

**EFFECTIVENESS OF INSTRUCTIONAL MATERIALS IN ENHANCING
ACQUISITION OF PRE- READING SKILLS AMONG PUBLIC PRE-SCHOOL
LEARNERS IN NAROK NORTH SUB COUNTY, NAROK COUNTY, KENYA**

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DECLARATION

This thesis is my original work and has not been presented for any award in any university.

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DEDICATION

This study is whole heartedly dedicated to the almighty God for His abundant grace that has made me see this beautiful end of academic journey.

To my husband Mr George Ntokoiwuan for such a great inspiration and financial support, together with my children Victor, Margaret, Mercy and Sharon, I am indeed indebted to you for being a source of emotional strength and moral support during the whole process.

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ABSTRACT

The efficacy of pre-reading abilities among preschool learners is compromised by the inadequate use of teaching resources. Investigations carried out on instructional materials suggest that the effectiveness of learning may be enhanced when instructors possess appropriate instructional resources, which are then used proficiently in the classroom. Nevertheless, the majority of research have concentrated on comprehending reading abilities in secondary or primary school students, disregarding the preschool stage, when the fundamental framework is established. Scant research exists on individualized educational tools for preschool learners, especially in Narok County. The objective of this research was to evaluate the efficacy of instructional materials in improving the development of pre-reading abilities among preschools in Narok North Sub County public schools. The study was guided by the following objectives: to establish the effectiveness of visual instructional materials in enhancing acquisition of pre-reading skills; the effectiveness of realia instructional materials in enhancing acquisition of pre-reading skills; the effectiveness of audio instructional materials in enhancing acquisition of pre-reading skills; and the effectiveness of teachers' pedagogical skills in instructing learners in pre-reading skills. A descriptive survey research approach was used in this study. The study focused on a sample of 294 preschool instructors and 1,560 preschool learners from the 98 ECDE Centres located in Narok County. The research sample consisted of 166 instructors and 308 learners, chosen by purposive and simple random selection techniques. Methods used for data collection included questionnaires and an observation checklist. To determine the suitability of the research instruments in gathering the anticipated data, an analysis was conducted on their reliability and validity. Analysis of quantitative data was conducted using descriptive techniques, whilst analysis of qualitative data was conducted using common themes. The research results indicated that instructional materials were successfully used to improve the development of pre-reading abilities in the preschools. With respect to visual instructional resources and the education of pre-reading abilities, the findings indicated that they were not efficiently used in the majority of schools. Furthermore, the findings indicated that the absence of visual instructional resources had an impact on the training of pre-reading abilities among the preschool students. In addition, the research found that the majority of preschools did not have sufficient realia resources to improve the development of pre-reading abilities, which might potentially have a detrimental impact on the instruction of pre-reading skills. Most of the schools showed the lowest level of effectiveness in using audio teaching resources. The majority of instructors had the requisite pedagogical abilities, previous experience, and had employed diverse instructional resources in their teaching. Therefore, the pedagogical qualifications of instructors were seen as a crucial instrument in improving the pre-reading abilities of preschool students. The majority of instructors reported using their expertise to create their own educational resources. The results of the study may be advantageous to preschool educators, creators of instructional materials, policymakers in the education sector, other scholars, and the KICD, which is tasked with providing guidance on instructional materials. Analysis of the research revealed that all the teaching materials examined were inadequate. Simultaneously, instructors had the necessary expertise and experience and had used a range of improvised resources to improve the development of essential pre-reading abilities in students. The research indicated that instructional materials were successful in improving the development of pre-reading abilities.

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LIST OF ABBREVIATIONS

DICECE	District Centre for Early Childhood Education
ECDE	Early Childhood Development Education
FPE	Free Primary Education
KICD	Kenya Institute of Curriculum Development
KIE	Kenya Institute of Education
MOE	Ministry of Education
MOEST	Ministry of Education Science and Technology.
NACECE	National Centre for Early Childhood Education
NACOSTI	National Commission of Science, Technology and Innovation
TLP	Teaching Learning Process
UNESCO	United Nations Education Scientific & Cultural Organizations.

CHAPTER ONE

INTRODUCTION TO THE STUDY

1.0. Introduction

This section comprises the following sub-sections; background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations and delimitations of the study, assumptions of the study, operational and definitions of the key terms in the study.

1.1 Background to the Study

Children aged five and six are the main focus of pre-primary education, a crucial juncture in the official primary education system (Chala et al., 2020). Rural education centres, madras (special schools for teaching the Quran), day care centres, nursery schools, and kindergartens are all considered pre-school establishments by the writers. Mwaniki et al. (2020) found that early childhood care was the original form of education up to pre-primary school in Kenya during the colonial period. Students are expected to develop basic skills in counting, pre-writing, and reading throughout their time in pre-primary school. Children benefit greatly from pre-primary education because it gives them the opportunity to develop important life skills including sharing toys, being physically agile, confident, self-reliant, proficient in personal hygiene, clothing themselves, and seeing well. Singing and reading poems also helps students improve their memory and public speaking skills.

Children in both developed and developing nations benefit greatly from preschool programs in terms of their social, emotional, physical, and cognitive development (Smith & Johnson, 2022). Acquiring the necessary information and abilities in early

childhood sets the basis for students to excel in later academic years. In addition to formal education, research has shown that preschoolers benefit greatly from high-quality family and preschool environments. Instructional materials are described as physical objects, tools, and tactics that teachers use to help students learn in a meaningful way in the research by Fitriah (2020). Any subject in a school curriculum may benefit greatly from instructional materials, which are crucial tools for teachers. In order to help students understand and remember what they have learned, instructional resources are essential (Reisman, 2017). Igwe et al. (2020) found that when teachers use the right materials in the classroom, students' imaginations and motivation to study are both enhanced.

Visual materials, which include both reading and non-reading materials, and audio-visual materials, which comprise both electrically operated and non-electrically driven resources, are the two groups into which instructional resources are divided according to Brown (2016). The resources and materials at your disposal include a variety of interactive tools, such as audio and video recorders, slide projectors, still pictures, instructional film strips that have been pre-programmed, maps, charts, and graphs. When used alone or in combination, these tools provide a wide variety of learning experiences to meet the requirements of different types of classrooms and students.

In their study, Smith and Johnson (2022) looked at how preschoolers' exposure to print affected their reading development. Teachers' narratives posted on bulletin boards, environmental prints, word walls, journals, and a school library were among the many print materials emphasized by the researchers as having to be prominently exhibited. These elements not only help babies learn to read, but they also create an engaging and stimulating classroom environment that encourages children to read and understand what they see. Learning, thinking, and conduct are all shaped by a child's early

experiences, which have a major impact on the brain's wiring. What makes the skills that kids learn in ECDE programs so important is the impact they may have on their future success in school.

According to Eurydice (2023), nations such as Poland, the Czech Republic, and Europe provide full governmental support to the early childhood development and education (ECDE) sector so that they may provide instructional materials for all levels of students. Essential Childhood Development Education (ECDE) is not only the duty of the government in most developing countries, especially in Africa. By actively engaging in routine activities like eating and bathing, children in Sri Lanka learn useful life skills (Pinnawala, 2009). Instructional technologies, according to Pinnawala, open up new channels of personal ownership, which helps students fully understand concepts when they work on mathematical or scientific projects. Even though program coordination is the government's job, there's still a lot of worry about how to pay for and provide instructional materials to students.

Early Childhood Development Education (ECDE) in African countries relies on funding from both public and private sources for its teaching materials. Learners' fees are the major source of revenue for ECD facilities, according to an audit carried out in South Africa. Both the state and parents buy the little educational materials that are available (Wangila, 2017). The Department of Basic Education (2014) states that the ECDE is unreliable for producing instructional materials due to insufficient government finance. Academic studies conducted in Ghana have shown that ECD centres do not have enough or high-quality teaching resources due to the government's inadequate financing of ECD programs. Dzorgbo and Aikins (2021) state that as a result, these programs are no longer successful.

According to World Bank (2007), materials are crucial to students' education and the success of any given program. Chalkboards, flat drawings, textbooks, flashcards, and symbols are just a few examples of the many different types of instructional materials that Brown and Green (2019) found. A few other examples would be the use of workbooks, televisions, laptops, slides, and filmstrip projectors. But there are two primary types of educational resources identified by Brown et al. (2016): print materials and non-print materials. The effectiveness of young learners in mastering the skills taught in an Early Childhood Education classroom is greatly influenced by both printed and non-printed materials.

A child's ability to adapt to new situations depends on his or her exposure to and utilization of educational materials from an early age. Based on their findings, Mwangi and Wanyama (2012) conclude that students paid closer attention in class when teachers included specific learning aids into their lessons. In addition, the students' optimistic outlooks sparked a deeper engagement with the course material. Because of this, the pupils' participation in class increased. In addition, kids were taught basic problem-solving skills that they would need in their daily lives (Nyaga, 2015).

Matazu (2022) listed books, magazines, newspapers, slides, pictures, and videos as some of the instructional materials used in Rwanda. Locally made tools like stones, sticks, leaves, seeds, etc. are also included in the teaching materials; they all contribute to a better learning environment. Teachers may better transfer knowledge to their students when they make use of instructional resources, which, according to Jamil (2022), allow them to tap into their students' full potential for learning.

According to Ajemba et al. (2021), modern textbooks, science laboratories, and other physical learning spaces are part of the educational resources available to students in

East African states. Other resources include consumables like chemicals and reagents, models, and charts. In addition, Ogunniyi (2016) illustrated a variety of instructional materials, such as physical objects, pictorial representations, models, graphs, charts, radios, DVDs, test tube holders, clinostats, reptile hooks, and cardboard paper. Locally made tools and materials, such as mosquito nets, thread, needles, and wooden rings/irons, serve as instructional resources. Learning is also helped along by imported tools like clinostats and aspirators (Chukwunazo et al., 2022). One way to classify these instruments is as print items or non-print objects.

The inability of certain Kenyan students to retain information from a previous lesson, perhaps as a result of poor pre-reading skills, was highlighted in a study by UWEZO (2011). Literacy researchers have long recognized the power of instructional materials as a key component of high-quality pre-reading education and student achievement in the target language. Instructional materials are educational aids that help students learn more effectively by providing concise explanations and making it easier for them to understand complex concepts.

Instructional tools allow teachers to more precisely explain concepts to students with fewer words, claims Mayer (2020). Preschool teachers should provide their students with a wide variety of instructional materials, according to Chukwunazo et al. (2022), so that their lessons are more relevant and interesting. Various materials are available to help youngsters develop their pre-reading skills. For children aged 2-4, there are picture books, simple storybooks, and phonetic reading books. Initiating pre-reading skills at a young age helps foster a positive attitude towards reading in later stages of schooling. The Kenyan Ministry of Education (2010) stressed the need of employing appropriate instructional materials for teaching and learning in Early Childhood Development Education (ECDE) centres for effective learning. Kids may learn new

things, use their imaginations, and increase their brainpower in this way. Mwaniki et al. (2020) discovered that students performed better on math assignments when they worked with real-world objects in the classroom.

According to Kiambi and Waithaka (2023), most Kenyan preschool instructors have never had formal training on how to best instruct young children in the early years of elementary school. As a result, they often face challenges while selecting and implementing appropriate instructional materials to enhance pre-reading skills in their students. It seems that these factors add up to a weak foundation in pre-reading skills for pre-scholars, which in turn leads to poor performance across the board in school. According to Bodrova and Leong (2007), one of the things that makes learning enjoyable for students is having access to relevant instructional resources. With these tools, kids may look forward to and dive headfirst into exciting new educational opportunities. The learning instructional materials encourage all-encompassing education by letting students investigate a wide range of topics. Bodrova and Leong (2007) found that when students have access to a variety of learning materials, they become more actively involved in their own education. Preschool teachers, on the other hand, have it made with enough and appropriate teaching materials (Mwongo & Wanyama, 2012).

According to Azmi and Mohamed (2017), the Kenyan Ministry of Education is in charge of overseeing the implementation of various programs, such as free primary education (FPE), and addressing new developments, such as increasing enrollment. Preschools in Kenya suffer from a severe lack of qualified teachers who can instill basic reading skills in their students, according to research by UWEZO (2011). In addition, out of 166 preschool teachers, only 68 were found to be competent; these 68 teachers were responsible for teaching 308 pupils, according to the inquiry. According to the

statistics, there is a high student-to-teacher ratio in preschool, which can hinder the development of effective learning strategies.

Early Childhood Development and Education (ECDE) centre managers' financial and organizational resources determine the availability of educational resources, according to a 2011 UWEZO evaluation. The preschools' sustainability over the long run will only get a small fraction of the total budget. The majority of the studies that were considered did not centre on any one set of instructional resources and were instead based outside of Kenya. Additionally, no specific educational resources in Narok North Sub-county have been the subject of any formal scientific study. Since every educational resource affects the teaching process in its own unique way, this occurrence creates a gap, which is why this study is necessary.

1.2 Statement of the Problem

The background material indicates that research has shown that people retain and use up to 80% of the information they directly experience or learn via practical experience, 10% of the information they hear, and 40% of the information they share with others. This underscores the significance of course materials for students. Granting pupils access to top-notch educational materials provides them with a competitive advantage in the practical realm. Effective teaching of pre-reading abilities necessitates the use of instructional materials that are easily available, ample, practical, and appropriate for the intended activities. Unfortunately, most research has made general findings regarding the effects of different learning tools without ascertaining which resources are most appropriate for specific kinds of classes. Conversely, Piasta et al. (2020) emphasize the significance of learning materials in enhancing students' competencies in pre-reading.

The objective of this study is to fill a contextual void that their previous work did not specifically tackle by investigating preschool students.

Sufficient financial resources are essential for acquiring instructional materials, and teachers will enhance access to resources according to the needs of the students. Consequently, there is a dearth of evidence about the impact of various early literacy classes on the development of pre-reading skills. The purpose of this study is to assess the effectiveness of employing several types of multimedia components such as realia, audio, and visual aids to teach pre-reading skills in preschools located in Narok North Sub-county, Narok County.

1.3 Purpose of the Study

The purpose of this study was to assess the effectiveness of instructional materials in enhancing acquisition of pre-reading skills among preschool learners in public pre-schools in Narok North Sub County, Kenya.

1.4 Objectives of the Study

The study sought to address the following specific objectives:

- i. To establish the effectiveness of visual instructional materials in enhancing acquisition pre-reading skills among public preschool learners in Narok North Sub County.
- ii. To establish the effectiveness of realia instructional materials in enhancing acquisition of pre-reading skills among public preschool learners in Narok North Sub County.
- iii. To assess the effectiveness of audio instructional materials in enhancing acquisition of pre-reading skills among public pre-school learners in Narok North Sub County.
- iv. To assess the effectiveness of teacher's pedagogical skills in instructing learners on pre-reading skills among preschool learners in public pre-school centers in Narok North Sub County.

1.5 Research Questions

The study seeks to answer the following research questions;

- i. How effective are the visual instructional materials in enhancing acquisition of pre reading skills among public preschool learners in Narok North Sub County?
- ii. How effective are the realia instructional materials in enhancing acquisition of pre reading skills among public preschool learners in Narok North Sub County?
- iii. How effective are the audio instructional materials in enhancing acquisition of pre-reading skills among public preschool learners in Narok North Sub County?
- iv. How does teacher's pedagogical skills help in instructing learners on pre-reading skills among pre-school learners in public pre-school centers in Narok North Sub County?

