INSTRUCTIONAL RESOURCES EFFECTS ON ENGLISH PERFORMANCE AMONG LEARNERS WITH LEARNING DISABILITIES IN STANDARD FIVE IN MURANG'A COUNTY, KENYA

BY

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DECLARATION

I hereby declare that this thesis is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma of the university or other institute of higher learning, except where due acknowledgement has been made in the text.

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DEDICATION

I wish to dedicate this work to Almighty God for giving me grace and energy, to my husband Peter Kiburi Gichomo and our children Abigael Wangechi, Arnold Gichomo, Adrian Mwangi and Angela Wairimu for their perseverance.

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LIST OF ABBREVIATIONS

ADA	-	Americans with Disabilities Act
ADHD	-	Attention Deficit Hyperactivity Disorder
AT	-	Assistive Technology
CD	-	Communication disorder
CD ROMS	-	Compact Disc - Read only memories
CEC	-	Council for Exceptional Children
FPE	-	Free Primary Education
GT	-	Gifted and Talented
IDEA	-	Individuals with Disabilities Education Act
IE	-	Inclusive Education
INSET	-	In-Service Education Training
KCPE	-	Kenya Certificate of Primary Education
KCSE	-	Kenya Certificate of Secondary Education
KNEC	-	Kenya National Examination Council
LD	-	Learning disability
MOEST	-	Ministry of Education Science and Technology
NETST	-	National Educational Technology Standards for Teachers
SNE	-	Special Needs Education
UDL	-	Universal Design for Learning
UNESCO	-	United Nations Educational Scientific and Cultural Organization

ABSTRACT

The increase in the number of slow learners and children with learning disabilities in schools in Africa has become a major issue and concern. In Murang'a County, not much attention has been given to the areas of special needs education, especially the education of learners with learning disabilities. The purpose of this study was to assess the impact of teaching/learning resources on English performance among learners with learning disabilities in Standard Five in Murang'a County. The objectives of this study were to: establish the prevalence of learning disability among standard 5 learners; determine types of teaching/ learning resources, establish the performance in English, establish the adequacy of teaching/learning resources, and determine the organization of teaching/learning resources in the classroom for learners with LD in Kandara Sub-County in Murang'a County. The study was guided by the sensory stimulation theory. The study was based on a descriptive survey design. The study targeted 630 respondents, comprised of 60 head teachers, 70 English teachers in standard five and 500 standard five learners. A sample size of 70 respondents, comprising of 10 head teachers, 20 teachers teaching English, was obtained through the use of purposive sampling and 50 standard five learners were selected using the simple random sampling technique. Questionnaires, a lesson observation schedule and a screening tool checklist were used to collect data. Piloting of instruments was done in one school within the same locality and was not included in the study. Content validity was determined by employing the expertise of the researcher's supervisors at the department, while reliability was determined through the test-retest method and correlation coefficient of 0.79 was obtained. Quantitative data was coded and keyed in the computer for analysis using the Statistical Package for Social Sciences (version 25.0). Quantitative data were analyzed using frequencies and percentages and the findings were presented using tables and figures. Qualitative were analyzed using the content analysis method and presented through narratives and texts as per the objectives. The findings revealed that out of the 37 learners exhibiting Learning Disability-related characteristics, the majority had problems with sentence structure, writing mechanics and organizing written work, difficulty memorizing information, having a short span, impulsivity and difficulty manipulating focus, a lack of social skills, misreading or miscopying information, and learning information presented in one way but not in another. Only one school had graphic organizers, two had computers, and another two had projection screens. However, charts and texts were available in seven schools. All teachers agreed that they used books as teaching and learning resources for the English language. The study concluded that the main challenge in using teaching/learning resources for learners with LDs as teacher incompetence rather than inadequacy or inappropriateness of resources. The study recommended that the Ministry of Education should provide school administrators and educators with support structures and training in features that make inclusive education work. The school managers should coordinate and enhance collaboration between special teachers and regular teachers for effective use of teaching/learning resources.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter outlines the following sections: background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, and significance of the study, limitations and delimitations of the study. Other sections discussed in this chapter are: assumptions, theoretical framework, conceptual framework and operational definition of terms.

1.1 Background to the Study

The field of learning disabilities can be traced back to the 1800s, although the federal government's involvement in its task forces, legislation and funding has been evident in the recent past, around the 1960s to 1970s (Iwanaga et al., 2021). The first written account of a learning disability was in 1896. The case was that of a 14-year-old boy, bright and intelligent, quick at games and in no way inferior to others of his age except for his inability to read (Kirby & Snowling, 2022). The field of learning disability could be said to be one of the newest categories officially recognized by the United States Department of Education, but the origins of its conceptual foundation are as long-standing as many of the other fields of disability (Shevin & Banks, 2021).By about the 1920s, the U.S. researchers focused on language, reading disabilities, perceptual, perceptual-motor and attention disabilities. The key figures in the United States were from medicine, psychology and education that used the research of Hinshel and other

Europeans as the springboard for their work. Among these were Samuel Orton, Grace Fenald, Marion and Samuel Kirk.

The term 'learning disability' was introduced during the emergent period (1960-1975). During the late 1950s, parents of children who would have qualified as learning disabled were starting to make inroads into having their children served (Apgar, 2023). In 1968, the first major professional organisation dealing with learning disabilities, the Division for Learning Disabilities of the Council for Exceptional Children (C.E.C.), was founded, and its first president was Raymond Barsch. Educational programmes were divided into those that focused on language disabilities and those that focused on visual-motor disabilities (Kaufman, 2022). Most authorities credit Kirk as the originator of the field of learning disabilities. Before the term 'learning disabilities' was used, several labels were used to describe learners having similar difficulties in schools, such as 'mental retardation', 'minimal brain dysfunction', 'dyslexia', 'perceptual impairment', 'neurological impairment' and 'slow learner' (Artzi et al., 2022). Many of these difficulties have been encompassed by the term 'learning disabilities', which is now written into law in the US (Bhutoria, 2022).

The increase in the number of slow learners and children with learning disabilities in schools in Africa has become a major issue and concern (Le Fanu et al., 2022). The situation is reflected in various school-leaving examinations; an average of 30% of the results are below average or failures each year. Although there are no statistical records available in most African countries on the number of children and youth with learning disabilities, it is believed that about 80% of the learners in schools are experiencing

learning difficulties in the classroom (Mampane, 2022). Diverse factors contribute to the large number of school difficulties, including overcrowded classrooms, poverty, health issues, shortages of experienced teachers, traditional beliefs, lack of teaching materials, school expectations and motivational issues (Cameron-Mackintosh, 2022). A study carried out in Botswana showed that teachers' main focus on completing the set curriculum in preparation for examinations compromised curriculum access to learners with learning disabilities in general education classrooms (Kabir, 2024).

The Uwezo initiative, as discussed by Mugo, Ruto, Nakabugo, and Mgalla (2015), shifted the discourse on education in East Africa from a narrow focus on enrolment to a broader concern with actual learning outcomes. Their study demonstrated that despite high enrolment following the introduction of free primary education in Kenya, Tanzania, and Uganda, learning outcomes remained consistently low among children aged 6 to 16 years. Uwezo's theory of change emphasizes large-scale learning assessments as critical in building public evidence and citizen participation to exert pressure on education systems to improve quality. This perspective underscores the need for robust measurement and accountability in education provision. In contrast, the current study adopts the Sensory Stimulation Theory, which emphasizes the role of varied instructional resources in engaging learners' senses to enhance comprehension and retention, particularly for learners with learning disabilities. While Uwezo focuses on systemic accountability and large-scale assessment of learning competences, this study narrows its lens to the micro-level classroom environment in Kandara Sub-County, Murang'a County, investigating how teaching and learning resources directly influence English performance among learners with learning disabilities. Together, the two perspectives complement each other

by highlighting both the structural (macro) and classroom (micro) determinants of learning outcomes, affirming the urgency of improving resource adequacy and instructional practices to raise educational performance.

Special needs education in Kenya started during the Second World War to rehabilitate army officers who returned from the war in 1945 with injuries (Owino, 2025). They could not fit into the society, so they lived in set-up homes. Special schools grew to cater for learners who were visually impaired. The disability movement, formed by parents and friends of persons with disabilities, started raising awareness on disability as a human rights issue on equal participation in the society (Kavinje, 2020). Some organizations, societies and support services groups formed in Kenya to offer services to them. The government put in place programmes to support the children with special needs in education (Wanjiru, 2018). The programmes included an administrative section which dealt with all administrative issues on special needs education; the Inspectorate department, which supervised special institutions to ensure that standards were maintained and improved; and curriculum development, which adopted specialized and specialist curricula as well as related needs in education (since 2023). The Kenya Education Commission of 1964 noted that many children with mild handicaps were learning in regular schools and recommended that they should continue to learn in regular schools. The commission called for all trained teachers to be given training which would enable them to teach children with special needs in regular schools (Thukia, 2025).

Kenya has been offering education to four categories of learners with disabilities: normally, those with hearing impairment, visual impairment, physical disability and

mental retardation, leaving out other groups like those with learning disabilities (LD), the gifted and talented (GT) and communication disorders (CD) (Rohwerder, 2020). In Kenya Free Primary Education (FPE) was introduced in 2003 so as to meet the international commitment such as Education for All (EFA) and the Millennium Development Goal (Ngingi et al., 2025). According to the Ministry of Education Science and Technology (2003), the Government of Kenya is responding to this through the Ministry of Education in conjunction with the Kenya Institute of Curriculum Development, the Kenya Institute of Special Education, and the quality assurance and standards officers in an effort to have learners with learning disabilities (LD) included in the regular/ordinary schools.

According to the Disability Act (2003), no person or learning institution shall deny admission to a person with a disability to any course of study by reason only of such disability to acquire substantial learning in that course. Special schools shall be established to cater for formal education, skills and development and self-reliance for persons with diverse needs in education. The right education will be achieved through the provision of an inclusive and quality education that is accessible and relevant to all Kenyans. In Kenya many learners with learning disabilities have been and still exist in regular schools where their needs are not met. The report of the commission of inquiry into the education system of Kenya points out that learning disability is a complex emerging area and recommends that the Kenya Institute of Curriculum Development develop guidelines for teachers to assist these learners and the Kenya National Examinations Council (KNEC) plan examinations for these learners accordingly (Garbutt, 2018; Republic of Kenya, 1999).

Every K.C.P.E. (Kenya Certificate of Primary Education) puts about 48-51% of learners with disabilities together and labels them as non-performers. However, 90% of learners with learning disabilities are made by teachers because of not taking care of the learning styles of the learners; only 10% are true learners with learning disabilities. The education cabinet secretary abolished the ranking of schools and candidates in national exams (K.C.P.E. and K.C.S.E.) in 2014 to reduce cut-throat competition. The new policy was aimed at ending unethical practices by teachers in the rush for top positions. While releasing the 2014 K.C.P.E., Prof. Kaimenyi (education cabinet secretary) defended the decision not to release any orders of performance ranking, saying there were more demerits of performance ranking than benefits.

Ranking affects the morale of teachers and learners in schools that are deemed to be regularly performing poorly; it lowers self-esteem, kills innate talent and allows stigma. Many schools had even stopped teaching non-examinable subjects such as music and the arts as a result. The ranking method has been cited as a leading cause of unethical routine by some schools where bright candidates are registered in different streams from the rest to maintain top slots in the national list. A document of analysis of English performance among learners with learning disabilities in ten schools under the study in Kandara Sub County, presented in Table 1.1, shows an improvement of six per cent for the last four years from 2015 to 2018.

