability

Drost, E.A. (2011) defines reliability as "the degree to which measurements are repeatable when different people perform the measurement on different occasions, under different circumstances, supposedly with alternative instruments which measure the construct or skill." It is also known as the dependability or consistency of a constructed measure. Cronbach coefficient alpha to test for internal consistency was used to calculate reliability. This coefficient is the internal consistency of a test and it always goes up in cases where the correlation among the variables goes up. It ranges from 0 to 1 and the closer the value is to 1, the greater the instrument's reliability at measuring the variables. The reliability of the teachers' questionnaire was tested by piloting the questionnaire in one primary school which did not participate in the study. Then the Cronbach's alpha coefficient in the statistical package for social sciences (SPSS) software was used to analyze and determine the reliability of instruments. The Reliability of the instrument was gauged by computing the Cronbach's Alpha coefficients. This helped to determine the internal consistency of the likert scales and a coefficient of 0.7 and above was considered sufficient in determining the reliable scales (Hair, P.S .2010). Results from the analysis of reliability tests showed in table 3.2 indicate that the variable of teaching literacy posted Cronbach Alpha of 0.857

while teaching numeracy posted a value of 0.874 which is above 0.7 and this confirms that the data is precisely reliable.

Table 3.2: Reliability tests

Construct	Cronbach's Alpha	No of Items
Teaching literacy	.857	7
teaching numeracy	.874	6

Source: Result of analysis 2023

3.10 Data Processing and Analysis

Both qualitative and quantitative data was analyzed

3.10.1 Quantitative Data Analysis

Data collected from the field was first of all sorted, edited, coded and entered into the computer using Statistical Package for Social Sciences (SPSS). This package helped the researcher to present data by generating tables, graphics and frequency tables. At univariate level, SPSS helped the researcher generate descriptive statistics such as means and standard deviations. The researcher used standard deviation so as to display sample data features and provide an explanation of statistical analysis and findings. The quality teaching of literacy and numeracy in selected Primary Schools was evaluated using the Pearson's correlation coefficient obtained from SPSS data analysis package. This method is preferred to graphical depictions because it standardizes the variables hence change of scale or unit of measurement do not affect its value. The Analysis of Variance (ANOVA) technique was used to establish the magnitude of the quality

teaching of literacy and numeracy in selected Primary Schools in Kongwa District. The interpretation of mean score appears in Table 3.4

Table 3.3 Interpretation of mean scores according to responses

Response	Mean score
Strongly Disagree	1.00 – 1.49
Disagree	1.50 – 2.49
Neutral	2.50 – 3.49
Agree	3.50 – 4.49
Strongly Agree	4.50 – 5.00

Source: Adapted from Bringula, Batalla and Moraga (2019)

3.10.2 Qualitative Data Analysis

From interviews, an objective coding scheme was applied to data in the process commonly known as content analysis. Qualitative data analysis utilized words to make narrative statements on how categories or themes of data are related. Once the themes, categories and patterns are established, data was evaluated and analyzed to determine the adequacy, credibility, usefulness and consistency of the information.

3.11 Ethical considerations

The pertinent ethical standards in research were observed in this social-scientific study.

Before starting to collect data, the researcher secured all essential authorizations. These were the letters for the Uganda Christian University (see Appendix VI) and the letter from Kongwa District Executive Director (see Appendix VI). Also, all responders were informed by the researcher of the topic and objectives of the study, as well as the importance of this study and the assurance of keeping confidentiality with regard to the responses that they gave. In maintaining

confidentiality, no personal information of the respondents has been including in the final report of this study.

3.11.1 Informed Consent

Informed consent was obtained from all participants before including them in the study. To ensure this, the researcher presented the authorization letter from UCUREC and the letter from Kongwa District Administration to the participants to show them that the research is specifically for academic purposes. Once the participants accept, the researcher distributed questionnaires to them and carry out interviews as well as conducting focus group discussions. The researcher ensured that the research was conducted within the laid down procedures and regulations in the research design. Everyone who took part in the study filled out an informed consent form that was detail the research's objectives. The researcher ensured that the research was conducted within the laid down procedures and regulations in the research design.

3.11.2 Confidentiality

All of the information that was gathered about the participants in the study in regards to hazards to them was maintained in full confidentiality and were only be available to members of the research team. Their personal information was not included unless they specifically wanted it if they agreed to share the material with other researchers (for instance, by making it available in a data archive). The participant was explicitly guaranteed that, the researcher won't use their name or job title in any reports that include the information they provided.

3.12 Anticipated methodological constraints

Few participants feared to reveal information; they thought a researcher wants to report them somewhere. The researcher decided to inform them the aim and purpose of the study by showing

them authorization letters from UCUREC and the letter from Kongwa District Administration as well as explaining to them how confidential the information is going to be treated. Though some respondents gave false information.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND INTERPRETATION OF THE FINDINGS

4.0 Introduction

This chapter presents the analysis, data presentation and interpretation of the findings gathered from the field. It starts with the presentation of the response rate and the demographic information of the respondents. The data obtained relates to the objectives of the study which are: (i) The techniques used by Teachers in teaching literacy and numeracy (ii) The strategies for Teachers in teaching literacy and numeracy (iii) The challenges faced by Teachers in teaching literacy and numeracy

4.1 Response rate

The response rate was calculated to find out if the sample size was sufficient for the study. In this study, 30 teachers were sampled giving a total of 30 questionnaires. However, the questionnaires that were retuned were 27 return rate of 90% and 76 Parents were sampled giving a total of 76 questionnaires but those who managed to return were 64, a return rate of 84%. Meanwhile, the interview guide for the District Educational Officer, response rate was 100%, as well as the response rate of the Head Teachers were 100%. Schvartsman, G., Peng, S. A., Bis, G., Lee, J. J., Benveniste, M. F., Zhang, J., & William, W.N. (2017) consider a response rate of 66.7% in each category to be very good. As a result, the study's response rate in each group is acceptable.

Table 4.1: Response Rate of the District Education Officer, Head Teachers, Teachers and Parents.

Instrument		Targeted	Returned	Response rate
Questionnaires	Teachers	30	27	90%
Interview Guide	District Educational Officer	1	1	100%
	Head Teachers	3	3	100%
	Parents	76	64	84.2%
Total		110	95	86.3%

Source: Primary Research Data 2023

4.2 Demographic Data of Respondents

The demographic data of 31 respondents included; (1) District Educational Officer, (3) Head Teachers, and (27) Teachers, in three (3) randomly selected primary schools. The study gathered information on the respondents' attributes. These attributes encompassed variables such as age, gender, level of education, duration of service in the position held, number of respondents and percentage as shown in Table 4.2

Table 4.2: Distribution by Age, Gender, Education Level and Working experience

Participants items		**Number of respondents**	**Percentage of respondents**
1. **Age**	29 years and above	4	12.9%
	30-35 years	8	25.8%

	36-40 years	9	29.0%
	41 years and above	10	32.3%
	Total	**31**	**100%**
2. Gender			
	Male	13	41.9%
	Female	18	58.1%
	Total	**31**	**100%**
3. **Level of Education**	Grade A/certificate	20	64.5%
	Diploma	8	25.8%
	Bachelors Degree	2	6.5%
	Masters Degree	1	3.2%
	Total	**31**	**100%**
4. **Work experience**	less than 10 years	11	35.5%
	11-15 years	7	22.6%
	16-20 years	13	41.9%
	Total	**31**	**100%**