1.6 Significance of the Study

The study's findings might be useful for early childhood education and care teacher educators (ECDE) in developing high-quality materials to help preschoolers acquire early literacy skills. Additionally, ECDE teachers may benefit from the findings if they get a better understanding of the topic and are able to use that knowledge to choose the most effective materials for teaching pre-reading literacy.

The government stands to gain from the study if it uses the results to inform the development of appropriate instructional materials for a variety of classroom settings, with a focus on preschoolers, and to strengthen policies related to Early Childhood Development Education (ECDE). Curriculum developers at institutions like the Kenya Institute of Curriculum Development (KICD) may use the data to push for better materials to be used in early childhood development and education (ECDE) programs, especially targeting pre-reading skills.

1.7 Limitations of Study

Most respondents dedicated time to complete the questionnaires given to them because of their hectic schedules and the demands of their profession. With the aim of addressing this delay, the researcher conducted further visits to the respondents in order to verify and gather the completed questionnaires. The reliance on a questionnaire as the principal instrument for data gathering constrained the quantity of data gathered, since it hinged on the respondents' willingness to provide precise information. The collected replies accurately represented the perspectives and opinions of the participants. Questionnaire validation confirmed the clarity of the statements for the responders.

The main objective of the research was to assess the efficacy of instructional materials in improving the development of pre-reading abilities among public preschoolers in Narok North Sub-county. This research focused on four specific educational resources (visual aids, audio, realia, and instructors' pedagogical abilities) that are often utilized in preschools. Information was gathered by means of a questionnaire and an observation schedule, both of which were postulated to provide enough data for analysis. Nevertheless, the descriptive approach was inadequate in providing comprehensive understanding of the fundamental mechanisms or processes by which instructional materials affected pre-reading abilities. Although the descriptive research design yielded useful data on the present condition of instructional materials in the target area and their influence on pre-reading abilities, the conclusions cannot be extrapolated to other regions because of variations in the pre-reading skill levels across different areas of the county.

1.8 Delimitations of the study

The primary objective of the research was to assess the efficacy of instructional teaching materials in improving the development of pre-reading abilities among public preschoolers in Narok North Sub-county. This research focused on four specific kinds of educational materials utilized in preschools: visual aids, audio, realia, and instructors' pedagogical qualifications. The data was gathered by means of a questionnaire and an observation schedule, widely believed to provide sufficient data for the study. The data analysis was restricted to descriptive statistics for elucidating the efficacy of the curriculum teaching materials.

1.9 Scope of the Study

This study focused on investigating the effectiveness of instructional materials in enhancing the teaching of pre-reading skills among preschool learners. Additionally, the study involved both teachers and preschool learners. Preschool education forms the foundation for pre-reading skills. The study was limited to preschool teachers tasked with teaching these learners and was conducted in Narok North Sub-county. According to Uwezo (2011), reading skills are generally low in Narok County, and the situation is similar in Narok North Sub-county. The region faces challenges in providing instructional materials due to financial constraints and insufficient support from the community in financing these materials.

1.10 Assumptions of the Study

The primary objective of the research was to assess the efficacy of instructional teaching materials in improving the development of pre-reading abilities among public preschoolers in Narok North Sub-county. This research focused on four specific kinds of educational materials utilized in preschools: visual aids, audio, realia, and instructors' pedagogical qualifications. The data was gathered by means of a questionnaire and an observation schedule, widely believed to provide sufficient data for the study. The data analysis was restricted to descriptive statistics for elucidating the efficacy of the curriculum teaching materials.

1.11. Operational Definition of Terms

Audio materials	These are instructional materials that help learners learn specific words and their pronunciation. They include radios, tape recorders, computers, and television sets.
Realia materials	These are real objects, such as insects, fruits, plants, soil, water, and rivers, shown to learners as they learn to read words related to these objects.
Visual materials	These are instructional devices such as charts, pictures, figures, videos, and other motion pictures that appeal to vision.
Teachers' Pedagogical Skills:	Refer to the ability of a teacher to effectively plan, organize, and deliver instruction, as well as facilitate learning experiences, manage classroom dynamics, and assess student progress.
Pre-Reading skills	These are reading readiness skills, such as vocabulary, phonological awareness, matching similar words, reading words, print motivation skills, and letter-sound knowledge, that young children acquire before they learn to read in preschool.

Instructional materials	These are physical materials used by teachers to promote the effectiveness of instruction and help them communicate more effectively with learners.
Effectiveness	This refers to anything that has the power to affect a person positively or negatively. In this study, it refers to factors that assist learners in effectively mastering their reading skills.
Pre-school	Preschools are educational institutions designed to provide early childhood education and care for children, typically aged between three and five years old, before they enter formal schooling.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviewed the literature on the effectiveness of instructional materials in enhancing pre-reading skills. The literature review was structured according to the objectives outlined in chapter one and covered the following subtopics: pre-reading skills, instructional materials, visual instructional materials, realia instructional materials, audio instructional materials, and the effectiveness of teachers' pedagogical skills in teaching pre-reading skills.

2.2 Instructional Materials

Teachers are able to better guide their students through the learning process with the use of a variety of instructional tools. The use of instructional materials is crucial to the success of educators and students in all fields. Learning becomes more exciting, practical, realistic, and engaging, and instructors become more efficient as a result. Furthermore, they facilitate the active and successful participation of both instructors and students in class activities (Brown & Green, 2019).

According to Okobia (2011), classroom presentations using real-world examples are the primary function of instructional materials. Similarly, instructional resources were defined by Abdu-Raheem (2016) as those that help instructors show students how to apply what they've learned in real-world situations. Instructors, especially English instructors, are picky about the resources they provide their students, says Tiwari (2023).

In their 2016 study, Renandya and Jacobs brought attention to the difficulties that instructors in Southeast Asian nations have when trying to choose interesting and relevant resources to teach English literature and language. They stressed how important it is to have resources that are culturally appropriate and reflect the many backgrounds of students in the area. Renandya and Jacobs also noted a number of obstacles, such as the dearth of literature instruction in ESL curricula and the scarcity of pedagogically sound resources for language and literature courses.

There is a lack of research on how to systematically evaluate and choose instructional resources that cover many aspects of instructors' expertise, as Harwood (2017) noted. It becomes difficult for teachers in this setting when high-quality instructional resources for teaching literature are few or unavailable, since this duty rests on them. Inadequate learning resources make it hard for students to acquire pre-reading abilities including word-matching, phonological awareness, and vocabulary (Abdu-Raheem, 2016).

2.2.1 Acquisition of Pre reading Skills

Proficient reading, which depends on the perception and comprehension of readers, has always been a crucial and fundamental skill. Proficiency in understanding and accurately analyzing written content is a challenging ability to develop when learning a new language. According to Chala et al. (2020), pre-reading skills such as phonological awareness, letter recognition, vocabulary development, and comprehension strategies are of utmost importance for academic achievement in the African context. Instructors may use pre-reading strategies with their students prior to providing reading tasks. According to Mwaniki et al. (2020), these abilities enable students to effectively prepare for reading by determining their desired learning outcomes, reassessing their existing knowledge on the topic, and previewing the

relevant content to establish realistic expectations.

Gonzalez et al. (2021), outlined four aims of pre-reading skills: "to stimulate, cultivate, or furnish general foundational knowledge, to stimulate or furnish foundational knowledge of the text structure, to introduce essential vocabulary, and to establish a purpose for undertaking the reading." Failure of the teacher to actively include the students' existing knowledge will render this task unattainable. Word recognition, letter identification, and phonological awareness are essential pre-reading skills that prepare children for successful reading. The current study aimed to ascertain the impact and mechanisms by which certain instructional materials facilitated the development of pre-reading skills in preschool-aged children.

2.3 Types of Instructional Materials

In order to accomplish their goals and provide students with a more well-rounded education, educators rely on instructional materials, which may be either human or non-human resources (Kumari & Raja, 2021). Additionally, they are seen as means by which data may be transferred from one location to another. Both the delivery method for learning goals and the assessment tools in the teaching process are instructional materials.

In order to improve the efficacy of teaching and learning, Azmi (2017) stressed the need of choosing instructional resources that are in line with learning goals, instructional methodologies, and the requirements of learners. Students are completely engaged in the educational activities in their classrooms because a variety of resources are used to improve learning, spark their natural curiosity, and create an ambiance that stimulates all the senses, including sight, sound, and touch. The effect of lesson plans on the academic performance of Kenyan preschoolers was investigated (Mwangi & Orodho,

2019). Results from their study corroborated previous claims that high-quality, age-appropriate instructional materials are critical to preschoolers' success in reading, math, and social-emotional development, among other areas of academic study.

Instructional resources' accessibility and availability are contingent upon students' abilities and study habits (Nikky, 2016). Nikky further pointed out that the quality of preschool teachers' training and preparation is dependent on the accessibility and adequacy of classroom learning resources. He went on to say that the different kinds of classroom tools that are mandatory for TLP are what really make a difference when it comes to instruction and student achievement. Motivating and equipping students to sort, classify, and categorize objects according to various attributes like length, colour, texture, shape, or usage helps them to symbolize and use various imitation strategies, which in turn enhances their cognitive capacities. According to Zosh et al. (2022), children's learning is enhanced when they are able to actively explore and manipulate tangible objects. This kind of learning is particularly important for children's growth and engagement. This implies that students are able to study about items in depth and differentiate between them via the use of a variety of resources.

According to Amadi and Offorma (2021), there are three main types of instructional materials: visual (e.g., pictures, graphs, charts), audio (e.g., recordings, radio, and teachers' voices), and audiovisual (e.g., television, video recordings, and films). Students should be provided with items that stimulate their sight, hearing, taste, smell, and touch as part of this study so that they may actively engage in the process of reading skill development.

Improved learning outcomes were seen in early childhood education settings where students were more engaged and motivated when age-appropriate instructional resources were used (Munji & Bire, 2021). Students are able to maintain attention and

motivation when engaging in number work exercises. Students are more likely to approach mathematics with a positive attitude when they have access to high-quality teaching resources. It is important that all students have access to the same amount of instructional resources in the classroom. Children are given the opportunity to explore and experiment with various materials via the use of a range of materials.

2.3.1 Visual Instructional Materials

The research by Kimathi and Mwaka (2021) on the effectiveness of visual aids in kindergarten reading teaching in Kenya shows how this is an important issue in the field of early childhood education. Providing instructional resources, particularly textbooks, seems to be the most cost-effective strategy to increase the quality of education in Africa, according to the study's results. The survey also touched on another issue: the lack of resources for pre-primary education.

Visual teaching tools are being studied in secondary schools as well as pre-primary ones. As an example, Alade and Okunola (2021) in Ogun State, Nigeria, looked at the effects of visual aids on pupils' performance in the classroom. Students' performance in ten different courses was connected with the use of visual aids in the classroom, according to the study's correlational design. Subject instructors from five different schools were surveyed to find out what materials they used in the classroom. The accessibility of course materials has a correlation with students' performance in the previous five years of school, found Alade and Okunola (2021). They found that instructional resources significantly impacted students' performance in all subjects, suggesting that, when used effectively, instructional materials may positively impact students' learning.

A comparable research was carried out in Arusha, Tanzania, by Mwakasanga (2021)

on the topic of visual instructional resources in pre-primary schools, specifically looking at their availability, usage, and problems. School officials, students, and instructors all contributed to the data set. The results showed that factors including student-teacher ratio, classroom layout, and instructional materials availability impacted how successful the materials were. Mwakasanga (2021) went on to say that pre-primary school students have a serious information gap when it comes to the utilization of instructional resources to teach them pre-reading abilities. There is a lack of knowledge about how visual instructional tools might improve pre-reading abilities, and this is also true in Narok North Sub-county preschools.

2.3.2 Audio Instructional Materials

These teaching materials enable children to simultaneously perceive visual and auditory stimuli. Example of educational technologies are computers, televisions, and radios. When acquiring the skill of reading, individuals rely on not just one, but two of the most essential faculties: vision and auditory perception. Based on the findings of Courage and Setliff (2022), educational television programs can enhance children's cognitive and linguistic development. However, audio instructional materials play a more crucial role in facilitating children's ability to establish connections, retain information, and make comparisons between visual and auditory sources. According to Natalia (2018), the usage of audio materials in the classroom stimulates students' interest and prolongs their attention span. All pupils, regardless of their learning speed, may get advantages from audio instructional materials. Students may acquire reading skills by actively listening to their teachers read aloud and thereafter imitating their articulated words.

According to Gilakjani and Ahmadi (2011), audio materials constitute a valuable

instrument for language instructors. Students may engage in listening comprehension exercises to develop a firm understanding of the intonation, pronunciation, and sounds of the target language. When children engage actively in pre-reading activities, audio materials provide enough opportunities for them to develop communication skills and acquire vocabulary more rapidly (Natolia, 2011).

The use of audio instructional resources offers authentic opportunities for listening practice and exposure to various accents and speech patterns, therefore enhancing learners' comprehension skills and cultural awareness (Atas, 2022). The need of regularly using audio teaching materials into the pre-reading skill program was further underscored (Atas, 2022). According to Atas (2022), when instructors make necessary arrangements to provide a conducive learning environment, pupils are more inclined to remember taught material. According to Wardhani (2012), educators are obligated to create classroom settings that facilitate the effective use of audio instructional materials during instruction. In an effectively designed classroom, students exhibit higher levels of engagement and attentiveness. In addition to adequate preparation, students get advantages from being acquainted with the learning materials as it facilitates their comprehension of topics and accelerates the development of their pre-reading skills. The predominant emphasis of the studies cited here has been on the preparation of lessons.

A study conducted by Snigdha and Moriom (2023), the effectiveness of audio pedagogical instruments in the instruction of reading to primary school pupils in Bangladesh. The study's objective was to evaluate the effectiveness of audio educational materials in improving learners' abilities within a classroom setting. The researchers conducted pre- and post-tests on a sample of 35 pupils from Tutpara Model Government Primary School in Khulna, Bangladesh, to assess their progress in an

experimental programme. Over a period of three months, students engaged in listening to audio teachings. The results indicated a substantial improvement in students' reading skills subsequent to attentive listening to the lectures. The acquisition of new terminology and its meanings resulted in enhanced pronunciation, an expanded vocabulary, and increased confidence in reading among pupils. Comparatively to their conventional classroom counterparts, students in the multimedia classroom exhibited much higher levels of activity and attentiveness when engaging in tasks.

In his study, Abdul (2020) examined the potential enhancement of reading comprehension among indigenous students in Malaysia via the use of multimedia classes. Empirical evidence indicates that the integration of technology in education may greatly enhance pupils' reading skills, thereby fueling their ambition. Data was collected from a sample of twenty rural schools in Kluang, Malaysia, using the methodology of action research. Descriptive statistics and theme analysis revealed that multimedia training significantly enhanced students' reading comprehension. The present study seeks to address the geographical limitation of the aforementioned study, which was limited to Malaysia.

A study conducted by Chang and Millett (2015) examined the impact of guided reading on fluency and comprehension in a sample of 64 English as a foreign language (EFL) learners. Their study revealed that this approach was even more effective than quiet reading in terms of enhancing reading speed and comprehension. The study conducted by Dawd (2020) revealed that teaching poetry to ESL students had a beneficial effect on their reading comprehension abilities.