Table 1.1: English performance among learners with learning disability in Kandara Sub County for the last four years from 2015-2018.

Class	Mean Score 2015	Mean Score 2016	Mean Score 2017	Mean Score 2018
4	29.4	28.5	29.7	26.6
5	20.9	21.0	19.9	20.1
6	25.8	26.85	24.6	25.95
7	24.6	25.7	24.5	25.2
8	26.3	25.8	26.0	25.4

For effective teaching and learning for these learners, there is need to find out the impact of teaching and learning resources on English performance. Therefore this study sought to find out the impact of teaching/learning resources on English performance among learners with learning disability.

1.2 Statement of the Problem

UNESCO (1994) passed the Salamanca statement that supports the practice of inclusive for learners with learning disabilities with caution that success requires a concerted effort by teachers, school staff, peers, parents, families and volunteers. The presence of learners with learning disability in primary schools is challenging as it is clear that learners with Learning disability cannot learn at the same pace with their peers without learning disability. These learners are left behind in terms of performances by their peers without learning disability. There is need to provide effective assistance to learners who need extra support, as part of ensuring that all learners, gain a level of literacy essential for successful participation in schooling , in work and in everyday life (McCrae, & Rowe

2003). Effective intervention requires specialist knowledge about the instructional needs of learners with learning disabilities and how best to cater for these needs (Carrington, McCain and Mustard 1999).

Skilled teachers are required to ensure that all learners learn and perform at appropriate levels despite the fact that some have learning disabilities. Majority of the children with learning disabilities in Kenya especially in Murang'a County have not been identified for proper placement and provision. However, in Kandara Sub-County, not much attention has been given to the areas of special needs education especially education of learners with learning disabilities. The problem of teaching/learning resources, in teaching and learning English among learners with learning disability has not been addressed. This study therefore sought to suggest a solution to this problem by examining the impact of teaching/learning resources on English performance among learners with learning disabilities. There was need to assess the impact of teaching /learning resources on English performance among learners with learning disabilities.

1.3 Purpose of the Study

The purpose of this study was to assess the impact of teaching /learning resources on English performance among class five learners with learning disabilities in Murang'a County, Kenya.

1.4 Objectives of the Study

This study sought to:-

1. Assess the prevalence of learning disability among standard 5 learners in Kandara Sub-County in Murang'a County

2. Find out types and adequacy of teaching/ learning resources for learners with learning disabilities in Standard five in Murang'a County.
3. Identify the performance in English for learners with learning disabilities in Standard five in Murang'a County.
4. Determine the teachers' organization of teaching/learning resources in the classroom for learners with learning disabilities in standard five in Murang'a County.

1.5 Research Questions

This study attempted to find answers to the following research questions:-

1. What is the prevalence of learning disability among standard 5 learners in Kandara Sub-County in Murang'a County?
2. What types and adequacy of teaching/learning resources are used for teaching English to learners with learning disabilities in standard five in Murang'a County?
3. How is the performance in English for learners with learning disabilities in standard five in Murang'a County?
4. How is the teachers' organization of teaching/learning resources in the classroom for learners with learning disabilities in standard five in Murang'a County?

1.6 Significance of the Study

The findings of the study may help primary school headteachers and their teachers to gain insight on the diversity of their learners with learning disabilities. By highlighting types of teaching/learning resources for learners with learning disabilities, the findings of the

study may help teachers to handle learners with learning disabilities based on their learning styles and needs. Teachers and learners may be aware of computer software that assists learners with learning disabilities as the Jubilee government rolls out the laptop project in the primary schools. Teachers may enhance their ways of identifying learners with learning disabilities using different assessment tools. Learners, especially those with learning disabilities, will benefit when teachers use different types of teaching/learning resources to meet their needs. The study may stimulate prospective researchers to replicate the study in other parts of Kenya. The findings may have implications for national examinations, which should be tailored to meet the needs of learners with learning disabilities.

1.7 Limitation and Delimitations

Every research study is carried out within certain boundaries and is subject to various challenges. It is therefore important to highlight both the limitations, which are factors beyond the researcher's control that may have influenced the study, and the delimitations, which are the self-imposed boundaries that defined the scope of the research.

1.7.1 Limitations

Limitations are factors which may affect the study (Nachmias and Nachmias, 2009). In this study, some learners were initially reluctant to participate fully because they feared that their responses might be used for fault-finding in their schools. To address this, the researcher clarified that the study was strictly for academic purposes and not for evaluation of individual schools or teachers. Time and accessibility also posed challenges, as some schools in Kandara Sub-County are located in areas that are difficult

to reach. This sometimes slowed down data collection, although the researcher made use of alternative means of transport such as motorbikes to overcome the challenge. Additionally, some respondents expected financial incentives for participation, which limited initial access to data. The researcher mitigated this by clearly explaining the purpose of the study, which helped to secure cooperation from most participants.

1.7.2 Delimitations of the Study

Delimitations are the boundaries set by the researcher to focus the study. This study was delimited to Standard Five learners in Kandara Sub-County, Murang'a County. Learners in this class were targeted because by this level, they are expected to have acquired basic literacy skills, making it possible to identify those with learning disabilities more accurately. The study specifically examined the prevalence of learning disabilities among Standard Five learners, the types and adequacy of teaching and learning resources available to them, their performance in English, and the organization of resources in the classroom. Other aspects, such as teacher competencies, teaching methods, or attitudes, were deliberately excluded, since the primary focus was on the learners' experiences with instructional resources and how these affected their English performance. Geographically, the study was confined to public primary schools in Kandara Sub-County. Public schools were chosen because they serve learners from diverse social and regional backgrounds, making the findings more representative. Methodologically, the study was delimited to a descriptive survey design, which was considered appropriate for capturing the characteristics and perspectives of learners without manipulating the study population.

1.8 Assumptions of the Study

The following were the assumptions of the study:-

That special educator was involved in regular school setup. Those regular school educators were involved in teaching learners with learning disabilities. Those regular school educators were undertaking intervention measures once they identified learners with learning disabilities. That all the learners selected for the study were homogenous in terms of teaching and syllabuses. That the respondents cooperated, honest in answering questionnaires and provided accurate information.

1.9 Theoretical and Conceptual Framework

This subsection presents the theory guiding this study, prior research that has used or tested similar theories, a critique of the theory, and its relevance to the current research on instructional resources and English performance among learners with learning disabilities. This section also outlines the conceptual framework guiding the study.

1.9.1 Theoretical Framework

The study is guided by Sensory Stimulation Theory (Laird, 1985), which posits that effective learning occurs when multiple senses are stimulated. According to the theory, a large proportion of what adults know is acquired through seeing (75%), followed by hearing (≈ 13%), with the remaining knowledge gained through the other senses touch, smell, taste making up the rest. Learning is enhanced when instructional resources engage more than one sensory modality. Under this theory, visual, auditory, audio-visual, tactile, and kinesthetic materials are essential components to facilitate understanding, retention, and recall.

Several recent studies reinforce the importance of sensory experiences in learning, particularly for learners with disabilities: Agostine, Erickson, & D'Ardenne (2022) studied Sensory Experiences and Children with Severe Disabilities: Impacts on Learning, finding that limited sensory-rich experiences in classrooms lead to students with severe disabilities being passive, with less engagement and poorer learning outcomes.

Stephenson and Carter (2024) examined literature on multisensory environments and found supporting but mixed evidence that such environments can improve engagement and developmental outcomes. A program based on sensory integration to reduce visual perception difficulties among children with developmental learning disabilities in Egypt (Ali, Mahmoud & Aborayah, 2021) demonstrated improvements in visual perceptual tasks when sensory integration interventions were used. These studies show empirical grounding for using sensory stimulation / integration in contexts involving learning disabilities, though many focus on severe or developmental disabilities rather than specific subject performance like English.

While Sensory Stimulation Theory offers a compelling rationale for engaging multiple senses in learning, it has limitations: Some studies report positive effects, but many are qualitative or have small samples; robust experimental evidence, especially in low- and middle-income countries or for learners with specific learning disabilities, is less common. As the theory suggests, seeing and hearing tend to dominate; less frequently are smell, taste, or tactile senses fully leveraged in typical classrooms, partly due to resource constraints. The effectiveness of sensory stimulation depends on how well resources are adapted to learners' needs. For learners with specific learning disabilities (e.g., dyslexia,

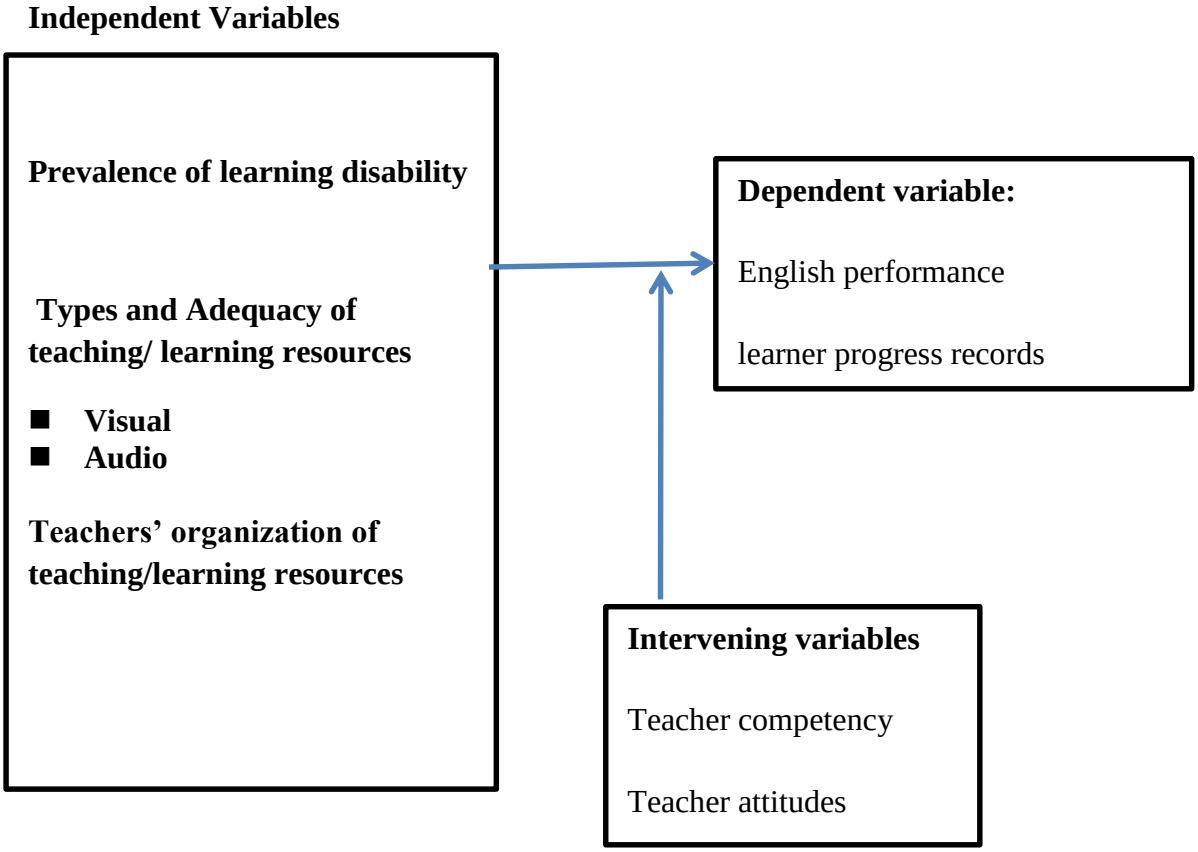
auditory processing deficit), certain senses or modalities may be more or less useful: Costs, teacher training, classroom space, and available materials can limit the extent to which full multisensory environments can be implemented.