Source: Primary Research Data 2023

The table 4.2 shows that 4(12.9%) of the respondents were aged 29years and below, 8(25.8%) of the respondents were aged between 30-35, 9(29%) of the respondents were aged between 36-40, and 10(32.3%) of the respondents were aged 41 years and above. This implies that respondents provided adequate insight into challenges surrounding the improvement of reading skills. Also according to the issue of gender, 13(41.9%) of the respondents were male, while the majority 18(58.1%) of the respondents were female. This implies that the highest percentage is represented by females in Kongwa District. Furthermore, on the issue of the level of education shows that 20(64.5%) of the respondents held grade A/Certificate in primary education, 8(25.8%) held

diplomas in primary education, 2(6.5%) held bachelor's degrees, and 1(3.2%) had qualified with a masters degree. Although reading and writing are crucial forms of literacy and numeracy that we use to communicate, this implies that the workers in Kongwa District do not have at least a minimum level of a Diploma education, which makes the work there to be difficult. A student's ability to participate in society and comprehend crucial public issues depends on their level of literacy and numeracy, which is essential for learning in the classroom. In additionally the issue of work experience shows that 11(35.5%) had taught for less than 10 years, 7(22.6%) had taught for a period between 11 to 15 years, and the majority of the teachers 13(41.9%) had taught for a period of between 16 -20 years. This implies that the majority of respondents had extensive experience implementing literacy and numeracy teaching and learning but they are not qualified.

4.3: Techniques used by Teachers in teaching literacy and numeracy

Objective one (1) of the study was to identify the techniques used by teachers in teaching Literacy and numeracy in selected primary schools in Kongwa District. The research question of this objective was *"What are the techniques used by Teachers in teaching literacy and numeracy?* The respondents' opinions were scored as strongly agree, agree, disagree, and disagree on a 5-Likert scale. The data was also analyzed using the mean and standard deviation. The measures of Strongly Agree as well as Agree were regarded as agreement with the assumption while the measures of Strongly Disagree and Disagree were viewed as disagreements to the stated assumptions.

Table 4.3: Opinions of respondents on techniques used by Teachers in teaching literacy and numeracy

Statement	SD	D	NS	A	SA	Mean	Std Dev
I use brainstorming technique to teach literacy and numeracy	0 (0%)	17 (61.3%)	0 (0%)	6 (22.6%)	4 (16.1%)	3.06	1.27
I use playing games as a technique of teaching literacy and numeracy	0 (0%)	19 (71%)	0 (0%)	6 (22.6%)	2 (6.5%)	2.39	1.931
I use cooperative learning and role plays to teach literacy and numeracy	0 (0%)	17 (64.5%)	0 (0%)	9 (32.3%)	1 (3.2%)	3.26	1.03
I use demonstration to teach literacy and numeracy.	0 (0%)	1 (3.2%)	0 (0%)	23 (83.9%)	3 (12.9%)	3.99	0.512
I use mind map techniques in teaching literacy and numeracy.	0 (0%)	3 (9.7%)	0 (0%)	19 (71%)	5 (19.4%)	2.00	0.775

Source: *Primary Research Data 2023*

The findings indicate that the majority 17 (61.3%) of the respondents disagreed that they use brainstorming technique to teach literacy and numeracy, while 10(38.7%) agreed. The mean was 3.06 while the standard deviation 1.270 was captured implying that majority of respondents disagreed with the statement that they do not use brainstorming technique to teach literacy and numeracy.

During an interview with one of the key Informant 1 said that:

We have few teachers who have skills of teaching pre-primary, so we have decided to take teachers who do not have skills of teaching pre-primary to teach those classes these teachers are not well qualified, so we have decided to take them to another school which are doing better than us especially private schools to learn how they teach by using different techniques, though the program is hard because to reach there we have to use transport and the school does not have some money as you know we have free education. We receive money from the government but it's not enough.

Therefore, it means that the most of the respondents disagreed that they do not use brainstorming technique to teach literacy and numeracy. According to this statement, it gives the impression that those teachers who never used brainstorming techniques to teach literacy and numeracy lacked the skills of teaching literacy and numeracy using brainstorming a skill which is necessary for teaching.

The findings from the above table 4.3 show that the minority 8(29.1%) of the respondents agreed that they use playing games as a technique of teaching literacy and numeracy, while 19(71%) disagreed. The mean was 2.39 while the standard deviation 1.931 was captured implying that some respondents were in disagreement with the statement that they use playing games as a technique of teaching literacy and numeracy. In confirmation to these findings, during an interview with informant 2 explained that**;**

Our schools has few teachers and therefore we encourage any teacher available to teach in any class in the school since there is a big problem of scarcity of teachers yet we have a huge population of learners" As you are seeing here we have temporary teachers who have just finished senior 6. We are in a hard time for sure, and the authority needs all pupils to understand literacy and numeracy also to pass in their national examinations

This means that a minority of the respondents agreed that they use playing games as a technique of teaching literacy and numeracy. This implies that the teachers are assigned classes that they are not trained to teach which makes them teach without using the necessary techniques of delivering lessons to learners in the lower primary section.

Table 4.3 shows that the majority 17(78%) of the respondents disagreed that they use cooperative learning and role plays to teach literacy and numeracy, while 10(15%) agreed. The mean was 3.26 while the standard deviation 1.03 was captured implying that majority of respondents disagreed with the assumption statement that they use cooperative learning and role plays to teach literacy and numeracy. In confirmation to this finding, during an interview with key informant 3 said that;

> *Most of our Teachers in this District are teaching classes but they are not supposed to teach. This is because we have very few teachers with qualifications to teach early childhood classes" These classes are not easy to teach, they need someone who is very well trained from college. We have teachers who do not have the skills of teaching these classes. In 2019 The Government decided to take secondary teachers to teach primary schools because of the scarcity of teachers in primary schools. These secondary school teachers teach according to their experiences which they have but they don't have any skills for teaching primary school pupils and there is no seminar that they gave them*

This means that the majority of the respondents disagreed that they do not use cooperative learning and role plays to teach literacy and numeracy.

The study found that only 26(96.8%) of the respondents agreed that they use demonstration to teach literacy and numeracy, whereas 1(3.2%) disagreed. The mean was 3.99 while the standard deviation 0.512 was recorded implying that majority of the respondents agreed with the

assumptive statement that they use demonstration to teach literacy and numeracy. It means that the most of the respondents agreed that they use demonstration to teach literacy and numeracy. This interpretation is supported by a submission from key informant 4 who said:

> *Yes demonstration is very necessary to enable learners to contextualize content but the problem is that we have many students in one class. One class has 100 students, as a result, some of the pupils may not be able to hear and see obviously what the teacher is demonstrating. Also, demonstration needs practice therefore many pupils will not be able to practice the demonstrated skills. Due to the big number of pupils, it is very hard for all pupils to understand, because others will be behind.*

The study established that the majority 24(90.4%) of the respondents agreed that they use mind map techniques in teaching literacy and numeracy, whereas only 3(9.7%) disagreed. Mean was 2.00 and standard deviation was 0.775 implying that most respondents agreed that they use mind map techniques in teaching literacy and numeracy. Therefore, it means that the most of the respondents agreed that they use mind map techniques in teaching literacy and numeracy.

Results of linear regression analysis on techniques used by Teachers in teaching literacy and numeracy are presented in the Table 4.4.