Previous research has shown that audiobooks enhance overall reading abilities and specific reading abilities in particular (Wagar, 2016; Anisah, 2018; Rahman & Hajar, 2020; Tusmagambet, 2020). Studies conducted across different age groups and

academic levels provide valid evidence that engaging with audiobooks enhances both reading comprehension and enjoyment. The use of audiobooks in the classroom has shown to be very effective in enhancing students' reading comprehension, fluency, and motivation, as well as their general attitude towards reading both within and outside the educational setting.

Analysis of the reviewed literature indicates that research has been conducted on the influence of audio instructional materials on pre-reading skills. However, scholarly research in this domain has generally disregarded the requirements of preschool-aged children in favour of audio instructional programs tailored for more advanced learners. In order to address this lack of information, the current study aimed to analyse this aspect of Narok North Sub-county in more detail.

2.3.3 Realia Instructional Materials

In 2016, Nikky actual items or things, as opposed to representations of models, are known as realia. Coins, tools, artifacts, plants, and animals are all part of this category. Realia, which are very valuable in almost every field, are categorized in many ways. Some examples are specimen exhibitions and cutaway artifacts. They may be pertinent to fields such as economics, history, physics, chemistry, biology, and a host of others. Insects, fish, and animals are just a few examples of how trainee biology teachers may employ realia to pique their students' attention and foster a sense of caring in the classroom. Realia removes any skewed understanding of the subject matter from the students' minds. According to Zhao and Flewitt (2020), using real-life objects and materials in the classroom can help students become more invested, make better connections between theoretical ideas and practical applications, and build the multiliteracies needed to communicate effectively in a variety of contexts.

Teaching resources shouldn't break the bank; ideally, they should be within reach of both educators and parents (Ogunyemi, 2020). The school's budget should include funds for teaching resources. The responsibility for ensuring that the instructional resources are suitable for the learners who will be utilizing them lies with the instructor. The content need to be age-, experience-, and intelligence-appropriate. Equal weight should be given to the materials' legal, safety, and ethical considerations. Additionally, they must to be devoid of any partiality, bias, or prejudice. If the materials need electricity, then it's best to look for a substitute, according to Wardhani (2012).

For instance, realia allow students to experience a language via their sense of sight, sound, touch, and manipulation, which is crucial in language learning. According to Gunning (2018), dealing with real-life materials helps students learn the language by exposing them to it in its natural context, which helps them address their genuine communication requirements. Additionally, authentic language acquisition requires an awareness for and comprehension of both language and culture, both of which may be fostered via the use of realia.

A model or mockup is a depiction of an object in three dimensions. The three dimensions of length, width, and depth allow a model or mockup to be seen from any angle. According to Waigera (2013), models reflect either the infinitely enormous (e.g., the earth or the solar system) or the infinitesimally little (e.g., an inanimate object). Either they are more detailed than the original or they are simpler. It is possible to deconstruct certain models so that students may examine them closely. In contrast, mock-ups are distinct from models due to their operational components and bigger size. Many scientific disciplines make extensive use of models and markups, including chemistry, geography, biology, and physics. In keeping with the recommendations of Stevenson and Bell (2021), trainee teachers might investigate eco-friendly and

economical alternatives, such as making models from recyclable materials.

Several types of Realia are available to teachers, say Zhao and Flewitt (2020). Items such as books, pencils, erasers, bags, pens, rulers, and classroom furnishings like tables, chairs, blackboards, pictures, and chalk are all considered stationery. As are human body parts like hands, hair, eyes, nose, ears, mouth, and foot. In the event that the actual items cannot be brought to the school, the following may be used as substitutes: animals (cow, goat, frog, cat, lion, dog), transportation (bus, train, aircraft, motorbike), and professions (doctor, soldier, steward, policeman, fisherman, etc.). Toys or dolls might be used by the instructor in place of the actual item. The incredible expansion of the Internet and the pervasiveness of personal computers in schools have necessitated the merging of traditional teaching methods with cutting-edge technological tools. According to Anderson (2014), digital artifacts and other things are now being used as teaching tools in classrooms via the use of virtual reality. Their primary function is to pique students' interest in what they are studying. Virtual realia integrates an established approach with contemporary educational technology to deliver culturally-based genuine materials into classrooms. Unlike conventional realia, which are physical objects, virtual realia are more interactive and versatile.

Wantini (2019) states that instructors may use realia in a variety of methods to help students who struggle with pre-reading abilities acquire language, including interactive teaching, visual aides, and hands-on activities. It may also be used with smaller groups of kids to help them improve their speaking and listening abilities. Kids may practice speaking and listening in these kinds of activities. while students make errors, particularly while reading, it is the duty of the teacher to correct them right away. They help kids who are having trouble pronouncing words properly by doing it themselves before asking them to repeat it. It may build on what they say by adding words to make

a phrase or elaborating on a word's meaning.

Working with students one-on-one or in small groups utilizing realia educational materials are two ways in which teachers might evaluate their students' development (Wantini, 2019). Teachers will get valuable insight on students' development in this way. Every student receives practice when the instructor makes sure they repeat a word, phrase, or sentence on a regular basis. According to this explanation provided by Gordon and Kahl (2021), using realia in the classroom is a fun and easy way to teach and learn, but teachers should be careful to follow the correct procedures so that students can choose the right materials for each lesson. Research on the impact of realia teaching materials on pre-reading abilities has been carried out, as mentioned in the aforementioned literature. In order to effectively improve preschoolers' pre-reading abilities, research in this field has mostly concentrated on generic realia teaching materials rather than preschool-specific realia instructional materials. That is why the researcher is keen in delving more into this facet of Narok North Sub County.

2.3.4 Teachers pedagogical skills

The cognitive, social, and emotional development of children throughout the formative years is greatly influenced by the interactions, instructional tactics, and selection of suitable learning materials used by preschool instructors, as described by Pyle and Bigelow (2022). In order to successfully facilitate learning in all activity areas, particularly in developing pre-reading skills that serve as the foundation for other learning areas, teachers must possess a profound comprehension of children's traits, behaviours, needs, talents, and interests. According to Mugo (2021), the prioritization of formal academic instruction in preschool settings often results in the neglect of developmentally suitable exercises and play-based learning. These practices are

essential for promoting the comprehensive development of young children and establishing a solid basis for their future academic achievements.

Mugo (2021) emphasized the need of providing training to ECDE instructors, since some ECDE centres in Kenya prioritize academics to the extent that learners have inadequate opportunity to engage with instructional materials. Although the ECDE curriculum offers children the chance to interact with educational materials, preschool instructors typically neglect this aspect, focusing instead on teaching children numeracy skills and equipping them for oral and written interviews intended for grade one admittance. This methodology gives learners little opportunity to engage with educational materials. An effective educator is required to provide an optimal learning atmosphere by offering supplementary materials that facilitate children's acquisition of skills such as counting and categorization with reduced challenges.

The pedagogical abilities of teachers are essential characteristics for successful academic instruction. These skills refer to long-lasting motivations, characteristics, self-perceptions, principles, knowledge, and abilities that may be evaluated and enhanced on a continuous basis (Kunter et al., 2013). Guerriero (2022) defines competence as the integration of knowledge with its practical implementation in the field of education. A proficient person successfully and optimally completes duties. Professional educators with robust pedagogical abilities adeptly choose, adapt, and use a diverse array of instructional resources, including written, visual, and audio-visual materials, that are suitable for the specific subject matter and the reading requirements and proficiency levels of the students. Highly proficient educators possess the necessary abilities to use optimal teaching methods, including techniques, protocols, and approaches to deliver, execute, and evaluate classroom instructions in connection to established goals. These instructors cultivate a classroom environment characterized by

reciprocal trust and respect, particularly with regard to the needs, interests, and talents of the students.

According to Kunter et al. (2013), instructors need to guarantee that instructional materials are easily accessible and accurately prepared prior to their usage. Teachers must assess the efficacy, usability, and safety of educational tools prior to their introduction in the classroom. According to Abdu-Raheem (2016), it is essential that instructional materials possess a high degree of usability and accessibility. Teachers should refrain from utilizing substandard materials, since they may not be effective in attaining the intended educational results. Mkandawire (2022) proposed that the deficiency or insufficiency of teaching resources might be attributed to the instructors' incapacity to improvise such materials. According to Nikky (2016), when instructional tools need technical operation, it is important to have a technician present and instructors should possess knowledge on how to operate the equipment used in instructional sessions.

Research conducted by Murungi (2021) revealed that preschools that deliberately integrated preparation activities and materials that were in line with the expectations of primary school children reported greater levels of academic preparedness and success rates among their pupils in the early primary grades. The Ministry of Education and Science in Kenya mandated that learners should solve addition and subtraction problems up to the tenth digit. Children need cognitive and physical stimulation, acquire social development skills, and cultivate emotional regulation. According to Osei (2021), it is crucial for preschool instructors to possess competence in planning, organization, and administration, as well as the capacity to engage children in numerical activities utilizing diverse instructional resources.

According to the National Coalition for Core Arts Standards (2012), instructors should

possess the expertise to carefully watch every child as they exercise their autonomy and engage in cooperative play within a nurturing educational setting. Educators should evaluate the interests, abilities, previous experiences, and informal knowledge of children and extend assistance using suitable instructional methods. The responsibility of the instructor is to provide educational resources and literature that facilitate active learning. According to Smith and Johnson (2022), it is crucial for instructors to collect various items such as little objects, number puzzles, counting books, games, egg cartons, and other materials in order to include number work into everyday routines across both solo and small group activities. Teachers should provide dedicated time for comprehensive, well-structured, small group experiences that include interaction, problem-solving, and reflection during tasks connected to numbers.

The research studied has mostly concentrated on the topic of number work and numeracy, specifically investigating the utilization of instructional resources and the proficiency of instructors in using these materials for the purpose of teaching numeracy. The majority of research have focused on materials designed for a specific learning activity. Nevertheless, learners may have difficulties in comprehending numeracy tasks if their pre-reading abilities are insufficient. Proficient incorporation of pre-reading abilities is essential for learners to adhere to instructions in numerical tasks. Despite the significance of this integration, there is a scarcity of research on teachers' pedagogical abilities and the effective use of instructional resources to enhance pre-reading skills in Narok North Sub-county.

2.4 Summary and Gaps

The objective of this study was to investigate the effectiveness of different instructional materials in facilitating the development of pre-reading skills in preschool-aged children attending public schools. Previous research by Salandanan (2012), Nikky (2016), and Kisirikoi (2015) has largely focused on the effectiveness of educational materials in the context of mathematics and general education. There seems to be a dearth of research on the efficacy of instructional materials in teaching other crucial skills, such as pre-reading, which are fundamental for achieving proficiency in all other academic disciplines. The scarcity of research on preschoolers has resulted in a predominant focus on elementary or secondary school pupils, therefore establishing a contextual limitation.

Due to the emphasis on industrialized nation-states and West African countries such as Ghana and Nigeria, several studies in the reviewed literature failed to address important themes. The limited and scattered local study on these resources underscores the need of examining specific instructional materials in relation to different learning processes. Therefore, more research is necessary to examine the effectiveness of teaching resources, the materials used, and the pedagogical skills of educators in enhancing pre-reading skills among preschoolers in Narok North Sub-county.

2.5 Theoretical Framework

This study was underpinned by the constructivism theory.

A theoretical framework serves as the conceptual foundation that guides the design, implementation, and interpretation of research studies by providing a systematic structure of concepts, theories, and assumptions relevant to the research topic (Creswell, 2021).

2.5.1 Theory of constructivism

The present study adhered to the constructivist paradigm as first presented by Jean Piaget in 1968. Instead of just acquiring information, students in a constructivist classroom engage in active construction of their own knowledge. Individuals develop their own cognitive frameworks of the world and incorporate new information into their existing knowledge structures when they participate in experiential learning and reflective thinking. Piaget argued that children must actively participate in sensory experiences in order to acquire knowledge and develop appropriately. Therefore, it is crucial to provide children with a diverse array of sensory encounters, including objects that may be textured, visually inspected, olfactory perceived, and gustatorily experienced.

The Montessori method places great importance on offering children the chance to engage in hands-on, experiential learning using real objects from their immediate environment. Activities of this kind not only facilitate the engagement and acquisition of information among children, but they also foster critical thinking, independent problem-solving, and general improvement in their learning abilities. Children must actively concentrate on the content being taught in order to acquire knowledge. This engages their visual faculty as they acquire knowledge using the teacher's portable instructional instruments.

Piaget also asserted that children may gain information, skills, and positive attitudes by engaging in play with tangible objects of significance. This research aimed to assess the effectiveness of different educational materials in facilitating the development of pre-reading skills in preschool-aged children, using Piaget's theory of constructivism as a theoretical framework. The fundamental principle of the paradigm is that students acquire knowledge most effectively when they have the opportunity to handle tangible

objects in the real world. This not only enhances their deductive and inferential reasoning skills but also their ability to derive significant conclusions from their experiences and resolve issues. This concept is very appropriate for the current study as it illuminates the role of toddlers' learning environments in their pre-reading development.

2.6 Conceptual Framework

Academic research often use conceptual frameworks to outline possible future actions or to suggest a preferred approach to addressing an issue (Jones, 2020). A conceptual framework is an intermediary theory that aims to connect many components of an inquiry, such as the conceptualization of the problem, the objective of the research, the literature review, the methodology, the data collection, and the analysis. Thus, they provide guidance to empirical investigation and function as navigational tools. The flexibility of conceptual frameworks to adapt to changing research topics and difficulties is attributed to their close connection to empirical study (Brown, 2019). In this study, Figure 1 illustrates the correlation between the effectiveness of the instructional resources and the pre-reading skills of the preschool-aged children.