Based on the context of the current study, learners with learning disabilities in Standard Five in Kandara Sub-County, Murang'a County Sensory Stimulation Theory is relevant because: The study examines instructional resources (types, adequacy, organization) which directly relate to how many senses learners can engage during learning. Poor performance in English among learners with learning disabilities may be partly due to inadequate sensory stimulation (e.g., lack of audio-visual aids, tactile materials, etc.). Using this theory allows you to frame which resources (visual, auditory, audio-visual, tactile / kinesthetic) to examine, and how their organization and adequacy may affect English performance. The theory helps in designing the conceptual framework, mapping out how instructional resources → sensory stimulation → learner engagement → performance in English.

1.9.2 Conceptual Framework

Figure 1.1 illustrates the conceptual framework.

Figure1.1. Conceptualization of the Study



The conceptual framework of this study illustrates the relationship between the independent, dependent, and intervening variables. The independent variables are the types and adequacy of teaching/learning resources, categorized into audio, visual, audio-visual, tactile, and kinesthetic. The dependent variable is English performance, measured through grades in report cards and learners' progress records. The intervening variables, which were acknowledged but not examined in detail, include teacher competency and teacher attitudes, as these may indirectly influence learners' performance.

This framework is grounded in the Sensory Stimulation Theory (Laird, 1985), which posits that learning is enhanced when multiple senses are engaged. The types of instructional resources examined in this study visual, auditory, audio-visual, tactile, and kinesthetic align directly with the theory's proposition that the stimulation of more senses improves comprehension and retention. For instance, a learner who struggles with purely auditory instruction may benefit from visual aids or tactile materials that reinforce English concepts. By applying the theory, the framework assumes that the greater the variety and adequacy of sensory-based resources, the higher the likelihood of improved English performance among learners with learning disabilities.

In addition, the framework incorporates Objective One of the study, which was to assess the prevalence of learning disabilities among Standard Five learners in Kandara Sub-County. Establishing the prevalence is critical because it provides the basis for understanding the magnitude of the problem and justifies the need for adequate and well-organized teaching/learning resources. Without knowing how many learners are affected, interventions on resource provision and utilization may not be appropriately targeted.

1.10 Operational Definition of Terms

Adequacy of Teaching/Learning Resources: Refers to the extent to which the available instructional resources are sufficient in number, variety, and accessibility to meet the needs of learners with learning disabilities in Standard Five.

English Performance: In this study, English performance refers to the scores and achievement levels of Standard Five learners with learning disabilities, measured through spelling, vocabulary, comprehension, and class assessments.

Impact: Refers to the influence or effect that the use of teaching/learning resources has on learners' English performance, whether positive or negative.

Instructional Resources: Refers to the materials and tools used in the teaching and learning process to meet learners' needs. In this study, they include audio, visual, audio-visual, tactile, and kinesthetic resources.

Learning Disabilities: In this study, learning disabilities refer to difficulties experienced by learners in acquiring and using skills such as listening, speaking, reading, writing, reasoning, or mathematical abilities, despite having normal intelligence and opportunities to learn.

Learning: Refers to the process by which learners with or without learning disabilities acquire new knowledge, skills, attitudes, or behaviors through interaction with instructional resources and the learning environment.

Organization of Teaching/Learning Resources: Refers to how instructional resources are arranged, structured, and integrated within the classroom setting to enhance accessibility and effective use by learners with learning disabilities.

Reading Difficulties: In this study, reading difficulties refer to challenges experienced by learners with learning disabilities in oral reading, word recognition, reading comprehension, and reading fluency.

Reading Disability: Refers to a condition where learners experience unexpected difficulty in learning to read, despite having normal intelligence and exposure to appropriate learning opportunities.

Resource: Refers to any material, tool, or equipment that is used to facilitate learning in English among Standard Five learners with learning disabilities.

Special Needs Education (SNE): Refers to an educational approach that provides differentiated resources, strategies, and learning environments designed to meet the unique needs of learners with learning disabilities.

Types of Teaching/Learning Resources: Refers to the specific categories of resources used to facilitate learning, namely audio (e.g., recorded stories), visual (e.g., charts, flashcards), audio-visual (e.g., videos), tactile (e.g., braille materials, clay models), and kinesthetic (e.g., role play, movement-based activities).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter presents a detailed review of related literature based on the identification of learners with learning disabilities, types of teaching/learning resources for teaching English to learners with learning disabilities, performance in English for learners with learning disabilities, adequacy of teaching/learning resources used for teaching English to learners with learning disabilities and organization of teaching learning resources in the classroom (environment) for learners with learning disabilities.

2.1 Children with Learning Disability

Over the years, parents, educators and other professionals have identified a wide variety of characteristics associated with learning disabilities. Learning disabilities are associated with problems in listening, reasoning, attention, selecting and focusing on relevant stimuli and the perception and processing of visual and/or auditory information. Al-Qadri, Zhao, Li, and Al-khresheh (2021) investigated the prevalence of academic learning difficulties using an observational tool across different school contexts. Their study revealed that a significant proportion of learners experience difficulties in reading, comprehension, and writing, with visual and auditory processing deficits being among the most reported. Although the study provided reliable insights into the magnitude of learning difficulties, it was conducted in Middle Eastern contexts, limiting its direct applicability to Kenyan classrooms. The gap lies in the absence of localized prevalence data that reflects learners' realities in rural sub-counties such as Kandara sub-county.

In the Kenyan context, Ooko (2023) examined the prevalence and patterns of dyslexia, a language-based learning disability, among learners in public schools. The study found that many learners struggled with reading fluency, word recognition, and comprehension, leading to underperformance in language subjects. The research underscores that dyslexia remains under-identified in many Kenyan schools, primarily due to limited teacher awareness and insufficient screening mechanisms. However, Ooko's study concentrated on dyslexia specifically, leaving out other forms of learning disabilities such as dysgraphia or dyscalculia. This creates a gap in understanding the overall prevalence of learning disabilities across subject areas such as English among learners in Standard Five.

Similarly, Muchiri (2021) explored the status of early identification of learners with special educational needs in Njoro, Nakuru County. The study established that teachers often lacked the training and tools necessary to identify learners with learning disabilities effectively. As a result, many learners remained unidentified and unsupported, which negatively affected their academic progress. While the study highlights the significance of teacher preparedness in identifying learning disabilities, it did not provide prevalence rates across specific grade levels such as Standard Five, hence limiting its relevance for planning targeted interventions.

Mutuku (2023) extended this discussion by investigating teacher preparedness for supporting learners with specific learning disabilities in Machakos County. The findings showed that while some teachers demonstrated awareness of learning disabilities, inadequate resources and limited professional development significantly hindered their capacity to support affected learners. This suggests that the prevalence of learning

disabilities may be underestimated due to insufficient teacher diagnostic capacity. The study, however, emphasized teacher preparedness rather than prevalence data, leaving unanswered questions about the actual magnitude of learning disabilities among learners in rural sub-counties such as Kandara.

At a broader policy level, the Government of Kenya's Status Report on Disability Inclusion (2021) acknowledged the increasing recognition of children with functional difficulties, including learning disabilities, in schools. The report identified persistent gaps in data collection and monitoring systems, which makes it difficult to provide reliable prevalence estimates. While useful at a national scale, the report did not disaggregate the data to class levels, nor did it provide sub-county-specific prevalence information.

Finally, de Kadt et al. (2025) analyzed developmental scores and prevalence of functional difficulties among children in Kenya. Their study revealed that a notable percentage of children experience difficulties in communication and learning functions, which align with indicators of learning disabilities. The research offered empirical prevalence data that is useful for policy and planning. Nevertheless, the study focused on children in general rather than specifically on school-going learners in Standard Five, making its findings less applicable for curriculum-specific performance outcomes such as English.

2.2 Types of Teaching Resources for Learners with Learning Disabilities

According to Constantinidous & Baker (2002), visual learners learn best by seeing what they are being taught. They typically prefer images, mind maps, graphs and other visual

representations. They have a better sense of remembering key information. They need text and/or pictures on papers, posters, models, projection screens, or computers, film, video, and multi-image media., UNESCO's Global Education Monitoring (2020) provided a report on the global state of inclusive education, including the extent to which education systems identify learners with functional difficulties and provide appropriate resources and accommodations (UNESCO, 2020). The report found that many education systems have expanded enrolment but continue to under-identify children with functional difficulties (including learning disabilities) and to under-resource inclusive provision. In particular, the report highlighted persistent shortages of adapted instructional materials, assistive technologies and teacher training in multisensory and differentiated instruction resources that are central to meeting the needs of learners with learning disabilities. The GEM report is authoritative and comprehensive but, by design, is global and diagnostic rather than empirical at the school level; it identifies systemic shortfalls but does not quantify resource adequacy or types at classroom or grade levels. UNESCO's global diagnosis underscores the problem but does not provide grade-level or sub-county evidence about what specific resource types (visual, audio, audio-visual, tactile, or kinaesthetic) are available or adequate for Standard Five learners with learning disabilities in settings such as Kandara Sub-County.

A complementary global data synthesis by Development Initiatives (Disability Data Initiative, 2023) mapped disability-related data sources and found similar patterns: functional-difficulty indicators are often collected, but measurements are inconsistent and lack the granularity needed for targeted school-level planning (Development Initiatives, 2023). The synthesis documents that data fragmentation undermines efforts to know how

many learners at a given grade level require adapted resources. The Development Initiatives report provides useful guidance on data systems and identifies measurement gaps, but its outputs are orientated to national/regional datasets rather than direct classroom inventories of resource types and adequacy. While the report calls for improved data systems, it does not replace the need for local, grade-specific inventories of teaching/learning resource types and their adequacy from the learners' perspective information this study will produce for Standard Five in Kandara Sub-County.

The African Committee of Experts on the Rights and Welfare of the Child (ACERWC) continental study (2024) examined the status of children with disabilities across Africa and documented that children with functional difficulties often matching learning disability profiles are frequently educated in mainstream classrooms without formal identification, adapted materials, or teacher supports (ACERWC, 2024). The study emphasizes that lack of appropriate teaching/learning resources and weak assessment/referral pathways contribute to invisibility and poor learning outcomes. The ACERWC study presents important continental evidence and case studies, but its broad scope means it principally highlights common systemic barriers rather than cataloguing the specific resource typologies or adequacy metrics at school or grade level. The ACERWC study shows the continent-level problem of under-resourcing, yet it does not identify which sensory-aligned resource types are available or adequate in particular primary-school grades. This study fills that gap by documenting specific resource typologies (visual, audio, audio-visual, tactile, and kinaesthetic) and assessing their adequacy for Standard Five learners.

Schools2030 (2023) explored teacher understanding of learning differences and the practical availability of supports in Kenyan classrooms (Schools2030, 2023). The report found that teachers frequently lack screening tools and adapted materials; where materials exist, they are often generic rather than differentiated for learners with learning disabilities. The study also noted differences across counties in how resources are organized and used. The Schools2030 report provides valuable practitioner insight and draws on interviews and field observations, but it is not a representative, grade-level prevalence or resource-inventory study; it emphasizes processes (teacher awareness, referral) rather than producing a quantified, sensory-aligned inventory of resource adequacy. Schools2030 indicates inconsistency in resource availability and organization across counties but leaves unanswered how many Standard Five learners actually have access to specific resource types and whether those resources are adequate for improving English performance.