Table 4.4 Regression Coefficients for quality teaching of literacy and numeracy in selected primary schools in Kongwa District. Tanzania.

Model	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
	B	**Std. Error**	**Beta**		

	(Constant)	11.182	2.803		3.989	.000
1	Techniques used	1.812	.180	.704	10.060	.000

a. Dependent Variable: literacy and numeracy in selected primary schools in Kongwa District. Tanzania

The results in table 4.4 revealed a regression coefficient of β=.704. This finding revealed that techniques used has a strong and positive statistically significant influence at (t= 3.989, p<.05) on teaching literacy and numeracy in selected primary schools in Kongwa District. Tanzania. Implying that techniques used accounts for 70.4% of the changes in teaching literacy and numeracy in selected primary schools in Kongwa District. Tanzania other factors remaining constant. Therefore, null hypothesis H01 "There is no statistically significant influence of techniques used on teaching literacy and numeracy in Kongwa District. Tanzania", was rejected.

4.4: Strategies for Teachers in teaching literacy and numeracy

Objective two (2) of the study was to examine strategies for teachers in teaching literacy and numeracy in selected primary schools in Kongwa District. The research question was *''what are the strategies for Teachers in teaching literacy and numeracy''?* The respondents' opinions were scored as strongly agree, agree, disagree, and disagree on a 5-Likert scale. The data was also analyzed using the mean and standard deviation. The measures of Strongly Agree as well as Agree were regarded as agreement with the assumption while the measures of Strongly Disagree and Disagree were viewed as disagreements to the stated assumptions.

Table 4.5: Opinions of respondents on Strategies for Teachers in teaching literacy and numeracy

Statement	SD	D	NS	A	SA	Mean	Std Dev
I use remedial teaching as a strategy in teaching literacy and numeracy	0 (0%)	21 (77.4%)	0 (0%)	4 (16.1%)	2 (6.5%)	3.48	0.996
I encourage learners to read aloud their work in class, and I time their sessions	0 (0%)	3 (9.6%)	0 (0%)	17 (64.5%)	7 (25.8%)	4.97	0.814
I use a talking class to teach literacy and numeracy	0 (0%)	18 (64.5%)	0 (0%)	6 (22.6%)	3 (12.9%)	3.16	1.186
I help slow learners in enabling them to grasp literacy and numeracy	0 (0%)	21 (80.6%)	0 (0%)	3 (9.7%)	3 (9.7%)	3.52	1.029

Source: Primary Research Data 2023

The findings indicate that the majority 21(77.4%) of the respondents disagreed that they use remedial teaching as a strategy in teaching literacy and numeracy, while 6(22.6%) agreed. In confirmation to this finding, the explanation from one of the teacher said that *"Yes, it is true there is no remedial teaching in our school and the Teachers do not conduct it. As a Teacher I haven't yet seen any of my fellows Teachers conducting remedial lessons.*

The mean was 3.48 while the standard deviation 0.996 was captured implying that majority of

respondents disagreed with the statement that they use remedial teaching as a strategy in teaching literacy and numeracy. Therefore, it means that the most of the respondents disagreed that they do not use remedial teaching as a strategy in teaching literacy and numeracy.

The findings from the above table 4.5 show that the majority 24(90.4%) of the respondents agreed that they encourage learners to read aloud their work in class, and they time their sessions, while 3(9.6%) disagreed. In confirmation to these findings, key informant 1 interviewed said

> *we always encourage learners to read aloud, this is the simple strategy for the big class though we don't know if all learners read aloud because the number of students is very high in the class to mentor one by one and one teacher teaches alone in standard one also we have other lessons to teach in upper classes. So we don't have enough time to guide each pupil to read aloud and remember they have to learn all subjects per day and each subject takes 40 minutes. This time is not enough for slower learners to understand literacy and numeracy. Due to this, we have decided to take pupils who understood very well in the class to teach their fellows even when they are out of the class we gave them books.*

The mean was 4.97 while the standard deviation 0.814 was captured implying that some respondents were in agreement with the statement that they encourage learners to read aloud their work in class, and they time their sessions. This means that a majority of the respondent agreed that they encourage learners to read aloud their work in class, and they time their sessions.

Table 4.5 shows that the majority 18(64.5%) of the respondents disagreed that they use a talking class to teach literacy and numeracy, while 9(35.5%) agreed. This was confirmed by key informant 2 who was interviewed

> *Some of our Teachers do not use talking class because they are not qualified to teach*

such a class which requires that you have a talking class throughout. A talking class is very necessary in early childhood classes; it assists students with reading independently while the teachers are in and out of the classroom. It greatly aids children in learning to read, while upper primary may not need a talking class. However, we must also note that making a talking class requires material that is very difficult in our area to get it. Some teachers buy a few materials from their resources. As a result, Teachers use teaching materials according to the environment, though we have a program that teaches teachers how to make a talking class

The mean was 3.16 while the standard deviation 1.186 was captured implying that majority of respondents disagreed with the assumption statement that they do not use a talking class to teach literacy and numeracy. This means that the majority of the respondents disagreed that they do not use a talking class to teach literacy and numeracy.

The study established that only 21(80.6%) of the respondents disagreed that they do not help slow learners in enabling them to grasp literacy and numeracy, whereas 6(19.4%) agreed. This was confirmed by a Teacher and stated that;

"As a Teacher, I feel that we have few teachers and yet the population of learners is very high. We need more teachers, learners need to be given special attention more to those with special needs and slow learners"

The mean was 3.52 while the standard deviation 1.029 was recorded implying that majority of the respondents disagreed with the assumptive statement that they do not help slow learners in enabling them to grasp literacy and numeracy. It means that the most of the respondents disagreed that they do not help slow learners in enabling them to grasp literacy and numeracy.

Results of linear regression analysis on Strategies for Teachers in teaching literacy and numeracy.

Table 4.6 Regression Coefficients for quality teaching of literacy and numeracy in selected primary schools in Kongwa District. Tanzania.

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	18.711	2.830		6.612	.000
	Strategies for teachers	1.384	.191	.578	7.229	.000

a. Dependent Variable: literacy and numeracy in selected primary schools in Kongwa District. Tanzania

The results in table 4.6 revealed a regression coefficient of β=.578. This finding revealed that Strategies for teachers has a moderate and positive statistically significant influence at (t= 6.612, p<.05) on literacy and numeracy in selected primary schools in Kongwa District. Tanzania. Implying that strategies for teaching accounts for 57.8% of the changes in literacy and numeracy in selected primary schools in Kongwa District. Tanzania, other factors remaining constant. Therefore, null hypothesis **H02** "There is no statistically significant influence of Strategies for teachers on literacy and numeracy in selected primary schools in Kongwa District. Tanzania", was rejected.

4.5: Challenges faced by Teachers in teaching literacy and numeracy

Objective three (3) of the study was to identify the challenges that teachers face in teaching literacy and numeracy in selected primary schools in Kongwa District. The research question was *''what are the challenges that face Teachers in teaching literacy and numeracy''?* The respondents' opinions were scored as strongly agree, agree, disagree, and disagree on a 5-Likert scale. The data was also analyzed using the mean and standard deviation.