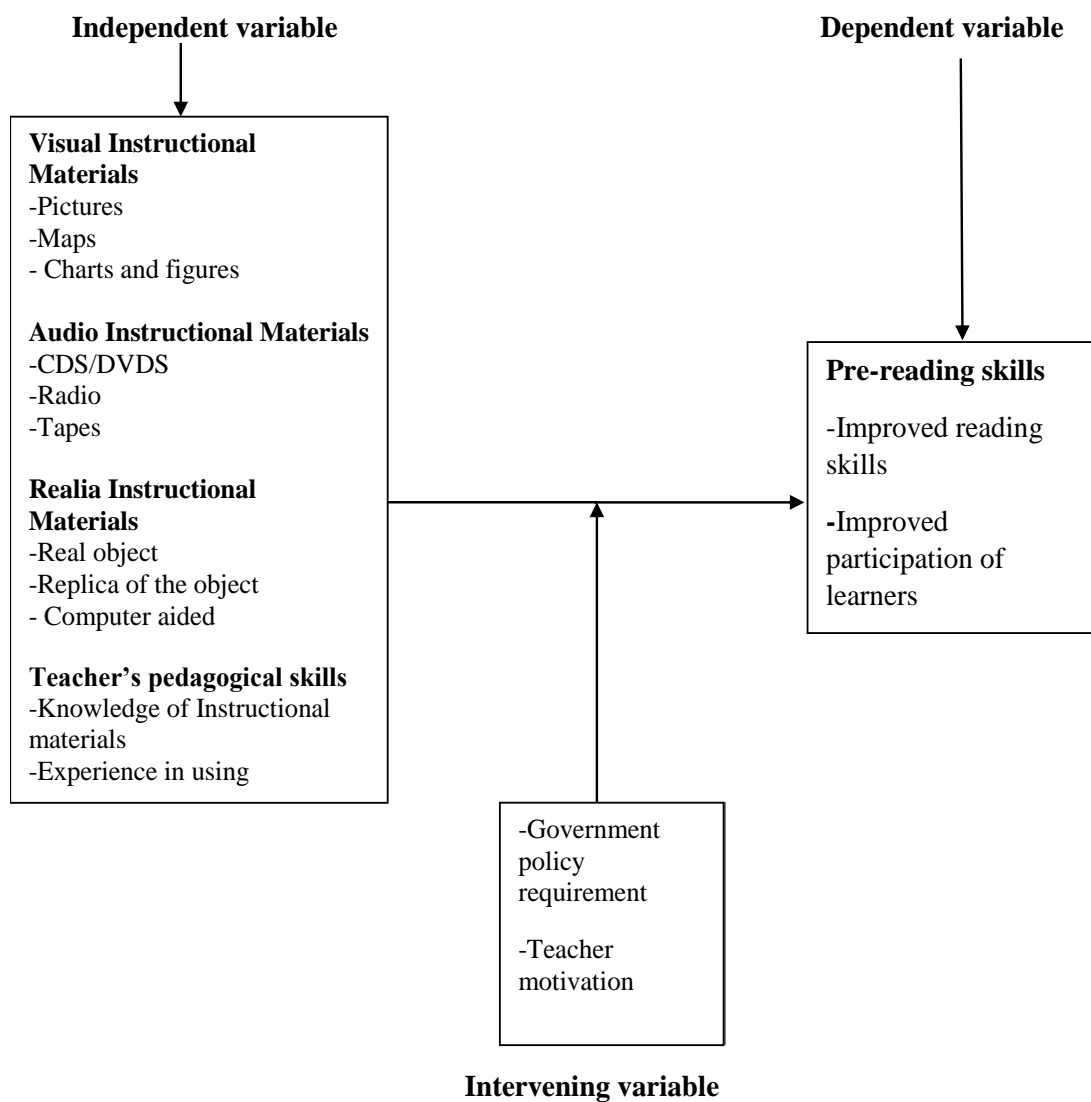


Figure 1: Conceptual Framework

The instructional materials used by preschoolers have a significant influence on the development of their pre-reading skills, as depicted in Figure 1. This model illustrates the interaction among the independent, dependent, and intervening elements that influence the pre-reading skills of kids. Investigation focused on the independent variables of visual, realia, auditory, and pedagogical ability of instructors. In the initial three aspects, children are presented with tangible educational resources through visual, auditory, and tactile senses; these resources also facilitate the retention of information from pre-reading exercises; and in the fourth aspect, adults arrange, explain, and guide the child's manipulation and understanding of the materials. Under the corresponding independent and dependent variables, many possible factors influencing pre-reading skills were considered in each case. Visuals, diagrams, cartography, and numerical data were all integral components of it.

Regarding audio, this study included mediums such as cassettes, CDs (Compact Discs), and DVDs (Digital Versatile Discs). Using these instruments, preschoolers were instructed in pre-reading skills. The successful use of these technologies is anticipated to have a positive impact on pre-reading skills, as shown by the figure which illustrates a clear correlation between the two variables.

The successful development of pre-reading skills in learners is intimately linked to the use of realia educational resources. This phenomenon may be attributed to the tendency of pupils to establish associations between the vocabulary they are acquiring and real-life objects. The instructional function is crucial in this interaction since it is the duty of the teacher to provide the learners with precise realia.

An instructor's pedagogical skills and competencies are closely linked to their knowledge of how to effectively use the resources available to them. In order to facilitate the active engagement of children in the enhancement of their pre-reading

skills, educators carefully choose, arrange, and guide the use of appropriate instructional materials. Interventional elements, such as government-mandated preschool policies and teacher motivation, have additional influence on all of these variables.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology used in this study. The areas covered include the research design, location of the study, target population, sample size and sampling design, research instruments, validity and reliability of the research instruments, data collection procedures, data analysis techniques, and ethical considerations.

3.2 Research design

This study employed a descriptive survey design. Descriptive research design uses both qualitative and quantitative data to gather information from a wide range of populations, which is essential for making accurate predictions about a particular problem. This design aids in the collection of detailed data to justify current conditions and practices. It ensures that the study variables are described without manipulation (Ary, Jacobs, Razavieh, & Sorensen, 2010). Furthermore, this research design allows the study to focus on a single issue, with results based on the natural responses of participants (Cohen et al., 2017). These characteristics made the research design appropriate for this study.

3.3 Location of the study

The study was conducted in Narok County, more precisely in the Narok North Sub-county. This particular location has the highest density of preschools among both urban and rural regions of the county. Nevertheless, the region's significant preschool attendance and limited economic resources are evident characteristics. Due to the lack of enough financial aid and economic resources from the county, parents bear the primary responsibility for providing their children with preschool learning instruments.

Considering children's dependence on their senses for acquiring knowledge, this chosen site was optimal for the study.

3.4 Target Population

The study targeted 92 preschools in Narok North Sub-county. These preschools have a total of 294 ECDE teachers and 1,560 preschool learners across 24 preschool centers in the sub-county. Therefore, the total population for the study was 1,854, as shown in Table 1.

Table 1: Target population

Categories	Target Population
Number of pre-schools in the sub-county (92)	
Preschool teachers	294
Pre -school learners	1560
Total	1854

3.5 Sample Size and Sampling Procedures

This section describes the process of selecting the sample for the study. The section is discussed in two parts, the sample size and the sampling procedure.

3.5.1 Sample size

The sample size is the fraction of the population of interest that is considered to be statistically representative of the whole population. The 294 ECDE instructors from the 24 ECDEs made up the target group. Ten percent to thirty percent of the population is the sweet spot for a representative sample, according to Mugenda (2008). Both Orodho

(2009) and Kothari (2014) shared this opinion. Nevertheless, as can be seen below, this research used the sample size calculation suggested by Patra (2012):

$$n = \frac{\chi^2 \times N \times P(1-P)}{(ME^2 \times (N-1)) + (\chi^2 \times P \times (1-P))}$$

Where;

n = sample size

χ^2 = chi-square for the specified confidence level at 1 degree of freedom = (3.841)

N = population size

P = population proportion (0.50 in the table)

ME = desired margin of error (expressed as a proportion = 0 .05)

$$\begin{aligned} n &= \frac{3.841 \times 294 \times 0.5 \times 0.5}{0.05^2 \times (294-1) + 3.841 \times 0.5 \times 0.5} \\ &= 282.31/1.693 \\ &= 166.751 \approx 167 \text{ ECDE teachers} \end{aligned}$$

This represents a percentage sample of 56.8% of the preschool teachers. This sample is within the provisions by other scholars such as Mugenda and Mugenda (2008) who suggested that a minimum sample size for a large population should be 10% and above.

For the learners the sample size will be

$$\begin{aligned} n &= \frac{3.841 \times 1560 \times 0.5 \times 0.5}{0.05^2 \times (1560-1) + 3.841 \times 0.5 \times 0.5} \\ &= 1498/ 4.8578 \\ &= 308 \text{ ECDE learners} \end{aligned}$$

This amounts to 19.7 percent of the student body. This sample falls within the guidelines laid forth by previous researchers, such Mugenda and Mugenda (2008), who proposed a minimum sample size of 10% or more for big populations.

3.5.2 Sampling Procedure

A sample is a predefined group from which information is obtained, while sampling is the systematic procedure of selecting individuals for a research study (Kothari, 2014). In order to ensure equitable representation of all school zones, this study used stratified random sampling. Next, schools from each educational zone were selected using a simple random sampling method within each stratum. Without exception, the study sample consisted of instructors from the selected schools. Under this approach, every individual in the population was guaranteed an equitable chance to participate in the study. The distribution of the sample according to the various zones is shown in Table 2.

Table 2: Sample Size Distribution

Zones	Study Population		Sample Size (<i>n</i> = (56.8% of <i>N</i>))	Sample Size (<i>n</i> = (19.7% of <i>N</i>))
	Preschool teachers	Preschool learners	Preschool teachers	Preschool learners
Olposimoru	32	181	18	36
Olooropil	18	159	10	32
Enaibelbel	24	166	13	32
Nkobon	14	102	8	20
Olesankale	73	362	41	72
Ilmashariani	90	436	50	86
Olchoro	29	154	16	30
Total	294	1560	166	308

3.6 Data Collection Instruments

This section discusses the research instruments used to collect data for the study. These instruments included structured questionnaires and an observation checklist.

3.6.1 Questionnaires

Based on the findings of Creswell and Creswell (2023), descriptive surveys are effective in gathering data from structured questionnaires. The design and development of the questionnaire were guided by the research objectives. It consisted of two components: Survey data on respondent characteristics were collected in Section I, while feedback about the objectives of the research were provided in Section II. Each question had three alternatives: (effective, less effective, or not effective) and (agree, uncertain, or disagree), and participants were required to choose their preferred response by indicating their most favoured viewpoint. According to Norman (2010), structured surveys are considered the most reliable method for assessing the extent of respondents' perceptions and attitudes towards a certain topic.

The questionnaire for this research consisted of 25 items, including 18 multiple-choice questions and 5 free-form questions to allow participants to offer more descriptive answers. Upon obtaining authorization from the administrators, the researcher personally distributed the questionnaires to the instructors. Following a one-week designated period for instructors to complete the questionnaires at their convenience, they were instructed to deposit them into a collection box that the researcher had established in the principal's office. In order to avoid compromising the privacy of the participants, instructors were asked to abstain from entering any personally identifying information in the survey.

3.6.2 Observation checklist

In order to get a deeper comprehension of the methods used by educators in the classroom, the researcher devised and executed an observation checklist. Specifically, the researcher observed the practical application of course information by students and assessed their level of contribution to the overall learning experience. One of the items highlighted on the checklist was the assessment of how teachers used different educational tools during class sessions. Observations included assessing students' understanding and enunciation of words, reading comprehension of fundamental phrases and words, and their ability to communicate effectively. Furthermore, the researcher recorded the frequency with which teachers used appropriate instructional materials.

The data provided in the questionnaires completed by the teachers were augmented with the information acquired from the observation checklist. By using the checklist, the researcher evaluated the accessibility, utility, and pertinence of the instructional materials, as well as the frequency of their use by instructors. Furthermore, the researcher examined the students' progress records to assess their competence in acquiring pre-reading skills.

3.7 Pilot Study

Before conducting the main investigation, the researcher performed a pilot study to see whether the research instruments were suitable for gathering the necessary data. Testing the validity and reliability of the research's instruments is what a pilot study is all about. The recommended minimum size for a pilot study, as stated by Mugenda & Mugenda (2008), is 10% of the total research population. The pilot research included 17 instructors (10% of 166) or $39.8 \approx 40$ per school, based on the total sample size of 166

teachers for the study. Thirteen preschoolers (10% of 308) participated in the pilot trial. To make sure the instruments were good for the main research, the pilot was done in Ololulunga zone in Narok South sub county. The primary research sample did not include Ololulunga Zone.

3.8 Validity and Reliability of Research Instruments

This section discusses the validity and reliability of the data collection instruments.

3.8.1 Validity of the Instrument

A measurement tool is considered valid if and only if it reliably assesses the constructs for which it was designed (Price et al., 2017). Validity was examined in this research in terms of both appearance and substance. For the questionnaire to be considered face valid, it has to be easy to understand, accurately measure the target variables, and cover all the bases. The well-organized format and progression of the questions allowed for this to happen. However, two faculty members from the institution where the pilot research was carried out were consulted in order to evaluate the content validity. The researcher went a step further in establishing content validity by consulting with Early Childhood Education experts and supervisors at Maasai Mara University's School of Education.

3.8.2 Reliability of the Instrument

Reliability refers to the extent to which collecting data repeatedly from a randomly chosen group using the same assessment tool produces consistent results for that population (Scribbr, 2023). According to Scribbr (2023), the reliability of an instrument is determined by its degree of internal consistency. This study used the Pearson Correlation Coefficient to assess the reliability of the questionnaire. Some thresholds for assessing the reliability of an instrument have been suggested by researchers. In

accordance with Price et al. (2017), a research instrument must possess a reliability coefficient of 0.7 or above to be considered reliable. This threshold was originally proposed by (Kothari, 2014).

The dependability of this study was evaluated by an application of the test-retest method. An initial test of the questionnaire was conducted with a cohort of participants, then subsequently administered to the same cohort three weeks later. Using the Pearson Correlation coefficient, we compared the two sets of results (Kothari, 2014). A coefficient over 0.7 indicates dependability. Given a Pearson Correlation Coefficient of 0.82, which above the threshold of 0.75, the instrument was deemed reliable based on the results of the pilot study.

3.9 Procedure for Data Collection

Following the approval of the proposal by the supervisors, the researcher officially requested an introduction letter from the Board of Postgraduate Studies at Maasai Mara University. This correspondence included a formal request for research authorization from NACOSTI (the National Commission for Science, Technology, and Innovation). The researcher pursued additional communication with the Ministry of Education of Narok County in order to get authorization for data collection from the ECDE centres. The researchers conducted on-site visits to ECDE facilities in order to distribute surveys, explain the objectives of the study, and provide participants with assurance about their anonymity and confidentiality.

Following a week of consistent follow-ups by the researcher to ensure a good response rate, the surveys were collected. Data collection was place from March 12th to March 17th, 2023, during the first term. On March 17, 2023, the researcher conducted a door-

to-door survey collection among the respondents. Concurrently, the preschools included in the sample also implemented the observation schedules.

3.10 Data Analysis

After the data was collected and checked, it was coded so that it could be analyzed. Kothari (2014) says that answered questions are written on a pre-made sheet and then put in order based on the study questions. There were different groups for the open-ended questions based on the real-life, visual, and audio training tools and the teachers' teaching skills. Using thematic order, we were able to find similar themes in the observational answers. These themes were then analyzed qualitatively.

To look at the data, both quantitative and qualitative methods were employed. To look at numeric data, descriptive statistics, like rates and ratios, were used. The observation plans and surveys' results were looked at conceptually based on recurring topics like conversation, engagement, and individual experiences. The results were shown in both tabular and graphics forms.

3.11 Ethical and Logistical Considerations

When conducting experiments on human subjects, scientists are obligated to comply with a collection of moral principles referred to as "ethical concerns" (Resnik, 2020). All elements of the inquiry, including its design, data collection, analysis, and reporting, were carried out in strict adherence to the most rigorous ethical principles (Mugenda & Mugenda, 2008). Following the acquisition of an introductory letter from the Director of Postgraduate Studies at Maasai Mara University, the researcher proceeded to apply for research license to NACOSTI. The researcher initiated communication with the principals of many preschools and sought their consent to utilize this permission for data collection purposes.

Through implementing measures to protect the personal information of the participants, the researcher ensured the confidentiality of their data. In order to safeguard the anonymity of the respondents, questionnaires and observation checklists were specifically developed to prevent the collection of personally identifying information.