Ooko (2023) investigated dyslexia and reading difficulties among Kenyan primary-school learners and evaluated remediation outcomes in participating schools. The study's purpose was to document the prevalence of reading-related learning disability among sampled learners and to test remediation approaches. Key findings included high rates of reading errors and measurable improvement after targeted interventions in the sampled schools; the study concluded that dyslexia and related reading learning disabilities are present in Kenyan classrooms and respond to structured support. Ooko's study demonstrates intervention potential but draws on purposive samples (selected schools and programme participants), limiting generalizability and preventing reliable prevalence estimates for specific grades or sub-counties. It also focuses primarily on

reading/dyslexia and less on the broader array of resource types or on subject-specific (English) resource adequacy across multiple sensory modalities. Ooko confirms that reading-related learning disability exists and can improve with resources but does not provide a representative, grade-level inventory of resource types or a measure of adequacy in Standard Five classrooms information required to plan local resource allocation in Kandara Sub-County.

Mutuku (2023) examined teacher preparedness for identification and support of learners with specific learning disabilities in Machakos County. The purpose was to assess teachers' knowledge, access to tools, and the availability of adapted materials. Mutuku found that most teachers lack adequate training and diagnostic tools and that adapted instructional resources are often scarce or unavailable in regular primary schools. Teachers reported improvising materials but expressed concern that improvised resources were insufficiently varied to meet different sensory learning needs. Mutuku's thesis provides useful, locally grounded insight on teacher capacity and resource shortages; however, like many field studies, it focuses on teacher reports and does not systematically inventory resource adequacy from the learners' perspective or provide grade-specific (Standard Five) metrics. The present study sought to produce that quantified, learner-centred inventory in Kandara Sub-County and link adequacy to English performance.

2.3 Adequacy of Teaching / Learning Resources and Learning Disabilities

According to Voltz & Sim (2010), teachers are being called upon to produce `greater similarity in learning outcomes, despite greater diversity in learner populations. This can

be achieved by using the materials of instruction, or the tangible items that are used to support instructions and create outcomes for our diverse learners. Sepadi (2025) in South Africa examined how mainstream teachers in resource-constrained settings understand and practice inclusion for learners with autism spectrum disorder. The findings revealed that inadequate availability of specialized instructional materials, limited assistive technology, and lack of adapted learning content severely hamper teachers' ability to address the needs of learners with learning disability; teachers often fall back to general classroom resources which do not meet particular sensory or accommodation needs. While this study offers recent empirical evidence, it is specific to autism spectrum disorder and mainstream settings with resource constraints, so it does not classify or quantify adequacy of resource types by sensory modality for learners with learning disability more broadly (e.g., reading, writing, comprehension challenges).

Akiyoo, Mosha, and Ogoti (2022) conducted a study in the Arusha region of Tanzania to assess the adequacy of teaching and learning resources for implementing inclusive education in public primary schools. The study found that essential resources such as computers, wheelchairs, braille machines, and assistive technologies were largely inadequate or absent. The results indicated a strong positive correlation between resource availability and the level of inclusive education implementation. The study's sample included mostly teachers and head teachers but had limited input from learners with learning disability themselves; it also did not disaggregate by grade level (such as Standard Five) or resource types by sensory modalities. The study does not tell us how many Standard Five learners are being supported and whether the available resources match their learning styles (visual, auditory, tactile etc.), particularly in English.

Within Kenya, Long'ore, Cheloti, and Mwanza (2023) studied public primary schools in Machakos Sub-County to assess the influence of physical facilities and instructional materials on the teaching of learners with special needs (Long'ore, Cheloti & Mwanza, 2023). Key findings were that many physical facilities (e.g., toilets, accessible classrooms) are inaccessible, and that many schools do not have instructional materials tailored to learners with special needs. Teachers reported improvising learning materials, but found them insufficient in variety and suitability. Although this study addresses both physical facilities and instructional materials, it still centers mostly on "special needs" broadly rather than specifying learners with learning disability. Nonetheless, the study does not provide detailed inventory of which types of instructional resources (visual, audio, audio-visual, tactile, kinesthetic) are adequately available, nor does it assess adequacy from learners' perspectives or link resource adequacy to English performance for Standard Five learners.

Another Kenyan study in Dadaab Sub-County by Osman, Oracha, and Okutoyi (2022) assessed availability and usage of teaching/learning resources for retention of learners with special needs in regular primary schools. Findings showed that availability and use of resources were low: many schools lacked sufficient materials and usage was inconsistent. The mean adequacy score for teaching/learning materials was 2.18 (on a scale used in the study), indicating generally poor adequacy. The study correctly identifies inadequacy and its correlation with retention, but it does not disaggregate by specific types of learning disability, sensory modality of resources, or grade level such as Standard Five. Also, performance in specific subjects (like English) was not measured. The study however leaves open the question: for Standard Five learners with learning

disability in Kandara Sub-County, what types of resources are available and how adequate are they (in terms of quantity, variety, and suitability), particularly for English?

2.4 Teaching / Learning Resources and English Performance

Njoki (2015) found out that teaching/learning instructional materials and resources to cater for learners with dysgraphia were inadequate and this factor among others hindered effective learning for learners with dysgraphia and needs to be addressed. Globally, there is growing recognition that the adequacy and effective use of teaching and learning resources significantly affect academic outcomes, particularly in language performance among learners with learning disabilities. For instance, Alhassan and Abosi (2020) conducted a study in Ghana examining the effectiveness of assistive technology on literacy skills of learners with dyslexia. The purpose of the study was to determine whether tools such as text-to-speech software and interactive reading applications improve reading and writing performance. Findings indicated that learners using these resources showed significant improvements in reading fluency and comprehension compared to those who relied solely on traditional materials. Although the study demonstrates the potential of assistive technology, it focused on dyslexia alone and did not address other categories of learning disability such as dysgraphia or dyscalculia.

Similarly, a study in the United States by Kennedy, Deshler, and Lloyd (2021) evaluated the impact of multi-sensory instructional resources on English performance among middle school learners with specific learning disabilities. The purpose was to assess whether integrating audio-visual tools and tactile activities into literacy instruction improved learners' vocabulary acquisition and comprehension. The results showed

statistically significant gains in vocabulary retention and reading comprehension. While the study was rigorous, it focused on middle school learners, making it less applicable to younger learners in primary school contexts. The findings need to be tested in lower-grade classrooms, such as Standard Five, where foundational literacy skills are still being developed.

At the regional level, Mlay and Gabriel (2022) explored the effect of inclusive instructional resources on reading comprehension of learners with learning disabilities in Tanzania. Their study aimed to establish whether resource adequacy and diversity influenced English literacy skills. Findings showed that schools with richer resources such as graphic organizers, digital readers, and peer-assisted reading programs reported higher reading comprehension outcomes. The study was limited to urban schools with relatively better resourcing, and therefore under-represents rural or under-resourced contexts. More evidence is needed from semi-rural settings like Kandara Sub-County, where resource scarcity may pose greater challenges.

In Kenya, Waweru and Gathigia (2021) investigated the use of assistive technology in improving literacy outcomes for learners with special educational needs in Nairobi County. The study's purpose was to evaluate whether learners with learning disabilities who used low-tech tools such as slant boards, phonics cards, and audio books performed better in English literacy than those without such support. The findings revealed a moderate but significant improvement in reading fluency and comprehension for learners who had access to these resources. While the study provides useful insights, it was conducted in urban schools with relatively better access to assistive devices. There is

limited research on how resource adequacy and usage affect English performance in rural or semi-urban counties like Murang'a.

Further, a study by Otieno and Orodho (2023) examined the adequacy of English teaching and learning resources in Kisumu County and their effect on learners with learning disabilities. The purpose was to determine whether learners' English performance was directly influenced by the adequacy of available materials. Results revealed that learners in schools with adequate English teaching resources (audio-visual tools, language games, and specialized readers) performed significantly better in spelling, comprehension, and vocabulary tests than those in resource-poor schools. Although the study established a strong link between adequacy of resources and performance, it did not specify how resources aligned with different learning styles (visual, auditory, tactile, kinesthetic). This leaves unanswered how different categories of instructional resources influence English outcomes in Standard Five classrooms.

2.5 Organizations of Teaching /Learning Resources in the Classroom and Learners with Learning Disabilities

Classroom organization focuses on physical environment. Effective teachers organize a safe classroom environment (Muflih, 2018). They strategically place furniture, learning centers and materials in order to optimize learner learning and reduce destructions. Furniture arrangements, location of materials displays and fixed elements are all parts of classroom organization. Effective teachers decorate the room with learner work, arrange the furniture to promote interaction as appropriate and they have comfortable areas for working ((Muflih, 2019).

Classroom organization affects the physical elements of the classroom, making it more productive environment for its users. How the classroom is organized influences the behavior, learner learning and smooth operating classrooms. Effective teachers take time in the beginning of the year and especially on the first day of school to establish classroom organization, (Vincent, 2020,). It's important to pay careful attention to classroom climate given that it can have as much impact on learner learning as learner aptitude.

A learning center is a space in the classroom that allows easy access to a variety of learning materials, designs and media through which learners can work by themselves or with others to operationalize the information learnt in the classroom. Learning centers are designed to enhance the learning of concepts, skills, themes, or topics. This learning can take place after a topic is presented to learners, during the course of presenting important concepts or as an initial introduction to material in the text (Seliane & Kgothule, 2022).

In Kenya, several studies indicate that the availability and adequacy of teaching/learning resources directly influence inclusive education implementation, though links to subject-specific (English) performance among learners with learning disability are less well documented. For example, Chumo (2024) in Nandi County found that instructional resource provision significantly affected how well inclusive education is enacted in public primary schools; schools with more resources (though still lacking specialized materials) showed more positive implementation outcomes. However, that study did not disaggregate by grade level or examine resource adequacy by sensory type, nor did it measure performance in English among learners with learning disability.

In Trans Nzoia County, Simiyu, Maiyo & Manasi (2022) explored how instructional resources affected access to inclusive primary education. They reported that where instructional resources are scarce, access suffers. This lends support to the idea that children without sufficient teaching/learning resources are disadvantaged. But again, access was general; the study did not measure how specific resource types or their organization contribute to English performance among learners with learning disability in a specific grade, such as Standard Five.

Similarly, in Belgut Sub-County, Kabwos, Moige & Omwenga (2024) found that preschools suffered from inadequate adapted materials (braille, hearing aids, large print books) etc., which hamper implementation of inclusive education. But given the preschool level and early childhood focus, the results do not directly inform the situation in primary Standard Five, particularly for English performance among learners with learning disability. Thus, the reviewed Kenyan studies provide partial support for the relationship between resource adequacy and inclusive education, but do not sufficiently address how types and organization of teaching/learning resources influence English performance among Standard Five learners with learning disability in sub-county settings. Your study will fill this gap by providing empirical, grade-specific data in Kandara Sub-County, categorizing resource types by sensory modality (visual, audio, audio-visual, tactile, kinesthetic), assessing both adequacy and organization, and linking these directly to learner performance in English.