Table 4.7: Opinions of respondents on Challenges faced by Teachers in teaching literacy and numeracy

Statement	SD	D	NS	A	SA	Mean	Std Dev
We need to be trained Numeracy (shortage of qualified teachers)	0 (0%)	8 (29%)	0 (0%)	19 (71%)	0 (0%)	1.74	0.461
There is a lack of developed pedagogies to aid in the teaching of literacy and numeracy	0 (0%)	0 (0%)	2 (6.7%)	21 (77.3%)	4 (16.1%)	3.84	0.374
There is a challenge of mixing learners with special needs and the normal learners which make it difficult to teach literacy and	0 (0%)	0 (0%)	0 (0%)	21 (77%)	6 (22.6%)	1.77	0.425

numeracy							
There is lack of interest among a big section of parents in supporting children to learn literacy and numeracy	0 (0%)	0 (0%)	0 (0%)	20 (74.2%)	7 (25.8%)	3.28	0.445
There is shortage of infrastructure which makes it difficult to accommodate all learners.	0 (0%)	0 (0%)	0 (0%)	19 (67.7%)	8 (29%)	1.77	0.617

Source: Primary Research Data 2023

Findings in table 4.7 indicate that the most 19(71%) of the respondents agreed that they need to be trained on teaching literacy and numeracy while 8(29%) disagreed. The mean was 1.74 while the standard deviation 0.461 was recorded implying that greater part of the respondents agreed that they need to be trained on teaching literacy and numeracy. This means that the greater part of the respondents agreed that they need to be trained on teaching literacy and numeracy.

Findings in table 4.7 indicate that the most of the teachers i.e., 25(93.4%) agreed that there is a lack of developed pedagogies to aid in the teaching of literacy and numeracy while 2(6.7%) were not sure. This was confirmed by Key informant 4 who was interviewed and said that

> *Yes, we have established the fact that most of our teachers need training and we have appropriated 8 million shillings to cater for the retraining and professional development of teachers in Kongwa District. We have a program of Continuous Professional Development (CPD). This is a program of the government through donors; in this*

program, we have something called (MEWAKA) Mafunzo Endelevu ya Walimu Walioko kazini or Teachers Continuous Professional Development (TCPD). The aim of this is to provide continuous training for teachers on their jobs centers on how to handle a class that has many pupils, Pupils who have low capacity understanding, high capacity understanding, and Pupils with disabilities as well as buying IT equipment that will help in the continuation of the training.

The mean was 3.84 and the standard deviation was 0.374 implying that most respondents agreed with the statement that there is a lack of developed pedagogies to aid in the teaching of literacy and numeracy. This indicates that the vast majority of those interviewed concurred that there is a lack of developed pedagogies to aid in the teaching of literacy and numeracy.

Furthermore, the findings established that all 27(100%) of the respondents agreed that there is a challenge of mixing learners with special needs and the normal learners which makes it difficult to teach literacy and numeracy. The mean was 4.77 and the standard deviation was 0.425 implying that all the respondents agreed with the statement that there is a challenge of mixing learners with special needs and the normal learners which makes it difficult to teach literacy and numeracy. This means that all of the respondents agreed that there is a challenge of mixing learners with special needs and the normal learners which makes it difficult to teach literacy and numeracy.

The study found that all 27(100%) of the respondents agreed that there is lack of interest among a big section of parents in supporting children to learn literacy and numeracy. In confirmation to this finding, one of the Teacher said that;

Most of the parents are not educated means that there is nothing much they can do to help learners revise their work. They can try to get scholastic materials but they can't do

much like guiding them on how to read and do numeracy work. How can they help their son/daughter to do homework when they can't even read and write? Besides once these learners go back home, they have to help their parents with work at home which may include looking after their siblings or even garden work since what sustains them as a family is a product from the family farm since they are a farming community that relies on agriculture

The Mean was measured at 3.28 while the and standard deviation at 0.445, implying that majority agreed with the statement that there is lack of interest among a big section of parents in supporting children to learn literacy and numeracy. This means that the all the respondents agreed that there is lack of interest among a big section of parents in supporting children to learn literacy and numeracy.

The findings indicate that all 27(100%) of the respondents agreed that there is shortage of infrastructure which makes it difficult to accommodate all learners. This was confirmed by the Teacher and said that, *"as a Teacher, I feel the pupil population is high in our school, but there is no alternative since it is the only school around the village. The government has to find a solution of constructing more classrooms, desks and also employing Teachers who have skills of teaching Literacy and Numeracy."*

The Mean was 4.97 while the Standard deviation 0.617 was captured indicating that all the respondents agreed with assumption that there is shortage of infrastructure which makes it difficult to accommodate all learners. This means that the all the respondents agreed that there is shortage of infrastructure which makes it difficult to accommodate all learners.

Results of linear regression analysis on challenges faced by Teachers in teaching literacy and numeracy

Table 4.8 Regression Coefficients for challenges faced by teachers in teaching literacy and numeracy in selected Primary schools in Kongwa District. Tanzania.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	14.133	4.175		3.385	.001
	challenges faced by teachers	.919	.155	.503	5.931	.000

a. Dependent Variable: literacy and numeracy in selected Primary Schools in Kongwa District. Tanzania

The results in table 4.8 revealed a regression coefficient of β=.503. This finding revealed that challenges faced by teachers has a moderate and positive statistically significant influence at (t= 3.385, p<.05) on literacy and numeracy in selected primary schools in Kongwa district. Tanzania. Implying that challenges faced by teachers in teaching accounts for 50.3% of the changes in teaching literacy and numeracy in selected primary schools in Kongwa District. Tanzania, other factors remaining constant. Therefore, null hypothesis H03 that "There is no statistically significant influence of challenges faced by teachers on literacy and numeracy in selected primary schools in Kongwa district. Tanzania", was rejected.

Multiple Regression Analysis between quality teaching and literacy and numeracy in selected primary schools in Kongwa District. Tanzania

Multiple Regression Analysis was performed purposely to examine the strongest predictor variable of quality teaching: Techniques used by teachers, Strategies for teachers, and Challenges that teachers face in teaching as reflected in the tables as follows

Table 4.9 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.741[a]	.548	.535	6.234

a. Predictors: (Constant), Techniques used by teachers, Strategies for teachers, and Challenges that teachers face in teaching

Table 4.10 Multiple Regression Analysis Coefficients between quality teaching of literacy and numeracy in selected primary schools in Kongwa District. Tanzania.

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	4.277	3.450		1.240	.218
Techniques used by teachers	.353	.142	.197	2.490	.014
Strategies for teachers	.366	.210	.155	1.747	.084

Challenges that teachers face in teaching	1.306	.233	.507	5.599	.000

a. Dependent Variable: literacy and numeracy

From the analysis that was performed on the data, the model is observed to be statistically significant ($F = 40.882$, $p = .000^b$). Of the three predictors (techniques used by teachers, strategies for teachers, and challenges that Teachers face in teaching) incorporated in the regression model, at least one of the predictors is statistically significant. From the Model Summary table, the coefficient of determination or the R-Square value is .548 indicating that the combined predictors: techniques used by teachers, strategies for teachers, and challenges that teachers face in teaching, explain 54.8% of the variations in the outcome of teaching literacy and numeracy in selected primary schools in Kongwa District. Tanzania.

The Adjusted R-Square value of .535 which indicates the R-Square that would have been obtained from the population from which the sample is chosen is observed to be similar to the R-Square value of .548. This is an indication that the model derived from the sample data reflects a good representation of the population. From the Coefficient table, one predictor (challenges that teachers face in teaching) is observed to be statistically significant. However, Inter-function Coordination is observed to be a stronger predictor compared to techniques used by teachers and strategies for teachers based on the Standardized Coefficients (Beta) as indicated in table 4.10.