CHAPTER FOUR

RESULTS AND DISCUSSIONS

4.0 Introduction

This chapter presents the data analysis, presentation and interpretation. The purpose of the study was to assess the effectiveness of instructional materials in enhancing acquisition of pre-reading skills among preschool learners in Narok North Sub County, Narok County, Kenya. This chapter provides a detailed analysis of the data presenting both quantitative and qualitative findings. The results are discussed in relation to the research objectives, The specific objectives of the study were (i) to establish the effectiveness of visual instructional materials in enhancing acquisition of pre-reading skills among preschool learners in Narok North sub-County. (ii) establish the effectiveness of realia instructional materials in enhancing acquisition of pre-reading skills among preschool learners in Narok North sub-County. (iii) to identify the effectiveness of audio instructional materials in enhancing acquisition of pre-reading skills among preschool learners in Narok North sub-County.

4.1 Response rate

The study selected a total sample of 166 respondents, all of whom were preschool teachers. A total of 166 questionnaires were administered, with 136 questionnaires returned, resulting in a response rate of 81.9%.

The response rate is presented in Table 3.

Table 3: Questionnaire Response Rate

Categories	Sample size	Response	Rate
Preschool teachers	166	136	81.9%
Total	166	136	81.9%

Table 3 indicates that the response rate was high and adequate for use in the analysis, with a rate of 81.9%. Response rate remains a critical concern for scholars who seek dependable, valid, and reliable results (Rowley et al., 2020). Higher response rates contribute to the credibility of the findings among stakeholders (Batty, 2020).

4.2 Demographic Findings of the study

This section provides a comprehensive breakdown of the respondent demographics. The distribution of replies was established by calculating these factors based on gender, teaching experience, and educational attainment. When assessing the skilled abilities of the responders, these factors are essential. The data representing the gender distribution of the preschool teachers involved in the study is shown in Figure 2.

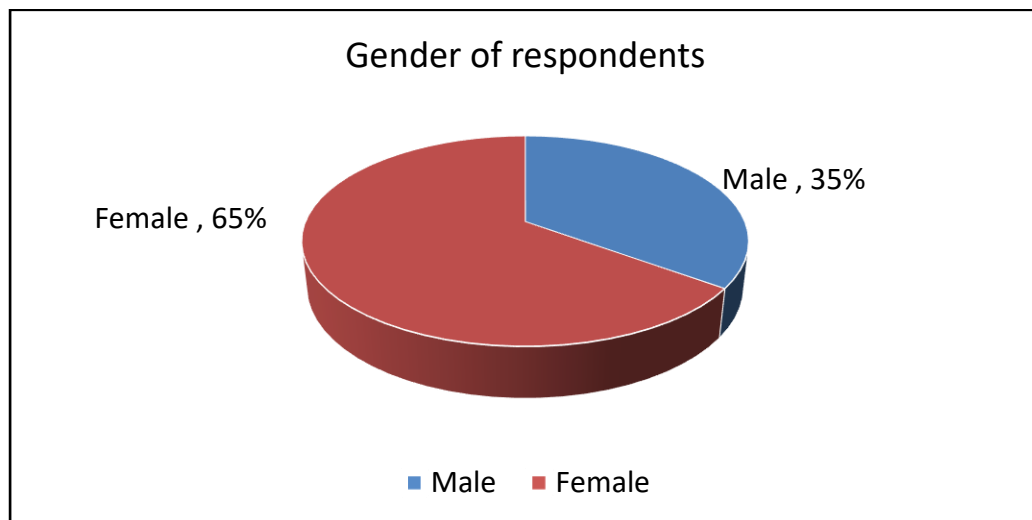


Figure 2: Gender of the respondents

The results show that among the preschool teachers who participated in the study, 65% (88) were female, while 35% (48) were male. This indicates that there were more female teachers compared to male teachers, suggesting that preschool teaching is still perceived by many as a feminine profession (The Hechinger Report, 2023).

The study also sought to assess the teaching experience of the preschool teachers. The results are presented in Figure 3 below.

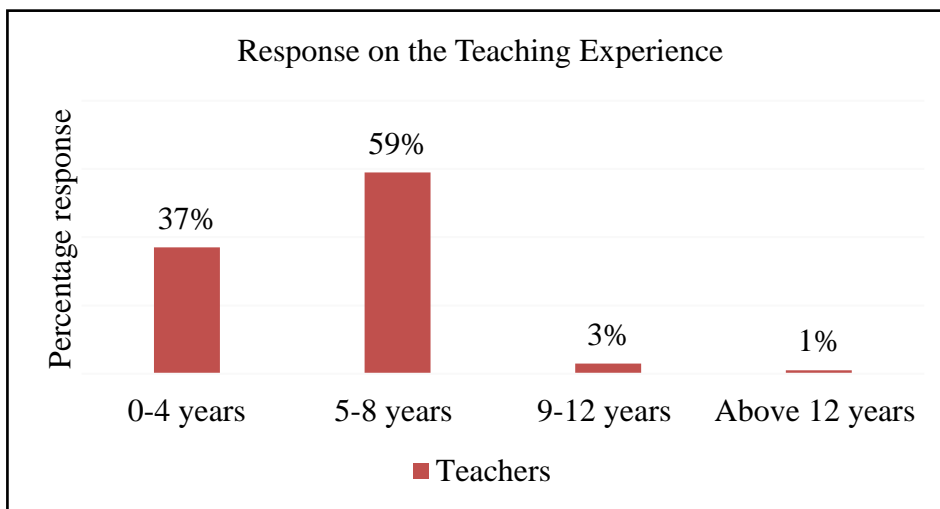


Figure 3: Teaching Experience of the Teachers

The study revealed that the majority of teachers, approximately 59.0% (80), had a teaching experience of 5-8 years, followed by 37% (50) who had 4 years or less of teaching experience. The remaining 3% (4) and 1% (2) had teaching experience of 9-12 years and more than 12 years, respectively. This implies that 63% of the total population had between 5 and over 12 years of teaching experience.

The study also aimed to establish the level of training of the preschool teachers. The results are presented in Figure 4.

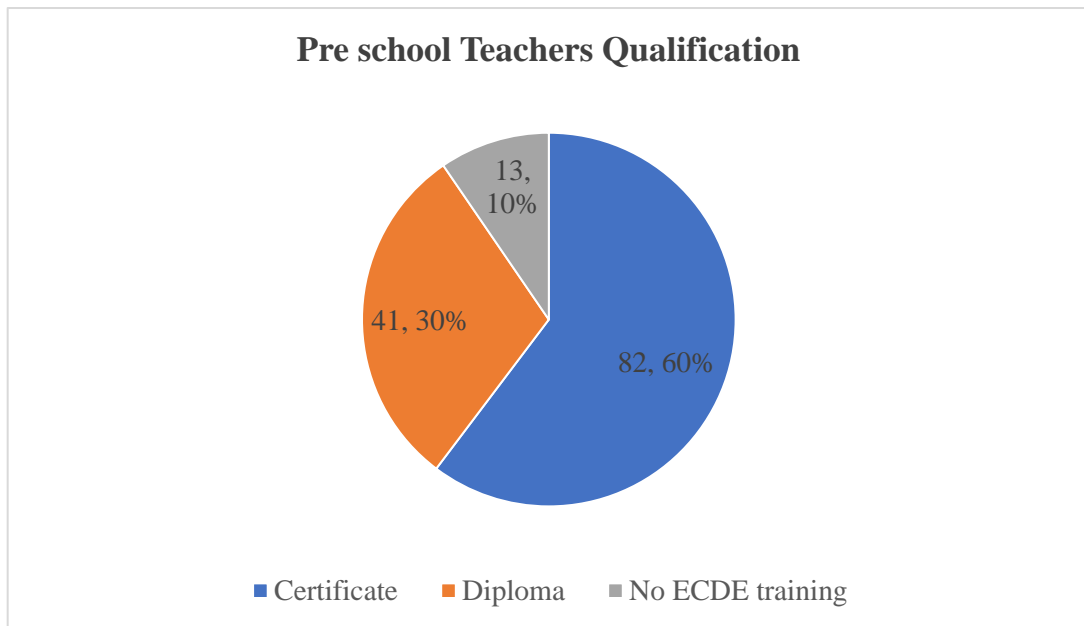


Figure 4: Pre-school teachers Level of Training

The results show that the majority of teachers who responded, 60% (82), held certificates in ECD education, 30% (41) had Diploma qualifications in ECDE, and 10% (13) had not yet acquired any teaching qualifications. This indicates that most preschool teachers were either Diploma or Certificate holders in ECDE, and thus qualified to teach pre-reading skills in ECDE.

The study also aimed to establish teachers' responses regarding the effectiveness of instructional materials on pre-reading skills among preschool learners. The results are presented in Table 4.

Table 4: Effectiveness of Instructional Materials

Effectiveness of teaching materials	Frequency	Percentage
Effective	96	70.6%
Not Effective	40	29.4%
Not sure	0	0
Total	136	100.0%

Among the preschool instructors surveyed, 70.6% (96 out of 100) felt that the resources they utilized to educate their students were beneficial. Teachers are able to offer their all and students are able to participate fully in the learning process when preschool educational materials are successful. Chávez-Moreno et al. (2021) asserts that instructional materials are crucial for enhancing both the efficiency of instructors and the performance of learners across a wide range of topics. In addition to facilitating effective and active participation from both instructors and students, instructional materials enhance the learning experience by making it more engaging, relevant, practical, and visually attractive.

Teachers' lack of expertise, which might cause them to depend on the lecture style, is one cause of ineffective materials (Mahdi & Al-Dera, 2023). According to Vongkulluksn et al. (2018), creative thinking on the part of educators is often what makes a difference when it comes to the success of educational resources. Similarly, Kloser et al. (2019) emphasized that instructors may fully use their manipulative abilities by coming up with creative solutions when resources are not accessible or not sufficient. This way, they can still achieve the class goals. To successfully teach students pre-reading skills, teachers must be creative in their approach and make good use of available instructional resources (Vongkulluksn et al., 2018).

4.3 Findings Based on the Objectives of the study

This section aimed to establish the effectiveness of four instructional materials visual, realia, audio, and teachers' pedagogical skills in enhancing the acquisition of pre-reading skills among preschool learners.

4.3.1 Effectiveness of Visual Instructional Materials

Objective one aimed to establish the effectiveness of visual instructional materials in enhancing the acquisition of pre-reading skills among preschool learners in Narok North Sub-county. Respondents were asked to indicate the effectiveness of various visual instructional materials in enhancing pre-reading skills. The findings are presented in Table 5.

Table 5: Effectiveness of Visual Instructional Materials

Visual instructional materials	Effective		Less effective		Not effective	
	Frequency	%	Frequency	%	Frequency	%
Pictures	102	75.3%	20	14.8%	14	9.9%
Maps	62	45.8%	60	43.6%	14	10.6%
Charts and figures	111	81.7%	16	12.0%	9	6.3%
Use of teaching flash cards	59	43.7%	48	35.2%	29	21.1%
Other visual classroom displays	104	62.7%	32	19.0%	30	18.3%

According to the data shown in Table 5, 75.3% of the 102 teachers questioned believed that the pictures were beneficial for their students' pre-reading skills, 14.8% indicated less success, and 9.9% reported no effectiveness. The findings revealed that 45.8% (62) of preschool teachers identified thought maps as successful, 43.6% (60) considered

them less helpful, and 10.6% (14) deemed them completely useless.

In relation to the use of charts and figures in pre-reading education, the results indicated that 81.7% (111) of teachers assessed their effectiveness. Furthermore, the results indicated that although 6.3% of teachers (9 in total) expressed the belief that the use of charts and figures was unsuccessful, 12.0% (16 in total) maintained that these resources were less beneficial. When queried about the effectiveness of these materials in enhancing pre-reading skills, 93.7% of participants confirmed their achievement.

Furthermore, the study examined the potential benefits of instructing flashcards with different concepts, such as length, colour, texture, and shape, in enhancing the development of first reading abilities. Based on the results, 59.3% of educators believed that flashcards were successful, 48.2% considered them to be of moderate effectiveness, and 29.1% deemed them to be completely useless. These findings indicate that flashcards were an effective instrument for teaching pre-reading skills in most preschool settings.

Furthermore, we investigated whether instructors used any supplementary visual aids in the classroom, specifically to enhance pre-reading skills, in order to augment student learning. Research findings indicate that 104 out of 122 preschool teachers reported using various visual aids to enhance their lectures. Simultaneously, although 19.0% (32 educators) expressed perceptions of the materials being less successful, 18.3% (30 educators) believed they were useless in enhancing children' pre-reading skills. Lenah (2015) and Hayoda (2017) have proposed that the comprehensibility of links may be enhanced by visual representations. In addition, they noted that visual instructional materials enable teachers to depict concepts, sounds, or operations using images instead of depending mostly on verbal descriptions. Consequently, children may comprehend more quickly and with greater accuracy. Another crucial element that significantly

enhances classroom teaching is the presence of competent preschool teachers. Owing to their widespread availability in classrooms, a majority of respondents (81.7%) said that visual aids such as charts and figures facilitated the development of pupils' pre-reading skills.

4.3.2 Realia Instructional Materials and Acquisition of pre reading skills

Objective two aimed to establish the effectiveness of realia instructional materials in enhancing the acquisition of pre-reading skills among preschool learners in Narok North Sub-county. Respondents were presented with questionnaires that inquired about the effectiveness of realia instructional materials in teaching pre-reading skills. They were asked to indicate the effectiveness of various realia instructional materials in enhancing pre-reading skills among learners. The results are presented in Table 6.

Table 6: Realia instructional materials and acquisition of pre reading skills

Realia instructional materials	Effective		Less Effective		Not effective	
	%	Frequency	%	Frequency	%	Frequency
Real object	49.2%	69	36.6%	49	14.2%	18
Replica of the object for example, animal models	40.5%	55	31.3%	43	28.2%	38
Computer aided drawn objects	22.5%	31	25.3%	34	52.1%	71

Preschoolers' pre-reading abilities were best taught and learned with the use of actual items, according to 49.2% (69) of the instructors surveyed. In addition, of the preschool instructors surveyed, 36.6% (49 people) said that realia were less helpful in helping their students develop pre-reading abilities, while 14.2% (18 people) said the same thing for real objects.

A secondary goal of the research was to determine how well replica items worked. Among the educators surveyed, 40.5% (55 people) felt that using replica items to teach pre-reading abilities was beneficial. In addition, although 28.2% of the instructors said that the replica items used to teach pre-reading abilities did not improve the acquisition of pre-reading skills among preschool learners, 31.3% of the teachers said that replicas were less effective. This suggests that in order to improve their pre-reading abilities, the majority of preschools were utilizing replica things to represent actual objects.

In addition, the data shows that 71 out of 72 educators felt that computer-aided items utilized in preschools did not help students develop their pre-reading abilities. Furthermore, when asked if computer-aided items improved preschoolers' pre-reading abilities, 25.3% (34) of instructors said no, while 22.5% (31) said yes.

If instructors are able to make good use of authentic instructional resources, students will find them more interesting and effective (Hao and Lee, 2021). According to Naz and Akbar (2020), instructors may help students understand concepts more effectively by creating their own teaching resources. The importance of instructional resources in teaching was highlighted by Bano et al. (2018). However, the sort of materials that teachers have access to determines how successful these materials are. Choosing suitable pre-reading resources also requires the expertise and work of instructors. According to the teachers' feedback, computer-aided objects were less successful than realia and replicas in teaching pre-reading abilities.