2.6 Summary of the Literature Reviewed

The literature reviewed confirms that children with learning disabilities are truly heterogeneous group. The characteristics exhibited by one child may be different from another one with a learning disability. It is Essential to understand all of the possible characteristics that may be seen in these children so as to be able to identify them and provide intervention. Depending on where a learner's problems lie, understanding their learning styles can lead to significant improvement in their academic performance and overall self- esteem of a learner with learning disability. In Kenya, learning disability is not well known yet there are more common than either physical disability, visual and hearing impairment or mental handicap. There is no reliable data of learners with learning disabilities, hence no adequate provision for them. The government of Kenya is facing challenge in identifying and rehabilitating all those with special needs, increasing budgetary support for special education, training teachers, providing more resources and initiating integration programmes for children with learning disabilities. It is evident that using different types of teaching/learning resources as an intervention improves English performance among learners with learning disabilities.

Literature reviewed has also confirmed that teaching /learning resources for teaching English to learning with learning disabilities are inadequate hence teachers give verbal instructions instead of using multi-sensory approach such as visual, audio, audio-visual, kinesthetic and tactile. Learning centers are of great opportunity for learners to focus in on areas that challenge them. This study sought to fill the gaps identified in the literature reviewed by addressing: Identification of learners with learning disabilities in standard five, types of teaching /learning resources used to teach English to learners with learning

disabilities in standard five, performance in English by learners with learning disabilities in standard five, adequacy of teaching /learning disabilities in standard five and organization of learning centers in the classroom for learners with learning disabilities in standard five.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter describes research design, variables, target population, location of the study sampling technique and sample size, validity and reliability of the instruments, piloting, data collection procedures, data analysis and logistical and ethical consideration.

3.1 Research Design

This study used a descriptive survey design that entailed the process of collecting data in order to answer questions concerning the current status of the subject in the study (Villaminet al., 2025). It is ideal in describing the conditions existing, relationships, ongoing processes, trends developing across a population and reports the way thing are based on behaviour, values, attitudes ad characteristics without manipulation . Quantitative data was derived from close-ended questions in questionnaires of head teachers and teachers teaching English in class five and lesson observation schedule. Nassaji (2015) state that quantitative and qualitative methods complement each other as qualitative methods provide in-depth explanations, while quantitative methods provide the hard data, needed to meet the required objectives. The combination of both qualitative and quantitative designs maybe appropriate since many educational issues have both qualitative and quantitative aspect (Saharan et al., 2024). This design enabled the researcher to make conclusions and obtain information that describes the existing phenomena.

3.2 Variables

Variables are key ideas that researchers seek to collect information to address the purpose of their studies (Creswell & Creswell, 2017). The study considered independent, dependent variables and intervening variables.

3.2.1 Independent Variables

The independent variables in this study are types of teaching/learning resources used in teaching English to learners with learning disabilities that include audio, visual, audio-visual, tactile and kinesthetic, adequacy of teaching/learning used to teach English to learners with learning disabilities and organization of teaching/learning resources in the classroom for learners with learning disability which were indicated by learning centers such as nature corners, science corners and shops.

3.2.2 Dependent Variables

The dependent variable in this study was the performance in English of learners with learning disability.

3.2.3 Intervening Variables

The intervening variables of this study were teacher competency and teacher attitudes in the use of teaching/ learning resources in teaching English to learners with learning disabilities.

3.3 Location of the Study

According to Mack et al. (2005) the ideal setting for any study is the one that is easily accessible to the researcher and one which permits instant rapport between researcher and

informants. The study will be carried out in Kandara sub-county in Murang'a County. It is bordered by Gatanga sub-county, Kigumo sub-county and Murang'a south sub-county. Kandara Sub County was selected because of persistent poor performance in English in standard five as indicated by document analysis of learners' report cards and progress records by the county government of Muranga county education report of 2019. The location of the study was also selected because of researcher's familiarity and proximity to the schools locations.

3.4. Target Population

The target population of this study was standard five teachers of English and headteachers in Kandara Sub-county. There are seventy (70) teachers teaching English in class five and sixty (60) head-teachers, 500 standard five learners. The total target population will be six hundred and thirty (630) respondents.

3.5 Sampling Techniques and Sample Size

3.5.1 Sampling Technique

Sampling refers to the process of selecting a subset of individuals from the larger population to participate in a study (Fraenkel & Wallen, 2009). In this study, a mixed sampling approach was adopted, combining purposive and random sampling techniques to ensure selection of information-rich cases and to minimize bias. Kandara Sub-County was purposively selected because it has public primary schools that include learners with persistent challenges in English, as identified through a standardized learning disability screening tool and teacher assessments, rather than solely relying on report cards. This ensured that the study population included learners relevant to the study objectives.

Schools with Standard Five classes and inclusive education programs were purposively chosen. Head teachers were purposively selected as key informants due to their knowledge of school resources, instructional practices, and learners with learning disabilities. Within the selected schools, learners in Standard Five identified with learning disabilities were chosen using random sampling from the pool of learners who met the inclusion criteria determined by the learning disability screening tool. This ensured that every eligible learner had an equal chance of being included in the study. Teachers who instruct learners with learning disabilities in Standard Five were purposively selected. These teachers were considered information-rich because they directly interact with the learners and are responsible for implementing instructional strategies and using teaching/learning resources. The purposive sampling allowed the researcher to select cases that were directly relevant to the study objectives, ensuring the collection of rich, detailed information (Campbell et al., 2020). The random sampling of learners helped reduce selection bias and increased the generalizability of findings to the study population (Tin & Bui, 2024). The combination of these techniques enabled the researcher to gather comprehensive data from multiple perspectives, including learners, teachers, and school leadership.

3.5.2 Sample Size

A sample size is a set of respondents selected from a larger population for the purpose of a survey (Fraenkel & Wallen, 2009). Upon selection of 10 public schools for the study, all the 10 head teachers were involved based on purposive sampling method, two English teachers were purposely selected from each of the doubled streams across the 10 schools leading to 20 teachers while 50 learners (25 male and 25 female) were selected using

simple random sampling method. The sample for this study comprises of 10 head-teachers, 20 English teachers 50 learners, translating into a total of 80 respondents, a representative of 12.7%. According to Marshal, Cardon, Poddar and Fontenot (2013), a sample size of at least 10% of the target population is ideal for a larger population.

Table 3.1: Sample Size

Target	N	Sample Size (n)	%
Head teachers	60	10	17%
Learners	500	50	10%
English Teachers	70	20	14%
Total	**630**	**80**	**12.7%**

3.6 Research Instrument

Data was collected using head teacher questionnaire, teachers questionnaire, lesson observation schedule and screening tool for LD (Checklist). The following section describes the instruments in detail:

3.6.1 Headteacher Questionnaire

The questionnaire was divided into six sections. Section one had five items dealing with profile of the respondents such as gender, age, current professional qualifications among others. Section two covered identification of learners with learning disabilities .Section three covered types of teaching/learning resources used to teach English to learners with learning disabilities in standard five. Section four dealt with adequacy of teaching/learning resources to teach English to learners with learning disabilities in standard five. Section five sought to establish performance in English of learners with

learning disabilities in standard five. Section six dealt with organization of teaching learning resources in the classroom for learners with learning disabilities in standard five. Questionnaires save a lot of time and are confidential hence respondents give responses without fear. Mugenda and Mugenda (2003) state that a questionnaire has the ability to collect large amount of information and it also ensures confidentiality therefore the researcher used questionnaires.

3.6.2 Teachers Questionnaire

The questionnaire was divided into six sections. Section one had five items dealing with profile of the respondents such as gender, age, current professional qualifications among others. Section two covered identification of learners with learning disabilities .Section three covered types of teaching/learning resources used to teach English to learners with learning disabilities in standard five. Section four dealt with adequacy of teaching/learning resources to teach English to learners with learning disabilities in standard five. Section five sought to establish performance in English of learners with learning disabilities in standard five. Section six dealt with organization of teaching learning resources in the classroom for learners with learning disabilities in standard five. Questionnaires save a lot of time and are confidential hence respondents give responses without fear. The close ended and open ended questions allowed respondents to give views and options on the teaching/learning resources used in teaching English.

3.6.3 Lesson Observation Schedule

A lesson observation schedule was used to systematically observe the organization and use of teaching/learning resources in classrooms for learners with learning disabilities.

The purpose of this instrument was to gather information on how teachers utilize instructional resources in the teaching of English, including the arrangement of materials, use of learning centers, and strategies employed to support learners with learning disabilities. The observation schedule was structured to focus on key aspects such as availability, accessibility, and effectiveness of teaching/learning resources in supporting literacy skills. The lesson observation schedule was validated by experts in special needs education from Kenyatta University and experienced primary school teachers with expertise in inclusive education. It was also piloted in one primary school outside the study area to ensure clarity, relevance, and consistency in recording observations.

3.6.4 Screening tool for LD (Checklist)

To identify learners with learning disabilities, the researcher developed a screening checklist based on established characteristics of learning disabilities. The checklist was adapted from recognized sources, including: Learning Disabilities Association of America (1990) – "A Look at Learning Disabilities"; ERIC Clearinghouse on Disabilities and Gifted Education (1991) – Examples of Learning Characteristics; Orton Dyslexia Society Annual of Dyslexia, Volume XLII, and Council for Learning Disabilities, Info Sheet (1993) The checklist was reviewed and vetted by a panel of special education experts to ensure content validity. The experts assessed the items for relevance, clarity, and appropriateness for Standard Five learners. The checklist included items to evaluate reading, writing, spelling, comprehension, and general classroom learning behaviors indicative of learning disabilities.

3.7 Pilot Study

The piloting for this study was conducted in one of the public schools in Kandara sub-county. This school was suitable because it is within the same environment with other target primary schools. The school also has learners with characteristics similar to those of learners of the targeted primary schools. The sample used guided the actual sample for the study. The pilot used one head teacher and three teachers who taught English in standard five. They were purposively selected from the school to respond to head teacher and teachers' screening tool checklist and questionnaires respectively. The researcher visited the school and briefed the respondents on the intended data collection in their school. The researcher then personally administered the tools to respondents and collected after they were completed. The pilot helped to improve the validity and reliability of the research tools by removing ambiguity in questions.

3.7.1 Validity

Validity is the degree to which an instrument measures what it is supposed to measure (Gravetter and Forzano, 2009). For this study, content validity was ascertained by the researcher by using expert judgment to ensure that all question items in the two questionnaires are related to the objectives of the study. The data obtained from measuring instrument were validated by wide and intense consultation with experts who in this study are the researcher's supervisors who were given the questionnaires to determine the relevance of the content used in the questionnaires to the research objectives.

3.7.2 Reliability

Reliability is the degree to which an instrument consistently measures what it is supposed to measure (Gary, 2002). In this study, the reliability of the research instruments was determined using the test-retest method during the piloting stage. Questionnaires were administered to the headteacher and three teachers from one public school in Kandara Sub-County. The responses were manually scored. After a period of two weeks, the same questionnaires were administered to the same respondents. The scores from the first and second administrations were then correlated using Pearson's product-moment correlation coefficient (r) to determine reliability. The formula used for Pearson's r is:

$$= \frac{n\sum XY - (\Sigma X)(\Sigma Y)}{\sqrt{|n\Sigma X^2 - (\Sigma^2)\ \Sigma Y)^2}}$$

XX = scores from the first administration

YY = scores from the second administration

A correlation coefficient of r = 0.79 was obtained, indicating a high level of reliability.