CHAPTER FIVE

SUMMARY AND DISCUSSION OF RESULTS.

5.1 Introduction

This study examined the quality teaching of literacy and numeracy in selected primary schools in Kongwa District, Tanzania. The previous chapter was concerned with analyzing, presenting and interpreting data got from teachers in selected primary Schools in Kongwa District. Tanzania. The summary and discussion of the findings are presented in this chapter in accordance with the three main objectives of the research.

5.2 Summary of the study findings

According to the particular objectives of the study, the summary of findings is presented in this section in accordance with the three main objectives of the research.

5.2.1 Techniques used by Teachers in teaching literacy and numeracy

The study findings revealed that there was a moderate positive significant correlation between techniques used by teachers and teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania (β=.503, $p < 0.05$). This implies that increase in techniques used by teachers results into an increase in teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania, other factors remaining constant is most likely to significantly improve the teaching of literacy and numeracy in primary Schools in Kongwa District.

5.2.2 Strategies for Teachers in teaching literacy and numeracy

The study findings revealed that there was a moderate positive significant correlation between strategies for teachers and teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania (β=.578, $p < 0.05$). This implies that increase in strategies for teachers results

into an increase in teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania, other factors remaining constant is most likely to significantly improve the teaching of literacy and numeracy in primary Schools in Kongwa District.

5.2.3 Challenges faced by Teachers in teaching literacy and numeracy

The study findings revealed that there was a strong positive significant correlation between challenges that teachers face and teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania (β=.704, $p < 0.05$). This implies that increase in challenges that teachers face results into an increase in teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania, other factors remaining constant most likely to significantly improve the teaching of literacy and numeracy in primary Schools in Kongwa District.

5.3 Discussion of Study Findings

5.3.1 Techniques used by Teachers in teaching literacy and numeracy

The study findings revealed that there was a moderate positive significant correlation between techniques used by teachers in teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania.

These findings are in agreement with Sitanggang, A. N., Pratama, D., Saragih, E., & Madina, M. (2022), stated that kids memorize information rapidly and understand it very early through play, symbols, demonstration and pictures. Children acquire a variety of skills that aid in their reading and writing, because children have different levels of understanding, it cannot be assumed that all of them will be capable to read, write, also to perform fundamental mathematics problems with ease. As a result, literacy and numeracy require effort.

Relatedly, Dhand. H (2008) & Mitchel, E. (2020) Argued that teachers as an expert are expected to use appropriate teaching and learning techniques that will help children to learn literacy and numeracy, those techniques are the use of pictures, independent practice, numbers, figures, storytelling, brainstorming, charts, diagrams, flashcards, mind map, simulation, role play, games and sound can easily help pupils to understand literacy and numeracy. In addition to that Hussain, M. A, (2020) said that teaching literacy and numeracy by using different techniques are considered to be very effective in lesson delivery and it also directly invites learners to participate in the learning process. In related with that, Anderson, L.W. (2001) argued that teaching by using technique enables learners to learn by experience. According to Anderson, L.W., & Krathwohl, D.R.(2001); Bloom, B., Englehart, M. Furst, E., Hill, W., & Krathwohl, D. (1956); Bonwell, C. C., & Eison, J. A. (1991); Hackathorn, J., & Ashdown, B. K. (2021) supported the above that Children who learn by experience are more likely to employ higher-order thinking abilities like analysis, synthesis, and assessment, according to cognitive theory. Not only that but they are also more adept at understanding concepts in context, manipulating phenomena for their own purposes, thinking conceptually and creatively about the subject matter, and better able to recall, retain, and memorize it (Pellegrino, J. W., Bransford, J. D., & Donovan, M. S. (Eds.).1999; Driscoll, M. 2002; Rubin, L., & Hebert, C. (1998); Serva, M. A., & Fuller, M. A. 2004). Additionally, according to Pluck and Johnson (2011), said that techniques help students to have "wow" moments. This increases the students' curiosity and capacity for reasoning.

Also these findings concur with Tsai, K. C. (2017) argued that brainstorming is considered to trigger innovation among learners which promotes creativity. In line with that Seechaliao, T. (2017) stated that learners need the potential of developing their critical thinking and problem solving skills by brainstorming. Similarly, Hoque. J. (2016) declared that techniques drawn from

a number of methods/approaches are frequently used by students to learn modern languages in class. Depending on the unique needs of their students, teachers choose techniques from a range of approaches. A teacher should be able to identify the instructional techniques which will best support a given learning objective.

5.3.2 Strategies for Teachers in teaching literacy and numeracy

The study findings revealed that there was a moderate positive significant correlation between strategies for teachers in teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania.

These findings are in agreement with Wiyono B.B. (2022), said that learning through play is the primary strategy for developing reading and numeracy skills. This is due to the fact that play in early childhood is learning in and of itself, making play-based learning activities is a crucial component of learning growth.

Also these findings concur with Zainudin M. & Fatah, D. A. (2022) explain some strategies, such as literacy corners and a setting that supports differentiated learning, in the study of supporting strategies of the recovery for students' literacy and numeracy in the primary school environment. Similarly, Karande, S., & Sholapurwala, R. F. (2017) explain the Use of Simple Language. When teaching a student who is a slow learner, the instructor should use a straightforward strategy of communication and should use the language that is appropriate for that student's level (Simple Language). In addition, Armana, M. A. R. A. (2011) said that there is need to assist students who fall behind in understand literacy and numeracy in catching up to an acceptable level by using remedial classes and is typically provided during regular school hours. All slow learners will understand during remedial ours. Also the results concur with those of Sajid, M. K. M., &

Kassim, H. (2019), who found that the deployment of remedial programs was successful in helping students improve literacy and numeracy. According to Douglas, H (2000), teaching strategies are significant part in the communicative method since they facilitate learning in a variety of ways. By providing circumstances (contexts) that illuminate the meaning of the language employed, they can, for example, brighten the classroom, add more diversity and excitement to language instruction, and encourage students to speak the language in addition to reading and writing it. Similarly, Borah, R (2013) suggested that teachers should provide slow learners extra tutorial support in their trouble areas. In the event of not applying the above strategy, literacy and numeracy learning becomes challenging to teach well.

5.3.3 Challenges faced by Teachers in teaching literacy and numeracy

The study findings revealed that there was a strong positive significant correlation between challenges that teachers face in teaching literacy and numeracy in selected primary Schools in Kongwa District, Tanzania.

These findings are in agreement with Msangi, M. M. (2018) whose results showed that there is a shortage of teachers, a poor society's perception of education, infrastructure issues, the use of mother tongues, overcrowding in the classroom, student absenteeism, and a long commute from home to school as challenges that teachers must deal with when teaching literacy and numeracy. Similarly, Kumburu, S. (2011) noted that due to the large number of students in most classrooms, it is challenging to organize activities for kids on an individual basis.

Also these findings concur with Ferranti (2000) observed that there is little involvement from each student in a large class, which is consistent with the aforementioned point of view. According to him, it gets even harder to meet each student's needs or individual differences, so indiscipline will inevitably show, particularly when kids start to feel like outsiders.

Relatedly, (Ndijuye, L.G. 2020; Rawle, F. 2015; UIS, 2021; Uwezo, 2020) indicated that family's socioeconomic status is a big challenge that face teachers in teaching literacy and numeracy. The available empirical data shows that children from lower social economic status (SES) families exhibit poor learning and developmental outcomes, including in mathematics, in the sub-Saharan area, and Tanzania in particular Parents who had more money sent their kids to private pre schools and primary schools, which had superior educational resources.