According to Leong and Bodrova (2021), realia educational materials are useful for teachers because they show students how tangible things relate to abstract ideas. Additionally, they said that students may significantly improve their pre-reading abilities, such as vocabulary, phonological awareness, and matching skills, by making connections between real-world items and their pronunciations.

4.3.3 Audio Instructional Materials and Acquisition of Pre reading Skills

The third objective of the study sought to establish the effectiveness of audio instructional materials in enhancing acquisition of pre-reading skills among preschool learners. The respondents were asked to rate various audio materials by indicating their effectiveness. The results were presented in Table 7.

Table 7: Effectiveness of Audio Instructional Materials

Audio instructional materials	Effective		Less effective		Not effective	
	%	Frequency	%	Frequency	%	Frequency
Computer	0%	0	0%	0	100%	136
CDS/DVDS						
Radio	0%	0	8.2%	11	91.8%	125
Tapes and Video	0%	0	5.1%	7	94.9%	129
TV	0%	0	11.6%	16	89.4%	120

The research found that out of all the preschools surveyed, every single teacher (136 out of 136) felt the CDS/DVDs were ineffective. Additionally, 91.8% (125 instructors) of the professors surveyed felt the radio did not contribute to student learning. Even though they weren't very useful, 8.2% (11) of the instructors said that their school did have radios in the classroom.

Additionally, the research aimed to determine whether the learners' pre-reading abilities were improved by the use of the cassettes and films. When asked how the movies and recordings helped their students develop pre-reading abilities, only seven educators (or 5.1% of the total) gave a positive response. Nearly all of the participants (94.9%, or 129 out of 150) felt the materials had no impact.

The effectiveness of the TVs as teaching tools for pre-reading abilities to preschoolers was another objective of the research. The findings revealed that 89.4 percent of the sample (120 people) thought that TVs in the classroom did not work. A mere sixteen instructors, or 11.6%, felt that the television had less of an impact on their students' ability to develop pre-reading abilities. When teaching preschoolers pre-reading abilities, Carson et al. (2020) found that audio instructional resources greatly aided the

learning process. When it comes to teaching students how to pronounce new words correctly, audio educational tools are often the most effective option.

Unfortunately, many schools just cannot afford the high cost of audio educational resources. There may be alternatives, but they may be difficult to maintain or not provide enough functionality for students to make good use of them. For instance, students' computers may need upgrades to accommodate their specific demands. Despite studies highlighting the usefulness and efficacy of audio instructional tools, a lack of awareness about their usage among instructors in the field might be a contributing factor to their ineffectiveness in teaching pre-reading skills. The findings are in line with those of Carson et al. (2020), who highlighted the significant significance of audio instructional resources in assisting preschoolers in their reading development.

4.3.4 Teachers' pedagogical skills and acquisition of pre-reading skills

The fourth objective sought to determine the effectiveness of teachers' pedagogical skills in instructing learners in pre-reading skills and enhancing the acquisition of pre-reading skills among preschool learners. The respondents were also required to rate various teachers on their effectiveness in teaching pre-reading skills. The findings are presented in Table 8.

Table 8: Pedagogical skills and acquisition of pre-reading skills

Pedagogical skills	Agree		Not Sure		Disagree	
	%	frequency	%	frequency	%	frequency
Induction skills						
Teachers have Experience in using the realia, visual, audio instructional materials in pre reading skills.	81%	110	19%	26	0%	0
Use of instructional materials in teaching						
Teachers are effectively using instructional materials in the classroom.	73%	99	8.2%	11	18.8%	26
Teachers Attitude						
Teachers had positive attitude and abilities to assist learners	61%	83	11.6%	16	27.4%	37
Prio knowledge of instructional materials	40.5%	55	28.2%	38	31.3	43
Teachers had prior knowledge acquired during their training						

The majority of respondents (81%, or 110 people) believed that instructors had experience with visual and auditory instructional tools to teach pre-reading abilities, whereas a small percentage (19%, or 26 people) were doubtful. Teaching students pre-reading skills via the use of instructional resources was supported by all educators (0%). The high rate of agreement indicates that most educators are familiar with the use of instructional resources to improve students' pre-reading abilities.

Additionally, a whopping 73% (99 out of 100) of the educators surveyed reported making good use of course materials. Furthermore, 18.8% (26 people) disagreed with the statement, while 8.2% (11 people) were undecided. This suggests that the majority

of educators were competent in the use of various forms of educational media to impart pre-reading abilities to their preschoolers.

Plus, a whopping 61% (83) of the educators polled felt confident in their ability to help students develop their pre-reading skills and had an optimistic outlook on the subject. Of those who took the survey, just 16.1% were undecided and 37.4% were opposed to the statement. According to Mwongo and Wanyama (2012), preschool instructors may have a beneficial influence on the teaching of pre-reading abilities when they have the necessary knowledge and skills to do their jobs well. This suggests that educators were competent in their use of audio teaching tools to foster pre-reading abilities.

Findings corroborate those of Darling-Hammond et al. (2017), who pointed out that a competent teacher can make connections between many areas of instruction, including pre-reading, and their knowledge and abilities. Additionally, as pointed out by Darling-Hammond et al. (2017), competence encompasses a range of pedagogical talents, beliefs, attitudes, and dispositions that promote an environment of trust among students and accommodate unique traits, such as their interests, abilities, needs, and classroom climate.

When it comes to selecting and using various instructional materials, teachers' pedagogical abilities are crucial. The findings show that the instructors had the necessary pedagogical abilities and expertise with the right teaching resources, as seen in their comments. In order to improve students' pre-reading abilities, the results indicate that instructors' knowledge, enthusiasm, and practice with teaching materials are crucial.

4.4 Results based on the observation checklist

For the study, classroom observations were conducted to observe the actual usage of the course materials by teachers. The validation of the survey results on the effectiveness of instructional materials used by teachers in the classroom was of paramount significance (see Table 7). The following variables were examined using an observation schedule: frequency of teachers' use of educational materials, prevailing materials and their use patterns, and the effectiveness and relevance of the materials. The materials were assessed in the classroom by the researcher for many factors, such as their accessibility, sufficiency, appropriateness, and usefulness. A further objective of the study was to ascertain if the instructional materials enhanced pre-reading skills, had no influence, or had a little effect. The children's competence in pre-reading was evaluated by a meticulous examination of their developmental records.

4.5 Visual Instructional Materials and Pre-Reading Skills

The researcher took her time to observe the visual instructional materials used in the classroom and make remarks based her understanding of the instructional materials. The results were presented in Table 9.

Table 9: Teachers use of instructional materials in class

Instructional materials	Effective		Less effective		Not effective	
	%	Frequency	%	frequency	%	frequency
<u>Visual Instructional Materials</u> <u>1.Pictures.</u> Teachers using pictures from the text books for instructing learners to pronounce the letter sound of items.	60%	82	30%	40	10%	14
<u>2. Charts</u> Teachers using words written on charts and ask learners to construct simple short sentences. Example: Cup- this is a cup Book- this is my book	55%	75	30%	41	15%	20
<u>Audio Instructional Materials</u> Radio- Teachers using the radio teacher to instruct learners to spell words. Examples; cow, bag, mat	10%	14	10%	14	80%	108
<u>Realia Instructional Materials</u> Real objects, replicas and computers-Teachers using realia to help learners in reading short words and pronunciations of letters and words for example Pan, bag, pen.	70%	95	25%	34	5%	7

Table 9 shows that eighty-two percent of the students got the pronunciation right. Contrarily, thirty percent (40 instructors) said that students lacked clarity, whereas ten percent (18 teachers) said that students could read. This investigation emphasizes the influence of visual teaching resources by suggesting that most learners were able to read when they were utilized in the classroom. Zhan et al. (2021) came to the same conclusion, that instructional materials had a substantial impact on students'

performance in different types of learning tasks, lending credence to our discovery.

In terms of the ability to construct simple sentences, 55% of the teachers (75 out of 201 total) said that their students could do it clearly, 30% (41 out of 202) said that their students were unsure how to do it, and 15% (20 out of 202) said that their students couldn't.

Ten percent of the instructors who used audio curricular materials said they were helpful, ten percent said they weren't, and eighty percent said they weren't at all. This means that 108 out of the 108 educators polled did not believe that audio pedagogical resources were beneficial for their students. This runs counter to the findings of the research by Liao et al. (2019), which highlighted the use of audio resources as a means to engage learners in learning activities by reducing significant verbalism difficulties and facilitating debates.

The majority of instructors (70%) felt that their students had mastered the ability to read and pronounce simple phrases using realia materials, whereas a minority (25%) felt that realia was ineffective in developing students' pre-reading abilities. They said that some instructional resources were unavailable, making it difficult to correlate images with text. Only seven educators, or 5% of the total, thought that realia weren't good for helping students develop their reading foundations. While incorporating realia into the teaching-learning process is a delight, it demands meticulous execution, as pointed out (Tăbăcaru & Humoreanu, 2021). By providing opportunities for direct engagement and practice, reliquaries aid in the reduction of misconceptions about the subject matter.

Because they make lessons more interesting and fun, realia educational resources are crucial in pre-reading instruction (Pinter & Zandian, 2014). As they practice letter sounds in a variety of contexts—by copying, drawing, and naming realia items—these materials may encourage creativity and development of pre-reading abilities. The

importance of preschool instructors as active participants in their students' learning and as catalysts for their own skill development in this area was highlighted (Pyle & Danniels, 2017). The use of realia and other forms of educational media are bolstered by this. Preschoolers were successfully taught pre-reading abilities using instructional materials that included visual and auditory components, as well as realia, according to the study. You may find these findings in Table 10.

Table 10: Result on observation schedule for learners

Instructional Materials	Remarks Percentage	Frequency
<u>Use of Visual instructional materials</u>	Able to read 50%	154
1. Learners construct simple sentences using words on the chart fluently. Example; a. Cup – This is a cup. b. Book – My book is big.	Fluency in reading 30% Not able to read 20%	92 62
2. Learners pronouncing letter sound and spelling names of pictures in the classroom a. P ____ Pen b. B ____ Book	Pronounce and spelt correctly 45% Correct spelling of short words 35% Not able to pronounce or spell words 20% correctly	139 108 61
3. Learners reading flash cards	Able to read 60% Fluency in reading 35% Not able to read 5%	185 108 15
4. Using realia, learners drew simple items like bag and pen	Drew clear pictures 70% Drew unclear pictures 20% Scribbling 10%	216 61 31
5. Learners' ability to name realia objects and their letter e.g. a. T -tree, V-Van	Pronouncing correctly 84% Pronouncing slightly correct 10% Not able to pronounce 6%	259 31 18

Based on Table 10, half of the students (154) demonstrated fluency in reading, whereas one-third (92 students) struggled to comprehend the material, and twenty percent (62 students) were unable to read at all. Therefore, it may be inferred that visual aids in schooling effectively enhance initial reading skills. Conversely, other factors, such as

limited exposure, may be affecting the reading proficiency of the 50% of the kids who were illegible or suffered from reading difficulties.

With regards to pronunciation, 139 students (45%) accurately identified the letter sounds from photographs, 108 students (35%) identified them fairly correctly, and 61 students (20%) identified them incorrectly, while being able to recognize the images. Even in the presence of faulty flash cards, a total of 185 pupils, which accounts for sixty percent of the student population, demonstrated high proficiency in reading utilizing the cards. Conversely, 108 students, accounting for 35% of the total, had difficulties in reading the flash cards, while 15 students, representing 5% of the total, reported being unable to read the words on the cards. Leveraging flash cards for the instruction of pre-reading skills is an excellent method to actively engage pupils. This aligns with the findings of Ansari and Pianta (2018), which indicate that students' pre-reading skills undergo enhancement when the classroom arrangement, teacher-to-student ratio, and instructional materials are appropriately adjusted.

Out of the pupil population that received instruction utilizing realia, 216 pupils, which accounts for 70%, demonstrated proficiency in precisely sketching the illustrations shown on tables. An further 61 students, accounting for 20% of the total, were able to sketch with assistance from their teachers, while 31 students, representing 10%, were utterly unable to draw and could only make rudimentary marks on their textbooks. According to Miller and Almon (2020), realia instructional materials are crucial for the teaching of pre-reading skills as they enhance the engagement and enjoyment of sessions. The effectiveness of realia may be attributed to three primary factors: its appeal, concentration-inducing properties, and tactile characteristics. Moreover, the researcher observed that most of the realia goods utilized were easily available, easily identifiable, and attractive to the students in the classroom.

Among the whole sample of learners, 84% (259) successfully articulated the words accurately. 10% (31 students) had difficulties with pronunciation, characterized by either omission of one or two letters, while 6% (18 students) exhibited total inability to articulate the letter sounds. The findings indicate that the effective use of realia instructional materials in the classroom may significantly enhance pre-reading skills. The findings of this study provide evidence that pre-reading education necessitates educators to possess proficiency in a diverse range of instructional methods.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATION

5.1 Introduction

This chapter provides a comprehensive summary of the study, drawing conclusions based on the findings, and offers recommendations for further research.

5.2 Summary of the Study findings

In this part, we drew conclusions and offered suggestions based on the study's results. The researchers in this study set out to determine if and how preschoolers in Narok North Sub County, Narok County, Kenya, may benefit from certain teaching resources in order to speed up their progress toward reading readiness. The goals of the study were to (1) determine whether visual or realia instructional materials are more effective in helping preschoolers acquire pre-reading skills, (2) determine whether audio instructional materials are more effective in helping preschoolers acquire pre-reading skills, and (3) determine whether or not teachers' pedagogical skills are beneficial in helping preschoolers in Narok North Sub County acquire pre-reading skills.

First and foremost, we wanted to see how well visual aids helped preschoolers develop their pre-reading abilities. In order to educate preschoolers pre-reading abilities, the research found that visual instructional tools were highly valued. In most schools, the majority of respondents said that the visual educational tools worked. Class observations confirmed that most preschools had visual teaching resources (pictures) and that instructors made use of them, even if these materials were insufficient. The use of visual aids, such as charts and figures, was also shown to be an effective strategy for boosting the development of pre-reading abilities, with similar outcomes. Teachers at the preschools also found that flashcards were a great visual aid for their lessons.

Classroom observational data showed that visual aids were employed successfully in the majority of preschools, which encouraged the development of pre-reading abilities in the students.

The second goal was to demonstrate that preschoolers may benefit from using realia teaching materials to improve their pre-reading abilities. The majority of those who took the survey said that the course contents worked. It was determined that the majority of participants believed that the genuine items used to teach pre-reading skills were successful and improved pre-reading abilities. But they weren't employed or were insufficient to teach pre-reading skills in most schools, so they weren't as successful. According to the proportion of replies, some thought the realia were good for teaching pre-reading abilities, while others thought they weren't.

The third objective was to determine whether or not audio teaching tools helped preschoolers better acquire pre-reading abilities. The lack of necessary audio resources was brought to the attention of most professors. When school districts' internet connections are spotty, educators may have to rely on their cell phones. The study found that a lot of preschools didn't have or employ audio educational tools including radios, DVDs/CDs, and cassettes.