In addition, the internal consistency reliability of the instruments was determined using Cronbach's alpha (α), which assesses how closely related a set of items are as a group. The formula for Cronbach's alpha is:

$$\alpha = \frac{K\bar{r}}{1 + (K-1)r}$$

After calculation, a Cronbach's alpha of 0.79 was obtained, which is above the acceptable threshold of 0.7. This indicates that the instruments were reliable for collecting data on

learners with learning disabilities (LD) in Standard Five in Kandara Sub-County, Murang'a County.

3.8 Data Collection Procedures

An introductory letter from Kenyatta University to collect data was obtained. The researcher sought a research permit from Ministry of Education Science and Technology and Kandara Sub-County Education Office. The researcher thereafter visited selected schools according to appointment given by the school head teachers in Kandara sub-county. The researcher discussed with the head teacher of each school and briefed them on the purpose and objectives of the study. The questionnaire was administered to each head teacher to fill after a discussion. The researcher will with permission of the head teacher proceeded to meet the selected teachers to discuss with them and administered questionnaires and screening tool checklist for assessing learners with learning disabilities and agreed with them on the day of observation of the lesson. To collect data for the research, the researcher herself distributed the questionnaires for head teachers to head teacher and questionnaires for teachers and the screening tools checklist to the teachers teaching English in standard five. The respondents were given two weeks to fill the questionnaires.

3.9 Data Analysis

Data analysis refers to categorization, ordering manipulating and summarizing data to obtain answers to research questions (Kerlinger, 1973). Quantitative and qualitative methods were used to analyze data for this research. The researcher edited and coded the

data from the questionnaires, observation schedule and checklist tool. The researcher then organized the data along research objectives and questions. Both qualitative and quantitative methods were employed. While quantitative data is quantifiable in terms of frequencies, percentages, means and deviations, qualitative data is not quantifiable (Mugenda & Mugenda, 1999). Qualitative data was obtained from open ended questions in the head teachers' questionnaires and teachers' questionnaires. On the other hand, quantitative data was obtained from close ended questions in the head teachers' questionnaires, teachers' questionnaires, lesson observation schedule and screening tools checklist for teachers. Quantitative data was edited, coded and entered into the computer for analyzing using a computer programme-Statistical Package for the Social Sciences version 22 (SPSS version 25.0). SPSS was used because of its efficiency and ability to handle large amounts of data. Qualitative data were analyzed using content and presented through narratives according to the objectives. Quantitative data generated from frequencies and percentages were used to describe the types of teaching /learning resources used to teach English to learners with learning disabilities, adequacy of teaching /learning resources used to teach English to learners with learning disabilities and organization of teaching learning resources in the classroom for learners with learning disabilities. The findings were presented in tables, graphs and texts.

3.10 Logistical and Ethical Consideration

The research was guided by the following ethical considerations. The researcher got an authorization letter from Kenyatta University Graduate School and then proceeded to the Ministry of Education Science and Technology to obtain a permit to conduct research

.The researcher then obtained permission from Kandara sub-county Education Office before proceeding to schools for data collection. The researcher then visited the schools to establish rapport with school administration and teachers who constitute the research samples. The researcher introduced herself and explains the purpose of the study to the head teachers and teachers participating. During research, all ethical issues to carry out research were observed and confidentiality of information was assured. The respondent was required to respond to the concern of the researcher voluntarily. To enhance confidentiality of information given, names of respondent were not included in the research tools.

CHAPTER FOUR
DATA PRESENTATION, ANALYSIS AND DISCUSSION OF RESEARCH FINDINGS

4.0 Introduction

This chapter presents the results of the study whose main purpose was to assess the impact of teaching /learning resources on English performance among learners with learning disabilities in class five Kandara Sub-County Murang'a County, Kenya. The findings of this study are presented in this chapter, organized and discussed as per the following objectives:

1. Assess the prevalence of learning disability among standard 5 learners in Kandara Sub-County in Murang'a County
2. Find out types and adequacy of teaching/ learning resources for learners with learning disabilities in Standard five in Murang'a County.
3. Identify the performance in English for learners with learning disabilities in Standard five in Murang'a County.
4. Determine the teachers' organization of teaching/learning resources in the classroom

Data was scheduled to be collected from a sample of 10 head teachers, 20 English teachers and 50 learners previously selected. The researcher employed both qualitative and quantitative methods to analyze data. The data was thematically analyzed in a descriptive form and frequency tables, and graphs were used to present the findings.

4.1 Response Rate

The response rate of the respondents was summarized and presented in Table 4.1.

Table 4.1: Response Rate

Category	Sample size	Participants	Percentage
Head Teachers	10	10	100.00%
Learners	50	37	74.0%
English teachers	20	20	100.00%
Total	**80**	**67**	**83.75%**

The researcher hoped for 100% response rate. While the participation of head teachers and teachers was achieved as expected, that of learners fell short of expectation. Out of the 50 learners scheduled for screening checklist, 37 of them were successfully observed and screened using a checklist representing a response rate of 74.0%. This is in accordance with Creswell (2013) who asserts that a response rate of 70% and above in a descriptive study is adequate to validate the findings. As such, the findings of the study and its conclusions can still be generalized in the whole area under study as well as similar parts of the country.

4.2 Demographic and General Information of the Respondents

Some of the demographic and general information that were sought for the study were: gender, age, teaching experience, as highest level of education attained and current professional qualifications. Such information was relevant since it had potential to influence the nature of the responses given by the respondents. According to Zhu (2015), it is important for a researcher to understand the kind of the respondents participating in

the study, since there is a lot that can be understood based on their individual characteristics. As such, the aim of the information in this section was simply to understand the kind of the respondents the researcher was dealing with. The results in were presented in the following sub-sections:

4.2.1 Distribution of the Respondents by Gender

Table 4.2: Respondents' Gender

Gender	**Head teachers**		**Teachers**	
	F	**%**	**F**	**%**
Male	7	70.0%	8	40.0%
Female	3	30.0%	12	60.0%
Total	**10**	**100.0%**	**20**	**100.0%**

The findings in Table 4.2 indicate that 12 (60%) of the teachers were female, whereas 7 (70%) of the head teachers were male. This suggests that while the primary school teaching workforce in Murang'a County is predominantly female, school leadership positions are mainly held by men. This aligns with LaRocque, Kleiman, and Darling (2011), who observed that more women pursue primary teaching globally, whereas men are less attracted to child-focused professions. Venetsanou and Kambas (2010) further note that women are often underrepresented in leadership roles, which supports the pattern observed in this study. The gender distribution indicates the need for gender-sensitive professional development programs that support female teachers in leadership roles, as well as training to ensure male headteachers are conversant with inclusive teaching practices for learners with learning disabilities.

4.2.2 Age of the Respondents

Respondents were also asked to indicate their age category and this data is presented in Table 4.3.

Table 4.3: Distribution of Respondents by Age

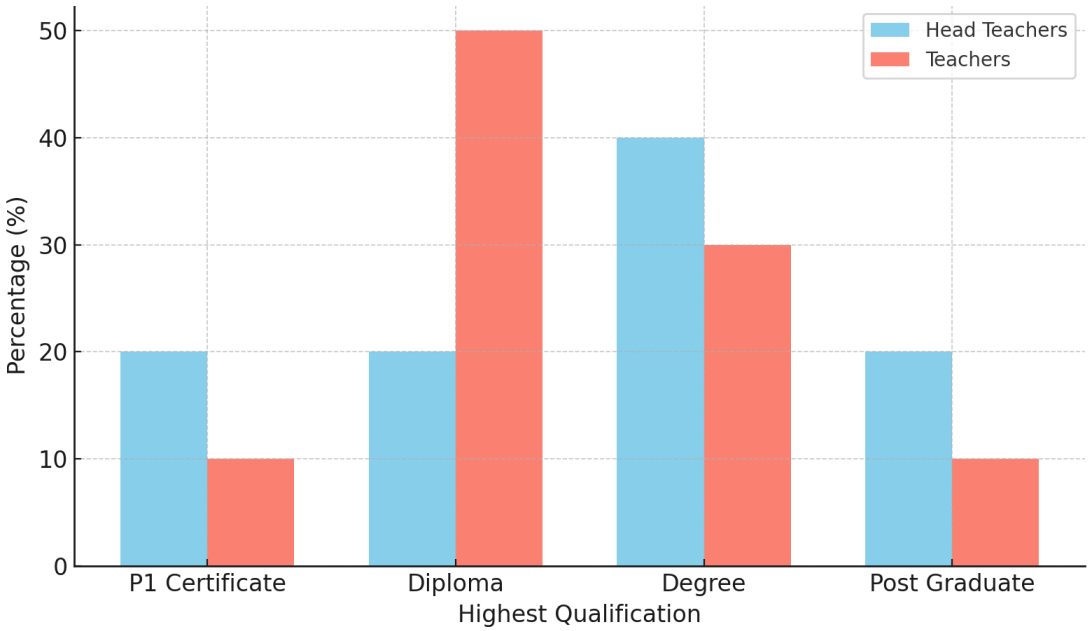
Age category	Teachers		Head Teachers	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Under 25 Years	1	5.0%	0	0.0%
26-40 Years	13	65.0%	3	30.0%
Above 40 Years	6	30.0%	7	70.0%
Total	**20**	**100.0%**	**10**	**100.0%**

Results in Table 4.3 indicate that among teachers, 13 (65%) were aged between 26–40 years, while 6 (30%) were above 40 years. In contrast, the majority of headteachers, 7 (70%), were above 40 years, with 3 (30%) aged 26–40 years. The age distribution suggests that most teachers are relatively young and energetic, which may enhance their engagement with learners with learning disabilities through innovative teaching strategies. Older headteachers bring experience that can guide inclusive policies and teacher mentorship, positively influencing learning outcomes.

4.2.3 Teachers' Highest Qualifications

The study sought to establish the professional qualifications of the teachers and that of head teachers. Figure 4.1 shows the distribution of Teachers and Head Teachers by highest Professional Qualifications.

Figure 4.1: Teachers' Highest Qualifications



From Figure 4.1 the data indicate that 10 (50%) of the teachers hold a Diploma in education, while 6 (30%) of headteachers and teachers have a degree. Less than a quarter of participants hold P1 certificates or postgraduate qualifications. Most teachers and headteachers have completed post-secondary education, suggesting they meet the basic professional requirements. However, the findings highlight a potential gap in specialized training for learners with learning disabilities, indicating a need for continuous professional development in special needs education. Qualified teachers are more likely to deliver effective instruction and enhance English performance among learners with learning disabilities (Goe, 2007; Lafayetter, 2009).

4.2.4 Teachers' Current Professional Qualification

The study sought to establish the current professional qualifications of the teachers and also to find out if they had training in special needs education. Figure 4.4 shows the

distribution of Teachers and Head Teachers by current Professional Qualifications with reference to certification of post degree in special needs, degree in special needs and certificate in special needs.

Table 4.4: Head Teachers and Teachers' Current Professional Qualification

Highest profession	**Teachers**		**Head Teachers**	
	Frequency	**Percentage**	**Frequency**	**Percentage**
Certificate in special needs	13	65.0%	4	40.0%
Degree in special needs	6	30.0%	2	20.0%
Post degree in special needs	1	5.0%	4	40.0%
Total	**20**	**100.0%**	**10**	**100.0%**

The findings in Table 4.4 indicate that among teachers, 13 (65%) hold a certificate in special needs education, 6 (30%) hold a degree, and 1 (5%) holds a post-degree. Among headteachers, 4 (40%) hold a certificate, 2 (20%) hold a degree, and 4 (40%) hold a post-degree. Most teachers possess basic competence in identifying and supporting learners with learning disabilities, which is critical for inclusive education (Valeo, 2008). Headteachers with advanced qualifications can provide leadership and mentoring in implementing special needs programs. However, gaps still exist for higher-level expertise among teachers, suggesting a need for additional training.