Furthermore, Oluwafemi, O. L., Nma, A., Osita, O., & Olugbenga, O. (2014), who argue that it is very important to undertake professional training of teachers to ensure that they are well-equipped to teach at the different levels of learner training. He adds that a teacher should first be retrained before being transferred to another class to teach or when a new curriculum is introduced. This is in agreement with Jaedun, A., Nurtanto, M., Mutohhari, F., Majid, N. W. A., & Kurdi, M. S. (2022), who argue that retraining teachers had a significant effect on the success of learning outcomes. This means that once attention is given to other factors affecting the teaching and learning of literacy, teachers once retrained and retooled can deliver as required to improve the learning outcomes.

The study findings noted that the majority of the teachers were of the view that, there were no developed pedagogies to aid in the teaching of literacy and numeracy. This means that most teachers teach according to personal preference and not necessarily what the need may entail. In line with that, Peterson et al., (2018) argues that pedagogies are important in enabling teachers to understand the best practices for teaching. Jaedun, A., Nurtanto, M., Mutohhari, F., Majid, N. W. A., & Kurdi, M. S. (2022) argue that developed pedagogies entail adaptive teaching, and content domains which greatly contribute to how a learner views knowledge and learning. Paris, D., &

Alim, H. S. (Eds.). (2017), and Upor, R. A. (2023) argue that the education sector in sub-Saharan Africa is partly affected by pedagogical aspects which have affected the teaching of literacy.

Additionally, lack of interest among parents in encouraging their children to study literacy and numeracy was cited as a contributing factor to their lack of adequacy. Parents' support for literacy and numeracy at school and at home is crucial because it enables parents to identify the academic difficulties their children are having with literacy learning and to figure out how to help them by enrolling them in additional classes, speaking with teachers at school, or providing direct assistance at home out of those difficulties. The results corroborate those of Flouri, E., & Buchanan, A. (2004), in particular that parental involvement in reading activities at home has significant beneficial effects on reading achievement, language comprehension, and expressive language skills, as well as on students' interest in reading, attitudes toward reading, and attentiveness in the classroom. Parents' support of their children's learning at home has the biggest impact on achievement.

CHAPTER SIX

CONCLUSION AND RECOMENDATION

6.0: Introduction

6.1: Conclusions of the Findings

The following conclusions of the study were made in relation to the three research objectives.

The majority of the teachers never used brainstorming, cooperative learning, and the use of games as techniques to deliver lessons to learners since the findings indicate that most teachers did not use games and brainstorming to teach literacy and numeracy due to the lack of skills to teach by using the above techniques. The use of teaching techniques allows the teachers to be confident in the class to accomplish their objectives. Each teacher can choose the technique that is best for him or her and their students. The language, ideas, culture, and subject matter of the teacher should all be reflected in these teaching techniques.

The findings from the study uncovered that there was a strong positive significant correlation between techniques used by teachers in teaching literacy and numeracy in Primary Schools in Kongwa District ($\beta = 0.353 p < 0.05$). This meant that making use of play games as a technique of teaching literacy and numeracy, while maintaining other factors constant, is likely to improve the teaching of Literacy and Numeracy in Primary schools in Kongwa District, Tanzania.

Based on the study findings, the study concludes that techniques used by teachers affect teaching literacy and numeracy in Primary Schools in Kongwa District. This meant that making use of use cooperative learning and role plays to teach literacy and numeracy, and other factors remaining constant, is likely to improve the teaching of Literacy and Numeracy in Primary

schools.

The teachers do not use strategies like using remedial teaching as shown. The majority of the teachers also do not use a talking class. Taking class aid learning in a variety of ways, teaching materials are very important in the communicative approach. They may lighten the classroom, offer more diversity and excitement to language instruction, and encourage students to speak the language in addition to reading and writing it by presenting situations that illuminate the meaning of the words used. Not only that but also the findings show that the majority of teachers do not help slow learners to learn literacy and numeracy as shown. An effective teacher needs to make strategies for teaching and implement them for the development of the school in general.

The findings from the study uncovered that there was a strong positive significant correlation between strategies used by teachers in teaching literacy and numeracy in Primary Schools in Kongwa District ($\beta = 0.366 p < 0.05$). This meant that making use of remedial teaching as a strategy of teaching literacy and numeracy, while maintaining other factors constant, is likely to improve the teaching of Literacy and Numeracy in Primary schools in Kongwa District, Tanzania.

Based on the study findings, the study concludes that strategies used by teachers affect teaching literacy and numeracy in Primary Schools in Kongwa District. This meant that encouraging learners to read aloud their work in class, using a talking class to teach literacy and numeracy, helping slow learners in enabling them to grasp literacy and numeracy, and other factors remaining constant, is likely to improve the teaching of Literacy and Numeracy in Primary schools.

There is limited infrastructure which contributes to overcrowding of classes since the facts established show that there was one teacher for every one hundred pupils. Inadequate and

inefficient of school infrastructures have a major negative impact on pupils learning and educational outcomes. A school's access to infrastructural resources is just one of many factors that affect how education is developed. The learning environment is influenced by the school's buildings, furniture, and equipment. This is also underscored by the mixing of learners who have special needs and those without special needs. The research also conclude that there is a limited number of qualified teachers to handle both the special needs learners and the normal learners, and no developed pedagogies to ensure the teaching of literacy and numeracy as shown by the study findings.

The findings from the study uncovered that there was a strong positive significant correlation between challenges faced by teachers in teaching literacy and numeracy in Primary Schools in Kongwa District ($\beta = 0.507 p < 0.05$). This meant that lack of trained teachers on teaching literacy and numeracy is a challenge faced by teachers in teaching literacy and numeracy, lack of developed pedagogies to aid in the teaching of literacy and numeracy, while maintaining other factors constant, is likely to improve the teaching of Literacy and Numeracy in Primary schools in Kongwa District, Tanzania.

6.2 RECOMMENDATIONS

The following recommendations of the study were made in relation to the three research

Objectives;

There has to be retraining of teachers and seminars so that teachers can be able to use brainstorming, cooperative learning and also use games as techniques to deliver lessons to learners since the findings indicate that most teachers did not use games and brainstorming to teach literacy and numeracy due to the lack of skills to teach using the above techniques. It is

encouraged to use ward meetings to address and resolve issues that prevent the development of literacy skills in a particular ward. Teachers themselves should meet and share ideas on how to do this.

The education authorities must ensure that through the different professional development programs, teachers should be helped to retrain so that they can be able to implement the different strategies of teaching literacy and numeracy like the use of remedial lessons and using a talking class to teach. When the class has many pictures and full teaching materials it will be easy for the pupils to learn even if the teacher will not there. When they look at pictures they get something in their mind. Furthermore, helping slow learners, ensuring that learners with special needs are taught in separate classes so that the teaching of literacy and numeracy can improve. To boost literacy and numeracy skills, The Ministry of Education should increase the variety of teaching and learning resources offered in the study area's primary schools. To lower higher pupil-teacher ratios, it is also necessary to increase the number of teachers and classrooms. The government should establish ward libraries to ensure that students, their families, and residents have access to books. Head teachers and ward education coordinators should keep an eye on these libraries.