The fourth goal was to find out how preschool instructors put their pedagogical talents to work in the classroom, specifically in helping their students develop their pre-reading abilities. For students to be able to read, these abilities were crucial. Teachers often have a lot of experience using instructional materials, according to the research. Teachers' abilities to design effective lessons and make effective use of instructional resources were perceived differently, suggesting room for growth in both areas of pedagogical practice.

5.3 Conclusion

It was evident from the results of this research that the instructional materials that were taken into account for the purpose of boosting preschoolers' pre-reading abilities were all crucial. Findings from the surveys agreed with what the researcher had seen in the classroom. Using educational resources helped students learn. Instructors of preschoolers reached a consensus: certain programs' pre-reading curriculum resources were either unavailable or had a low impact on students' development of these abilities. Visual, realia, and auditory resources were all deemed ineffective by a considerable portion of the respondents. Schools that were not making use of the resources or that did not have access to them in their preschools may have given this answer. Having said that, the research did find that most educators were competent, experienced, and capable of making good use of the instructional tools provided to improve students' pre-reading abilities. The pre-reading education was carried out by teachers who were both competent and experienced.

Using visual, aural, and tactile cues provided by audiovisual and realia educational resources, pre-primary students learn best. Children at this age learn a great deal more rapidly and easily because they form strong connections to what they see, hear, and touch. Consequently, students' development of pre-reading abilities is impeded when any of these teaching tools are not used appropriately.

5.4 Recommendations

It was recommended that;

- i. Teachers should improvise appropriate instructional materials to enhance effectiveness of teaching pre reading skills for pre-school learners in areas of inadequacy or absence of the instructional materials researched in the study.
- ii. Narok county government through the ministry of education should organize workshops and seminars to re-train pre-school teachers on how to effectively use instructional materials in teaching pre-reading skills.
- iii. Narok North Sub County directors of education and stakeholders such as NGOs and PTAs (parent teacher association) should initiate pre-school resource centers as points of reference for pre-school teachers

5.5 Areas for further study

The primary goal of this research was to catalogue the many pre-reading teaching resources currently in use.

Because descriptive analysis was the main method employed in this research, it is possible that the results may not accurately show which teaching resources are best for developing students' pre-reading abilities. Consequently, other studies might be conducted using alternative analytic methodologies.

It would be beneficial to do further studies to determine if teaching materials are adequate or whether there is a link between instructors' abilities and students' pre-reading abilities.

Additionally, the research only looked at preschools in the Narok North Sub County region. For a more accurate picture of preschoolers' progress in learning pre-reading

abilities with the help of lessons, it would be helpful to conduct research in other regions of the nation or to expand the scope of the current study.

REFERENCES

- Abdul Samat, M. S. (2020). Indigenous student's perception of multimedia learning as an approach for enhancing reading comprehension skills. *Open Journal of Science and Technology*, 3(1), 8-16.
- Abdu-Raheem, B. O. (2016). Effects of instructional materials on secondary schools' students' academic achievement in social studies in Ekiti State, Nigeria. *World Journal of Education*, 6(1), 32-39.
- Ajemba, H. E., Ahmed, F. M., Ogunode, N. J., & Olatunde Aiyedun, T. G. (2021). Problems facing science teachers in public secondary schools in Nigeria and way forward. *International Journal of Discoveries and Innovations in Applied Sciences*, 1(5), 118-129.
- Alade, A. O., & Okunola, R. A. (2021). The impact of visual instructional materials on students' academic achievement in secondary schools in Ogun State, Nigeria. *Journal of Educational Research and Practice*, 15(4), 203-217.
- Amadi, E. A., & Offorma, G. C. (2021). Classification and importance of instructional materials in teaching and learning in Nigerian schools. *Journal of Education and Practice*, 12(10), 23-31.
- Anderson, D. P. (2014). Reading achievement in a large urban school district: An analysis of the effects of four reading programs on the reading growth of four reading ability groups.
- Anisah, S. A. N. (2018). The Effectiveness of Tprc Strategy For Teaching Reading Comprehension Of Descriptive Texts. *Interaksi: Jurnal Kependidikan*, 13(1).
- Ansari, A., & Pianta, R. C. (2018). The role of elementary school quality in the persistence of preschool effects. *Children and Youth Services Review*, 86, 120-127.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to research in education* (8th ed.). Canada: Wadsworth Cengage Learning.
- Atas, M. (2022). The importance of audio instructional materials in language learning: Authentic listening practice, exposure to accents, and comprehension skills enhancement. *Language Learning Journal*, 50(3), 421-435.
- Azmi, N. (2017). The benefits of using ICT in the EFL classroom: From perceived utility to potential challenges. *Journal of Educational and Social Research*, 7(1), 111-118.
- Bano, J., Jabeen, Z., & Qutoshi, S. B. (2018). Perceptions of teachers about the role of parents in developing reading habits of children to improve their academic performance in schools. *Journal of Education and Educational Development*, 5(1), 42-59.
- Batty, E. (2020). Sorry to say goodbye: the dilemmas of letting go in longitudinal research. *Qualitative Research*, 20(6), 784-799.
- Bodrova, E., & Leong, D. J. (2007). *Tools of the mind: The Vygotskian approach to early childhood education* (2nd ed.). Pearson Education.

- Brown, A. H., & Green, T. D. (2019). *The essentials of instructional design: Connecting fundamental principles with process and practice*. Routledge.
- Brown, M. G. (2016). Blended instructional practice: A review of the empirical literature on instructors' adoption and use of online tools in face-to-face teaching. *The Internet and Higher Education*, 31, 1-10.
- Carson, K. L., Gillon, G. T., & Boustead, T. M. (2020). Classroom phonological awareness instruction and literacy outcomes in the first year of school. *Language, Speech, and Hearing Services in Schools*, 51(2), 356-371.
- Chala, L., Bersisa, A., & Teshome, H. (2020). Practices and Challenges of Pre-primary Schools: A Comparative Study between Public and Private Schools. *Journal of Science, Technology and Arts Research*, 9(3), 46-70.
- Chang, A. C. S., & Millett, S. (2015). Improving reading rates and comprehension through audio-assisted extensive reading for beginner learners. *System*, 52, 91-102.
- Chávez-Moreno, R., Sánchez-Mena, A., & Romero-Ramírez, M. A. (2021). The impact of instructional materials on student engagement and academic performance: A systematic review. *Journal of Educational Technology & Society*, 24(3), 44-55.
- Chukwunazo, O. M., Okwuchukwu, O. K., & Chikendu, R. E. (2022). Interaction effects on teaching with improvised instructional materials and standard instructional materials in secondary school chemistry. *ISSRA Journal of Education, Linguistics and Literature*, 2(2), 19-25.
- Cohen, L., Manion, L., & Morrison, K. (2017). The ethics of educational and social research. In *Research methods in education* (pp. 111-143). Routledge.
- Courage, M. L., & Setliff, A. E. (2022). Educational television programs and cognitive development in children: Remembering and comparing visual and auditory information. *Journal of Educational Psychology*, 114(3), 421-435.
- Creswell, J. W. (2021). *A concise introduction to mixed methods research*. SAGE publications.
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute.
- Dawd, A. (2020). *Assessing the Practice of Teaching Listening Skills in EFL Classes of South Wollo Zone at Kutaber Woreda Secondary Schools* (Doctoral dissertation).
- Department of Basic Education. (2014). *Report on the Annual National Assessment of 2014: Grade 1 to 6 & 9*. Republic of South Africa.
- Dzorgbo, D. B.-S., & Aikins, M. K. (2021). Challenges in early childhood education in Ghana: The role of government support and resource allocation. *African Journal of Education and Development Studies*, 11(1), 34-50.

- Eurydice. (2023). Structural indicators for monitoring education and training systems in Europe - 2023: Early childhood education and care. European Commission.
- Fitriah, F. (2020). Developing vocabulary materials for teaching learning process.
- Gilakjani, A. P., & Ahmadi, M. R. (2011). Benefits of using audio materials in language teaching: Improving listening skills, pronunciation, intonation, and sound familiarity. *Journal of Language Teaching and Research*, 2(5), 1125-1132.
- González-Cabañes, E., García, T., Núñez, J. C., & Rodríguez, C. (2021). Problem-Solving before instruction (PS-I): A protocol for assessment and intervention in students with different abilities. *JoVE (Journal of Visualized Experiments)*, (175), e62138.
- Gordon, C., & Kahl, S. (2021). Effective use of realia in teaching: Best practices and strategies. *Journal of Educational Techniques*, 22(3), 112-126.
- Guerriero, S. (Ed.). (2022). *Pedagogical knowledge and the changing nature of the teaching profession*. OECD Publishing.
- Gunning, S. K. (2018). Designing and testing multimodal instruction sets: Writing for real-life users. *English Journal*, 107(3), 68-74.
- Hao, Y., & Lee, K. S. (2021). The impact of digital learning materials on students' academic performance: A meta-analysis. *Education and Information Technologies*, 26(5), 5691-5705.
- Harwood, N. (2017). What can we learn from mainstream education textbook research? *RELC Journal*, 48(2), 264-277.
- Hayoda, W. (2017). Influence of instructional materials on learners' participation and academic achievement in social studies in selected rural primary schools in Banda Sub-County Namayingo District Uganda.
- Igwe, N. J., Kadiri, G. C., & Ekwueme, J. (2020). Impact of information and communication technology on acquiring the literacy skills outside the classroom among adults in Nsukka Urban. *Journal of Language Teaching and Research*, 11(6), 881-892.
- Jamil, S. (2022). Educational technology: Assessing instructional use in the elementary classroom (Doctoral dissertation, Memorial University of Newfoundland).
- Jones, T. (2020). A student-centred sociology of Australian education. London: Springer, 10, 978-3.
- Kiambi, I. N., & Waithaka, E. (2023). Teacher training and experience on the use of improvised learning resources in pre-primary schools in Meru County, Kenya. *Reviewed Journal International of Education Practice*, 4(1), 1-20.
- Kimathi, P., & Mwaka, M. (2021). The use of visual instructional materials in enhancing literacy skills among kindergarten learners in Kenya. *Journal of Early Childhood Education*, 44(3), 315-328.
- Kisirikoi, F. K. (2015). Integration of Information and Communications Technology as a Teaching Resource in Primary Teacher Education in Kenya.

- Kloser, M., Wilsey, M., Twohy, K. E., Immonen, A. D., & Navotas, A. C. (2019). "We do what we can": Examining urban science teaching practice through the lens of improvisation and responsiveness. *Journal of Research in Science Teaching*, 56(1), 1-28.
- Kothari, C. (2014). *Research methodology: Methods and strategy*. New age international.
- Kumar, M., & Raja, R. (2021). The role of instructional materials in teaching and learning: A critical review. *Journal of Educational Technology Systems*, 49(4), 524-541.
- Kunter, M., Klusmann, U., Baumert, J., Richter, D., Voss, T., & Hachfeld, A. (2013). Professional competence of teachers: Effects on instructional quality and student development. *Journal of Educational Psychology*, 105(3), 805-820.
- Lenah, M. G. (2015). Factors Affecting Utilization of Ict in Administration Of Public Secondary Schools In Kiambu Sub-County, Kiambu County, Kenya.
- Leong, D. J., & Bodrova, E. (2021). Vygotskian perspectives on early childhood education: The role of realia in developing foundational skills. *Early Childhood Education Journal*, 49(3), 275-287.
- Liao, C., Moran, R., & Cordes, S. (2019). Audio-visual duration discrimination in preschoolers and adults. *Developmental Psychology*, 55(10), 2118-2128.
- Mahdi, H. S., & Al-Dera, A. S. (2023). The impact of teacher knowledge on the effective use of instructional materials: A case study in Saudi Arabian higher education. *Journal of Education and Learning*, 12(2), 184-196.
- Matazu, S. S. (2022). Enhancing secondary school students' academic performance and retention in biology using instructional materials. In *Proceedings of the 62nd Annual Conference of Science teachers* (pp. 196-206). Science Teachers Association of Nigeria.
- Mayer, R. E. (2020). *Multimedia learning* (3rd ed.). Cambridge University Press.
- Miller, E., & Almon, J. (2020). The importance of hands-on materials in early literacy instruction: Enhancing engagement and comprehension. *Journal of Early Childhood Literacy*, 20(2), 212-229.
- Ministry of Education, O. (2010). *Ministry of Education. Science*.
- Mkandawire, S. B. (2022). The contribution of the physical environment to the teaching and learning of literacy in selected primary schools of Lusaka district of Zambia.
- Mugenda, A. G., & Mugenda, A. G. (2008). *Research methods dictionary*. Nairobi, Kenya: Applied Research & Training Services.
- Mugo, J. K. (2021). Teachers' preparedness and challenges in implementing competency-based curriculum in public primary schools in Kirinyaga County, Kenya. *African Journal of Education and Practice*, 7(1), 1-16.
- Munji, G., & Bire, I. (2021). Incorporation of diverse and age-appropriate instructional materials in early childhood education settings significantly enhances learner

- engagement and motivation, leading to improved learning outcomes. *Early Childhood Research Quarterly*, 45, 112-125.
- Murungi, C. G. (2021). Influence of instructional resources on preschool children's learning outcomes in Imenti South Sub County, Meru County, Kenya. *European Journal of Education Studies*, 8(11), 127-146.
- Mwakasanga, E. (2021). Availability, utilization, and challenges of visual instructional materials in pre-primary classrooms: A study in Arusha, Tanzania. *International Journal of Early Childhood Education*, 53(4), 512-525.
- Mwangi, J., & Orodho, J. A. (2019). Effectiveness of instructional materials on pre-school learners' achievement in literacy and numeracy in Kenya. *International Journal of Education and Research*, 7(5), 43-56.
- Mwaniki, C. N., Kigwilu, P. C., & Mwalw'a, S. (2020). Preparation of daycare children for primary school enrollment and schooling in Kiambu County, Kenya. *Journal of African Interdisciplinary Studies*, 4(7), 77-88.
- Mwongo, & Wanyama. (2012). Dealing with the prevailing attitude and challenges for effective implementation of ECD.
- Natalia, C. R. (2018). An observational analysis of executive performance in school children. *Psychology in Russia: State of the art*, 11(3), 195-208.
- National Coalition for Core Arts Standards. (2012). National core arts standards: A conceptual framework. Retrieved from <https://www.nationalartsstandards.org/content/national-core-arts-standards>
- Natolia, L. (2011). The impact of audio on learners' interest and attention span in the classroom. *Journal of Educational Technology*, 38(2), 201-215.
- Naz, F., & Akbar, R. A. (2020). Use of improvised instructional materials and academic achievement of secondary school students. *Global Social Sciences Review*, 5(1), 54-66.
- Nikky, P. (2016). Realia instructional materials: A practical guide for teachers. *Educational Research Journal*, 7(2), 87-102.
- Norman, G. (2010). Likert scales, levels of measurement and the "laws" of statistics. *Advances in health sciences education*, 15, 625-632.
- Nyaga, V. (2015). The influence of learner motivation on participation and cognitive skill development in early childhood education: A Kenyan perspective. *Journal of Early Childhood Research*, 13(2), 142-156. <https://doi.org/10.1177/1476718X14568240>
- Ogunniyi, M. B. (2016). Science education in Africa: Teacher and student perspectives.
- Ogunyemi, B. (2020). Cost-effective instructional materials for enhancing classroom learning: Strategies and implications. *Educational Research and Reviews*, 15(8), 375-382.