4.2.5 Duration of Service

Respondents were also asked to indicate the time they had served in their current stations in terms of years and this data is presented in Table 4.5.

Table 4.5: Distribution by Duration of Service

Duration in years	Head Teachers		Teachers	
	Frequency	**Percentage**	**Frequency**	**Percentage**
1-5yrs	0	0.0%	2	10.0%
6-10yrs	1	10.0%	4	20.0%
11-15yrs	2	20.0%	8	40.0%
16-20yrs	4	40.0%	6	30.0%
Over 20	3	30.0%	0	0.0%
Total	**10**	**100.0%**	**20**	**100.0%**

Table 4.5 above revealed that among headteachers, 4 (40%) had served 16–20 years, and 3 (30%) had served over 20 years. Among teachers, 8 (40%) had served 11–15 years, and 6 (30%) had served 16–20 years. Most respondents have substantial experience in their current positions, which likely enhances their ability to identify and address learning disabilities effectively. Experienced teachers are better equipped to apply differentiated teaching strategies and manage diverse learning needs, contributing to improved English performance among learners with learning disabilities (Margaritoiu, 2010).

4.3 Prevalence of Learning Disabilities

The first objective of the study sought to establish the prevalence of learning disability among standard 5 learners in Kandara Sub-County in Murang'a County. This helped in identification of learners with learning disabilities in standard five and the kind of characteristics manifested in them. The finding were presented and discussed in the following sub-sections.

4.3.1 Manifestation of Characteristics Associated with learning Disabilities

Through questionnaire and with reference to items related to early identification of learners with LDs, all head teachers agreed that they supported learners' disabilities by catering for essential teaching and learning resources for inclusive education. Head teachers were further asked to list the unique characteristics of learners with learning disabilities. Table 4.6.below indicates a multiple response analysis of various attributes used to assess whether or not the assessed learners exhibited Characteristics Associated with Learning Disabilities.

Table: 4.6 Unique Characteristics of Learners with LDs as reported by Head Teachers

Characteristics	**Number of learners showing attribute**	
	Frequency (N=37)	**Percentage**
Difficulties in reading, spelling, writing and copying accurately	31	83.8%
Lack of attention or concentration	15	40.5%
Slow in acquiring concepts as per their age	14	37.8%
Some do not hear or see properly	9	24.3%
Lack self-confidence	16	43.2%
Inability to communicate English	26	70.3%
Lack motivation	18	48.6%
Hyperactive and noisy	11	29.7%
Difficulties in mastering content and storing information	26	70.3%
Slow in completing tasks	27	73.0%
Never ask or answer questions	18	48.6%
Generally disorganize	21	56.8%
Difficulties in following instructions	9	24.3%
Overall mean	**18.53846**	**50.1%**

*****Multiple choice**

The findings in table 4.6 demonstrated that out of 37 learners assessed, 31 (83.8%) experienced difficulties in reading, spelling, writing, and copying accurately. These difficulties mirror findings by Ooko (2023), who noted that many Kenyan learners with dyslexia struggle with reading fluency and comprehension, which directly lowers performance in English. The implication is that head teachers and classroom teachers need to provide structured reading interventions, such as phonics-based instruction and repeated practice, to strengthen literacy among affected learners.

Additionally, 27 learners (73.0%) were reported as being slow in completing tasks, while 26 (70.3%) struggled to communicate in English and had difficulties mastering and storing information. This agrees with Al-Qadri et al. (2021), who found that deficits in working memory and processing speed are common among learners with academic difficulties. In classrooms, these challenges highlight the need for teachers to break tasks into smaller units, use visual aids, and allocate extended time to ensure learners complete assigned work successfully.

The results further show that 21 learners (56.8%) were generally disorganized, while 18 learners (48.6%) lacked motivation, rarely asked questions, or displayed low confidence. Similar findings were reported by Muchiri (2021), who argued that delayed identification of learning disabilities often leads to disengagement and poor classroom participation. This implies that early screening tools and individualized learning plans are essential in Kenyan classrooms to prevent loss of motivation.

In contrast, fewer learners exhibited sensory challenges, with 9 learners (24.3%) struggling to hear or see properly and another 9 (24.3%) showing difficulties in following

instructions. Only 11 learners (29.7%) were reported as hyperactive and noisy. Mutuku (2023) stressed that teachers in Kenya often lack sufficient training to differentiate between sensory impairments, attention deficits, and learning disabilities, which may lead to misclassification. The implication here is that teacher professional development in inclusive pedagogy and classroom management is critical to ensure appropriate support is provided. These results support Lerner's (2000) view that learners with learning disabilities are a heterogeneous group, with individual learners manifesting varied characteristics.

Many different characteristics are associated with LD but each individual is unique and will present only some of the reported characteristics. As the researcher made familiarization visits to sampled schools and interacted with teachers, some teachers made the following observations:

> *"Some learners are non-readers while others have no language of communication". "Some learners come to school because of the feeding programme. Some have the ability, if they just tried harder, but they choose not to work nor pay attention. Some cannot write; they are motivated."*

One Head teacher did not indicate the number of learners who could have LD in her school. Therefore, there is an inconsistency in the numbers given by the head teachers and those given by standard 5 teachers. Perhaps this could partly be because head teachers may not be in touch with what goes on in classrooms due to their overwhelming administrative responsibilities. English teachers were also asked to list the unique characteristics of learners with learning disabilities. Results were presented in Table 4.7.

Table: 4.7: learners Exhibiting Characteristics Associated with Learning Disabilities as reported by English Teachers

Behaviour Characteristics	Frequency	Percentage of the total (100learners)
Hardly reads and write	15	75.00%
Weakness in language writing	13	65.00%
Poor performance in numerals and lack of mastering of maths content	12	60.00%
Lack of friendship and social sills	9	45.00%
Lacks attention in classrooms and school work	12	60.00%
Is often withdrawn and uncooperative in class	16	80.00%
Does not complete assignments	15	75.00%
Mean	**13.142857**	65.71%

** Based on analysis of multiple responses

Table 4.7 presents results from English teachers, showing that 16 out of 20 learners (80.0%) were withdrawn and uncooperative in class, while 15 learners (75.0%) hardly read or wrote and failed to complete assignments. These findings reinforce Mercer and Pullen's (2005) observation that many learners with learning disabilities withdraw from learning activities when their needs are unmet. In the Kenyan context, this implies that teachers must create supportive learning environments where participation is encouraged through peer tutoring, cooperative learning, and the use of interactive instructional resources.

In addition, 13 learners (65.0%) were reported to have weaknesses in written language, while 12 (60.0%) lacked attention in class and struggled with numerals. These results are consistent with Ooko (2023), who emphasized that difficulties in word recognition and comprehension hinder performance in both literacy and numeracy. This calls for

differentiated instruction and targeted support, such as integrating multisensory teaching methods to cater to diverse learning needs.

Notably, 9 learners (45.0%) were identified as lacking friendship and social skills, which points to challenges in social inclusion. Woolery and Bailey (2003) note that approximately 75% of learners with learning disabilities demonstrate deficits in social interactions, which in turn affects academic engagement. In practice, this suggests that English teachers need to integrate social skills training and classroom group activities that encourage collaboration among learners with and without disabilities. The findings in Table 4.7 therefore highlight that beyond academic difficulties, social and behavioral challenges significantly affect classroom engagement for learners with learning disabilities. This underscores the need for holistic interventions that address both academic and socio-emotional needs.

Further, the researcher prepared a screening tool checklist to identify learners with learning disability. The screening tool method facilitated a broader look at achievement. The checklist was adopted from adapted lists developed by the following organizations; learning disabilities association, America for employers, A look at learning disabilities 1990, Eric clearing house on disabilities and Gifted education, examples of learning characteristics, 1991. The findings from the checklist were presented in table below.

Table. 4.8: Unique Characteristics of Learners with LDs as from the Checklist

	Number of learners showing attribute	
Characteristics	**Frequency (N=37)**	**Percentage**
1. Perform similar tasks differently from day to day	18	48.6%
2. Read well but not write well	22	59.5%
3. Learn information presented in one way but not in another	26	70.3%
4. Have a short span, impulsivity and difficulty manipulating focus	29	78.4%
5. Difficulty with social skills	28	75.7%
6. Misinterpret social skills?	19	51.4%
7. Difficulty memorizing information	31	83.8%
8. Difficulty following a schedule being on time or meeting deadlines	25	67.6%
9. Misread or miscopy	27	73.0%
10. Confuse similar letters, words or phrases when writing	24	64.9%
11. Problems with sentence structure, writing mechanics and organizing written work	31	83.8%
12. Confuse upland down, left and right?	18	48.6%
13. Hear sounds, words or sentences incorrectly	15	40.5%
14. Unable to tell what has just been said	19	51.4%
Mean	**23.71428571**	**64.1%**

** Based on analysis of multiple responses

The results in Table 4.8 indicate that 31 learners (83.8%) had difficulty memorizing information and with sentence structure, writing mechanics, and organizing written work. These findings are consistent with de Kadt et al. (2025), who found that a notable proportion of Kenyan children exhibit cognitive difficulties that affect learning and communication. The implication for teachers is that learners with such difficulties require structured memory aids, guided practice, and repeated exposure to concepts to strengthen retention.

Furthermore, 29 learners (78.4%) were reported to have short attention spans, impulsivity, and difficulty manipulating focus, while 28 (75.7%) had challenges with social skills. Kavale and Forness (as cited in Woolery & Bailey, 2003) similarly observed that most learners with learning disabilities experience social skills deficits that hinder classroom participation and peer interactions. This implies that teachers in lower primary and upper primary must incorporate explicit instruction in self-regulation strategies and social interaction skills to foster inclusion.

The table further shows that 27 learners (73.0%) misread or miscopied written work, 25 (67.6%) struggled with following schedules, and 24 (64.9%) confused similar words or letters. These findings align with Al-Qadri et al. (2021), who emphasized that difficulties in visual and auditory processing directly impair reading and writing performance. For classroom practice, teachers should therefore integrate visual organizers, enlarged print resources, and phonological awareness activities to support learners in mastering reading and writing tasks.

In summary, Table 4.8 confirms that learners with learning disabilities often experience combined cognitive, behavioral, and social difficulties, supporting Mercer and Pullen's (2005) claim that there are numerous possible combinations of challenges faced by this population. For instruction, this means that individualized and multi-pronged interventions are essential to address the wide spectrum of difficulties.

4.4 Types and Adequacy of Teaching/ Learning Resources for Learners with Learning Disabilities

The second objective sought to determine types and adequacy of teaching/ learning resources for learners with learning disabilities in Standard five in Murang'a County. Head teachers were asked to indicate the types of teaching/learning resources used in teaching English in your school. Findings are presented in Tables 4.9 and 4.10, and Figure 4.2, and are discussed in this section with reference to current literature.

4.4.1 Types of Teaching/ Learning Resources for LWLDs as reported by Head Teachers

Teaching/learning resources were categorized based on five types namely: visual, audio, audio-visual, tactile and kinesthetic teaching/learning resources. Descriptive statistics of frequency and percentages were used to describe the results as presented in Table 4.9.