There has to be more infrastructures put up to accommodate more learners so that congestion and crowding of classes is solved. There has to be a separation of learners with special needs from normal learners so that proper learning can take place through effective monitoring of learners and paying attention to their needs at all times during class time. Special needs learners should be assigned teachers who have qualified in handling special needs learners. There has to be updating of the curriculum to ensure developed pedagogies are used to ensure the learning of literacy and numeracy in schools in the Kongwa District. There has to be increased logistical provision to the education sector so that the DEO and other authorities like the head teachers can

afford transport to easily become mobile and supervise the teaching of literacy and numeracy for proper evaluation regarding learning outcomes. The Ministry of Education and Vocational Training should ensure that teachers are directly involved in changes to the teaching curriculum since they are the ones who put the changes into practice rather than receiving instructions from authorities. Any changes should be implemented using a bottom-up, not top-down, system. There has to be updating of the curriculum to ensure developed pedagogies to be used to ensure the learning of literacy and numeracy in schools in Kongwa District, also to assist in the elimination of truancy in schools, parents should receive education about the value of education to their children.

Areas for Further Studies

Based on the results of this study, additional research in the following areas may be beneficial;

Reading clubs, according to Neill (2012), the reading club stays connected to the outside world. In our own lives, it is simple to get overly occupied. The groups educate students about current authors and novels. Their awareness of the world is greatly expanded by reading about living in many countries and societies.

Also, provision of meals at school. Pupils need to eat when they are at school. It is very difficult for pupils to understand literacy and numeracy when they are hungry. Other pupils who are coming from far, they cannot go home to take food and come back again to school. Therefore, the school leadership needs to cooperate with parents to solve this problem.

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APPENDICES

APPENDEX 1: CONSENT FORM

TOPIC: QUALITY TEACHING OF LITERACY AND NUMERACY IN SELECTED PRIMARY SCHOOLS IN KONGWA DISTRICT. TANZANIA.

Introduction: I am, **ZILPA GRACEFORD MASENJE** a Masters student from Uganda Christian University. I am conducting a study entitled **"QUALITY TEACHING OF LITERACY AND NUMERACY IN SELECTECTED PRIMARY SCHOOLS IN KONGWA DISTRICT. TANZANIA''**.

Purpose of the Study: The purpose of the study will be to investigate Quality teaching of literacy and numeracy in selected primary schools

Procedure of Study: I have some questions for you regarding "Quality Teaching of Literacy and Numeracy in Selected Primary Schools in Kongwa District" because you have been chosen to participate in the study. Your responses/answers will help schools to get different ways for the pupils to understand literacy and numeracy.

Benefits and Risks: The schools in Tanzania's Kongwa District will benefit from the result of this study. Your participation in this study won't subject you to any recognized risks.

People who will participate in the study: The study will include parents, teachers, head teachers, and District of Educational Officer. Key informants will be interviewed to Educational officer, Head teachers and parents, and then teachers will participate to fill questionnaires.

Risks: With the exception of the inconvenience of losing your time during the interview, neither you nor your institutions are at risk as a result of this study.

Dissemination of Results: In agreement with the researcher, the school administration may ask for a presentation to help knowledge-sharing sessions with the school management, teachers, and District Educational officer. They may also ask for a copy of the final report for their records.

Confidentiality: Your replies will be considered a part of one participant's overall contribution. The responses will be kept confidential and used only for the objectives of this study. Your identity is not necessary, and feedback will be collected immediately and kept in a secure location without the knowledge of anybody else. For the sake of this study, your responses won't be kept private. Participant data will be kept private, unless the researcher is mandated by law to disclose specific occurrences. These situations include but are not limited to those that involve abuse and suicide risk.

Voluntary Consent: You have the choice of participating or not in this study. If you decide not to take part in the study, you won't suffer any consequences at work or be treated unfairly in any way. We won't go any farther unless you agree to take part in the study. You can stop the study at any point if you feel uncomfortable while it is ongoing. Zilpa Graceford Masenje, the lead researcher on the study, can be reached at 0769175217. Please get in touch if you have any questions about the study at this time or at any point in the trial. You can get in touch with the Uganda Christian University study Board on Tel:+256(0)772 405357, Email: pwaiswa@musph.ac.ug and the secretary on Tel:+256(0)775737627, Email: oahimbisibwe@ucu.ac.ug if you have any questions regarding your rights as a study participant or if you encounter problems that you feel uncomfortable discussing with the lead researcher.

Voluntary Participation: You are not required to take part in this study. You have the choice of participating in this study or not. You will be required to sign a consent form if you choose to participate in this study. You have the right to cancel your permission at any time and without providing a reason even after signing the form. Your data will either be returned to you or deleted if you leave the study before it has finished collecting it.

Statement of Consent

I..... give my permission for Zilpa Graceford Masenje to use the information I provide in the questionnaire for research as a teacher chosen based on my knowledge, experience, and readiness to express my thoughts.

The researcher is free to use the information I voluntarily provide as long as my privacy is protected. I understand that by completing this form, I am merely certifying that I have been informed about the research project in which I have voluntarily chosen to participate. I am not waiving any of my legal rights in any way.

I'll get a photocopy of this.

The researcher may freely utilize the details I supply as long as my privacy is protected.

Participants Signature: …….

Researchers Signature: …….

Researchers Name: ZILPA GRACEFORD MASENJE

Researchers Signature: ……..

Date…….

Appendix II: Questionnaire

Teachers questionnaire

I am conducting an academic research to enable me to complete my masters degree of education in administration and planning at Uganda Christian University. The title of my research is **Quality Teaching of Literacy and Numeracy in Selected Primary schools in Kongwa District, Tanzania.**

Section A: Background information

Please tick [√] the appropriate box, carefully fill in the blanks, or react as directed.

Code		**Response of categories**	**Tick**
a	Age of Respondents	Below 29 years 30-35years 36-40years 41 years and above	1 2 3 4
d	Sex of the Respondents	Male Female	1 2
c	Highest level of education	Grade A/Certificate Diploma Bachelor Masters degree	1 2 3 4

d	Duration taught	Less than 10 years 11-15years 16-20years Above 21 years	1 2 3 4

Section B.

1) What are the techniques used by teachers in teaching literacy and numeracy?

On a scale of 1-5 please indicate the techniques used by teachers in teaching literacy and numeracy 1=strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=strongly disagree

CODE	**STATEMENT**	**Tick**				
		1	2	3	4	5
A-1	I use brainstorming technique to teach literacy and numeracy					
A-2	I use playing games as a technique of teaching literacy and numeracy					
A-3	I use cooperative learning and role plays to teach literacy and numeracy					
A-4	I use demonstration to teach literacy and numeracy.					
A-5	I use mind map techniques in teaching literacy and numeracy.					

2) **What are the strategies for teachers in teaching literacy and numeracy?**

On a scale of 1-5, please indicate the strategies you use for teaching literacy and numeracy 1=strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=strongly disagree

CODE	**STATEMENT**	**Tick**				
		1	2	3	4	5
B-1	I use remedial teaching as a strategy in teaching literacy and numeracy					
B-2	I encourage learners to read aloud their work in class					
B-3	I use a talking class to teach literacy and numeracy					
B-4	I help slow learners in enabling them to grasp literacy and numeracy					

3) What are the challenges faced by teachers in teaching literacy and numeracy?