- Okobia, E. O. (2011). Availability and teachers' use of instructional materials and resources in the implementation of social studies in junior secondary schools in Edo State, Nigeria. *Rev. Eur. Stud.*, 3, 90.
- Orodho, A. J. (2009). *Elements of Education and Social Science Research Methods*. Nairobi: Kanezja Publishers.
- Osei, A. (2021). Effective strategies for preschool teachers: Planning, organizing, and managing early childhood education. *Journal of Early Childhood Education Research*, 10(2), 87-102.
- Patra, K. K. (2012). Pedagogical challenges of Indian higher education: policy and research implications. *International Journal of Management in Education*, 6(1-2), 88-100.
- Piaget, J. (1968). *Six psychological studies*. Vintage Books.
- Piasta, S. B., Justice, L. M., O'Connell, A., & Schachter, R. E. (2020). Increasing preschool teachers' use of emergent literacy instructional practices through coursework and coaching. *Reading Research Quarterly*, 55(S1), S139-S160.
- Pinnawala, M. (2009). Integrating traditional and modern practices in early childhood education: A Sri Lankan case study. *Childhood Education*, 85(6), 349-353.
- Pinter, A., & Zandian, S. (2014). 'I don't ever want to leave this room': benefits of researching 'with' children. *ELT journal*, 68(1), 64-74.
- Price, P. C., Jhangiani, R. S., & Chiang, I. C. A. (2017). *Research methods in psychology*. 2nd Canadian Edition. BCcampus. Retrieved from <https://opentextbc.ca/researchmethods/chapter/reliability-and-validity-of-measurement>
- Pyle, A., & Bigelow, A. (2022). Play-based learning in kindergarten: Teachers' perceptions of implementation and outcomes. *Early Childhood Education Journal*, 50(3), 457-467.
- Pyle, A., & Danniels, E. (2017). A continuum of play-based learning: The role of the teacher in play-based pedagogy and the fear of hijacking play. *Early Education and Development*, 28(3), 274-289.
- Rahman, A., & Hajar, I. (2020). The effect of audiobook on reading comprehension of the eleventh-grade students of SMA Negeri 2 Buru. *Elt worldwide*, 7(2), 104-115.
- Reisman, A. (2017). Integrating content and literacy in social studies: Assessing instructional materials and student work from a common core-aligned intervention. *Theory & Research in Social Education*, 45(4), 517-554.
- Renandya, W. A., & Jacobs, G. M. (2016). Challenges faced by teachers in Southeast Asian countries in selecting appropriate and engaging instructional materials for teaching English language and literature. *TESOL Quarterly*, 50(3), 521-545.
- Resnik, J. (2020). All against all competition: The incorporation of the International Baccalaureate in public high schools in Canada. *Journal of Education Policy*, 35(3), 315-336.

- Rowley, K. J., Edmunds, C. C., Dufur, M. J., Jarvis, J. A., & Silveira, F. (2020). Contextualising the achievement gap: Assessing educational achievement, inequality, and disadvantage in high-income countries. *Comparative Education*, 56(4), 459-483.
- Salandanan, G. (2012). *Teaching and the teacher*. Lorimar Publishing Inc.
- Scribbr. (2023). Reliability vs. validity in research: Difference, types and examples. *Scribbr*. Retrieved from <https://www.scribbr.com/methodology/reliability-vs-validity>
- Smith, J., & Johnson, D. J. (2022). Parental perspectives on education: Mexican and Mexican-American farmworker families with young children enrolled in migrant and seasonal head start. *Journal of Latinos and Education*, 21(4), 388-403.
- Smith, L. L., & Johnson, H. A. (2022). Practical strategies for using everyday materials in early childhood education. *Early Childhood Education Journal*, 50(1), 45-60.
- Snigdha, S. S., & Akter, M. (2023). Effectiveness of audio-visual materials in teaching reading for young EFL learners in Bangladesh: An experimental study. *EIKI Journal of Effective Teaching Methods*, 1(4).
- Stevenson, M., & Bell, D. (2021). The role of digital technologies in early literacy development: A scoping review. *Computers & Education*, 170, 104203.
- Tăbăcaru, L., & Humoreanu, B. (2021). The use of realia in teaching English as a foreign language to young learners. *European Journal of Education Studies*, 8(4), 247-258.
- The Hechinger Report. (2023). What is it like to be a male teacher in early ed? Retrieved from <https://hechingerreport.org/what-is-it-like-to-be-a-male-teacher-in-early-ed/>
- Tiwari, H. P. (2023). Effectiveness of Pictures in Enhancing ESL Students' Short Story writing Ability. *Voice: A Biannual & Bilingual Journal*, 15(1), 19-33.
- Tusmagambet, B. (2020). Effects of audiobooks on EFL learners' reading development: Focus on fluency and motivation. *English Teaching (South Korea)*, 75(2), 41-67.
- Uwezo. (2011). *Are our Children Learning? Uwezo Uganda Eighth Learning Assessment Report: Twaweza East Africa*
- Vongkulluksn, V. W., Xie, K., & Bowman, M. A. (2018). The role of value on teachers' internalization of external barriers and externalization of personal beliefs for classroom technology integration. *Computers & Education*, 118, 70-81.
- Wagar, S. (2016). *The Journal of the Assembly for Expanded Perspectives on Learning*.
- Waigera, J. (2013). Pre-Primary school teachers' use of culturally relevant instructional materials in teaching in Kyeni West district, Nyeri County, Kenya. Unpublished M.A. thesis, Kenyatta University, Kenya.

- Wangila, P. (2017). Challenges in the provision of instructional materials in early childhood development education in South Africa. *Journal of African Educational Research*, 12(3), 215-228.
- Wantini, M. A. (2019). Strategy of values education in the Indonesian education system. *International Journal of Instruction*, 12(1), 607-624.
- Wardhani. (2012). A contribution of habit in watching cartoon films and lexical meaning mastery toward reading skill. *English Education*, 4(1), 101-110.
- World Bank. (2007). Pre-school, secondary education in Africa: Developing science, mathematics, and ICT education in Sub-Sahara Africa. World Bank.
- Zhan, Y., So, W. W. M., & Cheng, S. K. W. (2021). The effects of technology-enhanced learning on students' academic performance: A meta-analysis of 95 experimental studies. *Educational Technology & Society*, 24(3), 125-139.
- Zhao, S., & Flewitt, R. (2020). Young Chinese immigrant children's language and literacy practices on social media: A translanguaging perspective. *Language and Education*, 34(3), 267-285.
- Zosh, J. M., Hassinger-Das, B., & Laurie, M. (2022). Learning through play and the development of holistic skills across childhood. Billund, Denmark: LEGO Foundation.

APPENDICES

APPENDIX I: INTRODUCTORY LETTER

July, 2023

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT RESEARCH IN YOUR SCHOOL

I am a post graduate student in Maasai Mara University undertaking a course in Master of Education administration. My research title is: “**Effectiveness of instructional teaching materials in enhancing acquisition of pre- reading skills among public preschoolers in Narok North Sub County, Kenya**”. To achieve this, your school has been selected to participate in the study. I therefore wish to request you to participate in the study. This information will be used purely for academic purposes and your name will not be mentioned in the report. Findings of the study, shall, upon request, be availed to you.

Your assistance and cooperation will be highly appreciated.

Thank you in advance,

Yours faithfully,



Martha Naisiae

APPENDIX II: QUESTIONNAIRE FOR PRE-SCHOOL TEACHERS

This was used to collect data from the teachers

Instructions

1. Do not write your name anywhere on this paper.
2. Please answer as many questions as possible.

NB: All information given will be treated with confidentiality.

Answer by putting a tick (✓) against the most appropriate answer or fill in the blank spaces.

Answer by putting a tick (✓) against the most appropriate answer or fill in the blank spaces.

Section A: Demographic Information

1: Please indicate your Gender

Male Female

2: Please indicate the Years of teaching

0-4 years 5-8 years

9-12 years Above 12 years

3: Please Indicate your Level of Education

No teaching qualifications Certificate qualifications

Primary teacher (P1) Diploma qualification

Other qualification above diploma

4: Indicate whether the Instructional Materials are effective in your School

	Yes	Not sure	No
Effective			
Less Effective			
Not Effective			
Total			

Visual instructional materials in teaching pre-reading skills among preschool learners.

Please indicate using a tick [√] on the appropriate response.

Visual instructional materials	Effective	Less Effective	Not Effectives
Pictures			
Maps			
Charts and figures available			
Use of teaching flash cards with different concepts such as length, color, texture, shape etc.			
Other classrooms display			

Indicate any other visual instructional materials that are available at the school-----

Realia instructional materials in teaching pre-reading skills

You are requested to indicate the effectiveness and use of these realia instruction materials at the preschool in enhancing pre-reading skills among the learners by indicating using a tick [√] on the appropriate response.

Realia instructional materials	Effective	Less Effective	Not Effective
Real object			
Replica of the object			
Computer aided objects			
Any other objects			

Indicate any other realia materials you feel are effectively used in the teaching of pre reading skills.....

Audio instructional materials in teaching pre-reading skills

You are requested to rate the audio materials by indicating their effectiveness. please use a [√] to check on the appropriate response.

Audio instructional materials	Effective	Less Effective	Not Effective
Computer CDS/DVDS			
Radio			
Tapes/ Video			
TV			

Give your own personal view regarding the effectiveness of the audio instructional materials in teaching pre reading skills

Teacher's pedagogical Skills in using instructional materials

Please rate the teachers' skills on a five-point Likert as provided on the table.

Statement on Teachers skills in instructional materials	SA	A	N	D	SD
Teachers have Experience in using instructional pre reading material					
Teachers are effectively using instructional pre reading materials on the class room					
Teachers have Skills in using instructional pre reading materials					
Teachers have the required Attitude to assist learners acquire their pre reading skills					
Teachers have the abilities to assist learners acquire pre reading skills					
Teachers have the ability to manipulate the instructional teaching materials					

APPENDIX III: OBSERVATION CHECK LIST FOR THE CLASS ROOM

Assessment tool for the Learners

Instructions

NB: All information given will be treated with confidentiality.

Answer by putting a tick (✓) against the most appropriate answer or fill in the blank spaces.

1. Gender of the child: Male _____ Female _____

2. Pre reading skills

a) Verbal language

-Assessing the ability of the learner to understand and communicate with others.

Tested by speech and listening skills and child's ability to ask question.

Commend on each skill observed -----

-Using the letters and sounds and sight words for the learner to recognize, sound and read.

--For this case alphabetic letters are appropriate where the learner is shown the upper case, lower case and sounds.

Make comments on the ability of the learner -----

b) Letter knowledge

-Recognizing, sounding, Naming of letters of the alphabet

--Testing the learner ability to recognize letters -----

--Testing the learner ability to sounding the letters-----

--Testing the ability of the learner to name the letters of the alphabet when flashed at him/her -----

c)Phonological awareness

- Ability of the learner to identify and read letters of the alphabet in a sentence.

Ask the learner to pick a book, then;

- Observe how they hold and place it on the table -----

- Their sitting position as they prepare to write. -----

- Observe how they hold the pen. -----

- Observe how they identify and sound the letters in words. -----

- Show pictures to the Learner and assess how they are able to identify the pictures and other real items.

d) Writing skills

The learner is tested on the ability to listen, identify different letters and symbols and effectively write them.

This involve; effective coordination of the figures, hand -eye coordination

Assessment tool

Ask the learners to recognize some game and plays on an iPad or laptop.

Flash pictures of different things and let the learners recognize them and sound them.

APPENDIX IV: INTRODUCTION LETTER FROM POSTGRADUATE
SCHOOL



Maasai Mara University

BOARD OF POSTGRADUATE STUDIES

OFFICE OF THE DIRECTOR

P.O. BOX 861 – 20500
Narok, Kenya www.mmarau.ac.ke

Tel: +254 – 20 -2066042
+254 – 20 - 8081874

13th January,2022

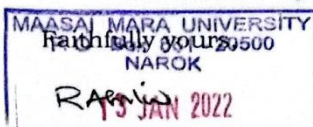
**RESEARCH PERMITS SECTION
NACOSTI
UTALII HOUSE**

REF: MARTHA NAISIAE KESUNA- EM06/S/1004/2014

We wish to confirm that the above named is a bona fide Master's student at Maasai Mara University pursuing Master of Education – Early Childhood & Primary Education in the School of Education. Her proposed research is '*Influence of Instructional Materials in Enhancing Teaching of Pre-Reading Skills Among Pre-Schoolers in Narok North Sub-County, Narok County, Kenya*' She would like to apply for a research permit from NACOSTI before she can proceed for field work and data collection.

We further confirm that the candidate has adhered to all research protocol requirements of Maasai Mara University and the proposed research has been rated as having no known adverse impacts on the environment and does not pose any ethical concerns.

This is therefore to request your office to issue her with a research permit.



Prof. Remulus Abila, PhD.

Director, Board of Postgraduate Studies

abila@mmarau.ac.ke, <https://orcid.org/0000-0001-8762-7153>

APPENDIX V: RESEARCH PERMIT FROM NACOSTI

 REPUBLIC OF KENYA	 NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
Ref No: 948180	Date of Issue: <i>24/January/2022</i>
RESEARCH LICENSE	
	
<p>This is to Certify that Ms.. MARTHA NAISIAE KISUNA of Maasai Mara University, has been licensed to conduct research in Narok on the topic: INFLUENCE OF INSTRUCTIONAL MATERIALS IN ENHANCING TEACHING OF PRE-READING SKILLS AMONG PRE-SCHOOLERS IN NAROK NORTH SUB-COUNTY, NAROK COUNTY, KENYA for the period ending : 24/January/2023.</p>	
License No: NACOSTI/P/22/15344	
948180 Applicant Identification Number	 Director General NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION
	Verification QR Code 
<p>NOTE: This is a computer generated License. To verify the authenticity of this document, Scan the QR Code using QR scanner application.</p>	

**APPENDIX VI: INTRODUCTION LETTER FROM COUNTY DIRECTOR OF
EDUCATION**



REPUBLIC OF KENYA
MINISTRY OF EDUCATION
State Department of Early Learning and Basic Education

FAX NO. 050-22391
When replying please quote;

Ref. CDE/NRK/RES/VOL1/232

COUNTY DIRECTOR OF EDUCATION
NAROK COUNTY
P. O BOX 18
NAROK

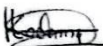
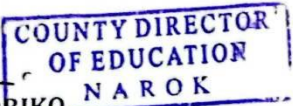
DATE: 3RD MARCH, 2022

TO WHOM IT MAY CONCERN

RE: RESEARCH AUTHORIZATION - MS. MARTH NAISIAE KISUNA.

The above named is a student of Maasai Mara University, she has been authorized to carry out research on the topic "*Influence of Instructional Materials in Enhancing Teaching of Pre-Reading Skills among Pre-Schoolers*" in Narok North Sub County, in Narok County Kenya for the period ending 24th January, 2023.

Please accord her necessary assistance.



LEDAMA KORIKO
FOR: COUNTY DIRECTOR OF EDUCATION
NAROK

C.C
- County Commissioner - Narok
- Ms. Martha Naisiae Kisuna