On a scale of 1-5, please indicate the challenges faced by teachers in teaching literacy and numeracy. 1=strongly Agree, 2=Agree, 3=Not sure, 4=Disagree, 5=strongly disagree.

CODE	STATEMENT	Tick				
		1	2	3	4	5
C-1	We need to be trained on teaching literacy and numeracy(shortage of qualified teachers)					
C-2	There is a lack of developed pedagogies to aid in the teaching of literacy and numeracy					
C-3	There is a challenge of mixing learners with special needs and the normal learners which makes it difficult to teach literacy and numeracy					
C-4	There is lack of interest among a big section of parents in supporting children to learn literacy and numeracy					
C-5	There is shortage of infrastructure which makes it difficult to accommodate all learners.					

APPENDEX III: INTERVIEW GUIDE

Interview Guide for the District Education officer

1. Do the schools have enough materials for teaching literacy and numeracy?

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   .....

1) Do the schools have enough teachers for teaching literacy and numeracy?

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2) What strategies did you plan to enable teachers to be able to teach effectively literacy and numeracy?

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3) What are the challenges that teachers face in teaching literacy and numeracy?

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4) Is there any close monitoring of teachers in their work performance in teaching literacy and numeracy?

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5) What reasons do you think makes pupils not understand literacy and numeracy?

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6) What are the techniques used by teachers in teaching literacy and numeracy?.....

Interview Guide for the Head of Teachers

1) How many pupils do you have in the school?

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2) How many teachers do you have in your school who have skills in teaching literacy and numeracy?

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……..

3) Do you have enough materials in teaching literacy and numeracy?

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4) Do teachers use teaching aids and prepare themselves before entering in the class?

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5) What are the strategies made for the teaching of literacy and numeracy

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6) What strategies imposed on illiterate and innumeracy pupils?

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7) Do teachers attend seminars of teaching literacy and numeracy?

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8) Is the environment friendly for the pupils to understand literacy and numeracy?

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9) What are the challenges do teachers face on teaching literacy and numeracy?

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10) Do you think students' rate of absenteeism is the big challenge for them not understanding literacy and numeracy?

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11) How many pupils do not know how to read, write and math?

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Interview Guide for the Parents

1) Do you think quality teaching literacy and numeracy is just a teacher's responsibility?

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2) What cooperation do you show in learning literacy and numeracy to the pupils?

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3) How does your cooperation contribute to the pupils to understand literacy and numeracy?

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4) Do you participate in buying learning materials for a pupil?

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5) Do you participate in school meeting about pupil development?

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6) What are the strategies have you planned to empower the pupil to learn literacy and numeracy.

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Thank you for your Co-operation

APPENDIX VI: A LETTER FROM UCUREC AND A LETTER FROM KONGWA AUTHORITIES

UGANDA CHRISTIAN UNIVERSITY
A Centre of Excellence in the Heart of Africa

6th June, 2023

TO WHOM IT MIGHT CONCERN

Dear Sir/Madam,

RE: INTRODUCTORY LETTER FOR ZILPA GRACEFORD MASENJE

Warm greetings from the School of Research and Post-Graduate Studies (UCU)!

This serves to introduce the above named; **Zilpa Graceford Masenje** as our student pursuing a Master's degree in Education planning and administration registration number **RM21M06/002.**

Zilpa is conducting a research as a requirement for the award of the above mentioned degree entitled; **Quality Teaching Of Literacy and Numeracy in Selected Primary Schools in Kongwa District. Tanzania.**

She has fulfilled all clearance requirements such as getting faculty and Research Ethics Approval from UCUREC; accredited by Uganda National Council for Science and Technology (UNCST). Her work has minimal risks and deemed not harmful to both individual participants and the institution.

Any assistance given to her to achieving this goal will be highly welcome.

Thank you so much.

Yours faithfully,

UGANDA CHRISTIAN UNIVERSITY
06 JUN 2023
DIRECTORATE OF POSTGRADUATE STUDIES

Dr. Owor Joseph
Head, Research, Grants & Publications
Uganda Christian University
jowor.ucu.ac.ug

A Centre of Excellence in the Heart of Africa

P.O. Box 4, Mukono, Uganda (East Africa), Plot 67-173, Bishop Tucker Road, Mukono Hill, Tel: +256 (0) 31 235 0800, www.ucu.ac.ug
Ugandachristianuniversity @UCUniversity, Founded by the Province of Church of Uganda, Chartered by the Government of Uganda.

JAMHURI YA MUUNGANO WA TANZANIA
OFISI YA RAIS
TAWALA ZA MIKOA NA SERIKALI ZA MITAA

HALMASHAURI YA WILAYA YA KONGWA
(Barua zote ziandikwe kwa Mkurugenzi Mtendaji)

Unapojibu tafadhali taja:

Kumb. Na. HW/KOG/T.10/8/86 **12/06/2023**

Walimu Wakuu,
Shule za Msingi Norini, Mlanje,na Mkoka,
S.L.P 206,
KONGWA.

YAH: KUMTAMBULISHA KWENU ZILPA GRACEFORD MASENJE

Rejea mada tajwa hapo juu.

2. Ofisi ya Mkurugenzi Mtendaji imepokea barua kutoka katika chuo cha **Uganda Christian University** ikimtambulisha mtajwa hapo juu kwa ajili ya kufanya utafiti kuhusu **QUALITY TEACHING OF LITERACY AND NUMERACY IN SELECTED PRIMARY SCHOOLD IN KONGWA DISTRICT. TANZANIA.**

3. Hivyo kwa barua hii mnaagizwa kumpa mwanafunzi huyo ushirikiano wa kutosha ili kumsaidia kufikia malengo ya Utafiti huu kwa kipindi cha wiki moja kuanzia **Juni 13 – 20, 2023**

Nawatakia utekelezaji mwema.

Gwantwa I. Mwabungulu
Kny: MKURUGENZI MTENDAJI (W)

Nakala: Mkurugenzi Mtendaji (W) – *Aione kwenye jalada*
Maafisa Elimu Kata husika- *kwa taarifa*

KAIMU MKURUGENZI MTENDAJI
HALMASHAURI YA WILAYA KONGWA
S.L.P 57 KONGWA

Ofisi ya Mkurugenzi Mtendaji, S. L. P 57, KONGWA, Simu 026-2370031, Nukushi 026-2370031, Barua Pepe: ded@kongwadc.go.tz
Tovuti: www.kongwadc.go.tz

APPENDIX V: PROPOSED BUDGET

No	**Items**	**Amount**
1.	Printing	200,000/=
2.	Photocopying	100,000/=
3.	Field work – data collection	500,000/=
4.	Research Assistants (SDA)	7000,000/=
5.	Binding	50,000/=
	Estimate Total	**1,550,000=Tzs**

APPENDIX VI: PROPOSED WORK PLAN

No	**Activity**	**Time schedule**
1.	Topic Submission and Approval	Nov, 2022
2.	Proposal writing	Dec- Feb, 2022
3.	VIVA-Proposal	Feb, 2022
4.	Proposal submission (1st draft)	March, 2023
5.	Final proposal Submission	March, 2023
6.	UCUREC Approval	April, 2023

7.	Field work –data collection	April, 2023
8.	Dissertation/Report compilation	April, 2024
9.	Dissertation submission (1st draft)	April, 2024
10.	Final copy submission	May, 2024
11.	Submission to External Examiners	May, 2024
12.	VIVA VOCA (Presentation)	August, 2024
13.	Final Submission	August, 2024

Table 3.1

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*