Table 4.9: Types of Teaching/ Learning Resources for LWLDs as reported by Head Teachers

Resource Type		Frequency (N=10)	Percentage
Visual	Pictures	4	40.00%
	Diagrams	6	60.00%
	Flash cards	4	60.00%
	Word webs	2	40.00%
	Graphic organizers	2	10.00%
	Computers	1	20.00%
	Projection screens	2	20.00%
	Text	5	70.00%
	Colour for highlighting	6	60.00%
	Charts	7	75.00%
Mean		**3.9**	**39%**
Audio	Films	1	10.00%
	Video recording	1	10.00%
	Text to speech programme	0	0.00%
	DVD	3	30.00%
Mean		**0.5**	**5%**
Tactile	Paper mache	1	10.00%
	Sand trays	2	30.00%
	Play dough	5	40.00%
	Clay	5	70.00%
	Word building kits	4	50.00%
	Raised line papers	3	40.00%
	Sensory putty	4	40.00%
	Puzzle	6	70.00%
	Finger paints	5	60.00%
Mean		**3.5**	**41%**
Kinesthetic	Jumping rope	8	80.00%
	Speaking rhymes	3	30.00%
	Language game	4	40.00%
	Bean bag tossing	4	40.00%
	Flash card races	2	20.00%
Mean		**2.1**	**21%**

Table 4.9 shows that visual resources were the most commonly available, with 7 schools (75.0%) reporting the use of charts, 6 schools (60.0%) using diagrams and highlighters, and 5 schools (70.0%) reporting the use of text materials. In contrast, only 1 school (20.0%) reported the use of computers and projection screens, while 2 schools (20.0%)

reported the use of graphic organizers. These findings highlight an imbalance, where low-cost, traditional resources are widely adopted but digital and technology-based resources remain scarce. This supports Schools 2030 (2023), which observed that many Kenyan schools still rely heavily on improvised visual aids due to limited access to adapted digital materials. The implication for classroom practice is that English teachers often lack access to modern assistive tools such as text-to-speech programs, despite their proven benefit in improving reading comprehension among learners with dyslexia (Mutuku, 2023).

Audio resources were least represented, with only 3 schools (30.0%) reporting the use of DVDs and 1 school (10.0%) reporting the use of films and video recordings, while no school had text-to-speech programs. With a mean of 0.5 (5%), this category was the least used. This aligns with findings by UNESCO (2020), which highlighted persistent shortages of adapted auditory instructional resources in many developing countries. In Kenya, this shortage limits the ability of learners with auditory learning preferences or language-processing difficulties to benefit from English lessons. The implication is that without sufficient auditory inputs such as recorded reading programs or speech support tools, learners' listening and pronunciation skills remain underdeveloped.

Tactile resources were moderately represented, with 6 schools (70.0%) reporting the use of puzzles, 5 schools (70.0%) using clay, and 4 schools (50.0%) using word-building kits. However, only 1 school (10.0%) reported paper mâché and 2 schools (30.0%) reported sand trays. These findings resonate with ACERWC (2024), which noted that African classrooms rarely integrate structured tactile resources despite their value in developing

literacy through hands-on learning. The implication is that while some schools in Murang'a provide tactile activities such as puzzles and clay work, their inconsistent use limits opportunities for multisensory reinforcement of English learning.

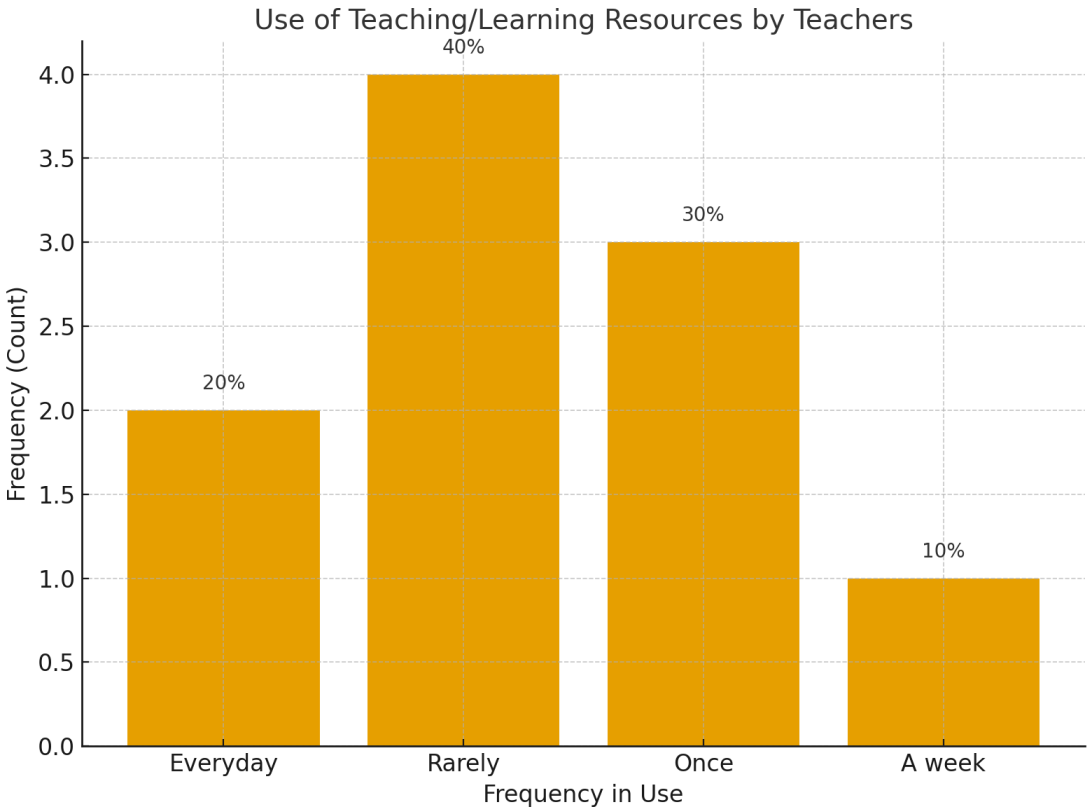
Kinesthetic resources were more common than audio but less than visual and tactile, with 8 schools (80.0%) reporting the use of jumping ropes, while only 2 schools (20.0%) reported flash card races. This suggests that gross motor activities are easier to implement in classrooms than structured kinesthetic learning aids. Navaneedhan (2015) similarly observed that physical activities such as rope jumping and bean bag tossing are often used to engage learners but are not systematically linked to literacy skills. The implication is that kinesthetic strategies are underutilized for English learning despite their potential to improve word recognition and retention in learners with learning disabilities. Overall, while visual and tactile resources were widely used, audio and kinesthetic resources were underutilized. This pattern reflects broader trends reported by Development Initiatives (2023) and Ooko (2023), who emphasized that learners with learning disabilities benefit most from a multisensory approach, but resource inadequacies force schools to rely on limited modalities.

4.4.2 Types of Teaching/ Learning Resources for LWLDs as reported by Head Teachers

Further, the study sought to establish the adequacy of teaching/learning resources for learners with learning disabilities in Standard five in Murang'a County. To establish this, head teachers were required to indicate whether teachers teaching English were trained in the use of teaching/learning resources for learners with learning disabilities. Results

revealed that more than half of the head teachers agreed that teachers were trained on the use of teaching/learning resources for learners with learning disabilities while the rest disagreed. Head teachers were further asked to state how often their teachers use teaching/learning resources to teach learners with learning disabilities English in class five. Results were presented in Figure 4.2.

Figure 4.2: Frequency in Use of teaching/learning resources by Teachers



Results in Figure 4.2 indicate that 4 teachers (40.0%) reported rarely using teaching/learning resources, 3 teachers (30.0%) reported using them once a week, 2 teachers (20.0%) reported daily use, and only 1 teacher (10.0%) reported weekly use. This suggests that the frequency of using resources in English instruction remains inconsistent and often inadequate. According to Long'ore, Cheloti, and Mwanza (2023),

many teachers in Kenyan classrooms rely on traditional teaching methods due to a lack of training in integrating instructional resources into daily lessons. The implication is that learners with disabilities are not consistently exposed to materials that could help bridge their learning gaps in English.

Table 4.10: Head Teachers and Teachers' Ratings on Adequacy of teaching/learning resources

Respondent	Very adequate		Adequate		Inadequate		Not sure	
	N	%	N	%	N	%	N	%
Head teachers	0	0.00%	1	10.00%	9	90.00%	0	0%
Teachers	0	0.00%	2	10.00%	15	75.00%	3	15%

Findings in Table 4.10 show that 9 head teachers (90.0%) reported instructional resources as inadequate, while 15 teachers (75.0%) similarly rated them as inadequate. Only 1 head teacher (10.0%) and 2 teachers (10.0%) rated resources as adequate, while 3 teachers (15.0%) were unsure. These findings are consistent with Osman, Oracha, and Okutoyi (2022), who reported that availability and use of teaching/learning resources for learners with special needs were generally low in Kenyan primary schools. Similarly, Akiyoo, Mosha, and Ogoti (2022) in Tanzania found that shortages of adapted resources constrained inclusive education, reinforcing that this is a regional challenge.

The results imply that despite government capitation for inclusive education, resource allocation for learners with learning disabilities remains inadequate. Teachers reported that requests for adapted resources are often treated as non-urgent, echoing Sepadi (2025) who found that in South Africa, teachers often rely on general classroom resources that

do not address the specific sensory needs of learners with disabilities. In Murang'a County, this inadequacy likely hampers English performance by denying learners exposure to varied and multisensory instructional inputs.

Over-reliance on visual resources – Teachers frequently use charts, diagrams, and texts, but the lack of balance with audio, tactile, and kinesthetic inputs undermines multisensory learning, which is critical for learners with disabilities. Inadequate training and use of resources – Even where resources exist, irregular use by teachers reduces their impact. Consistent integration of resources into lesson delivery is necessary to improve English skills. Both head teachers and teachers confirmed that available materials are insufficient. This aligns with UNESCO's (2020) Global Education Monitoring Report, which warned that under-resourcing of inclusive classrooms continues to disadvantage children with disabilities.

4.5 Performance in English by learners with LD in Standard five

The third objective of this study sought to establish the performance in English for learners with LD in Standard five in Murang'a County. The question on the performance among standard five learners took a multiplicity of facets. Each skill area was scored as follows: Visual perception: 0–8; Spelling: 0–8; Auditory perception: 0–10; Visual discrimination: 0–4; Auditory discrimination: 0–4; and Written expression: 0–15. Total scores therefore ranged from 0 to 49. To classify performance, a total score below 30 indicated failing, while scores equal to or above 30 were considered passing. A 5-point rating scale was also used for specific sub-skills, where 1–2 indicated below average, 3 indicated average, and 4–5 indicated above average performance. Table 4.11 gives a

summary of the results for the learners in the 10 schools that were given in terms of mean scores with regards to visual perception, spelling, auditory perception, visual discrimination and written expression for the selected 37 learners with LDs.

Table 4.11: Average Performance in English by gender

Tested areas	Male (mean score)	Female (mean score)
Visual perception	4.79	5.55
Spelling	6.16	7.55
Auditory perception	6.58	7.55
Visual discrimination	4.05	3.91
Written expression	4.05	3.18
Total score	**25.63**	**27.74**

From Table 4.11, the total mean score for girls (27.74) was higher than that of boys (25.63) out of a possible 49. Girls outperformed boys particularly in spelling (7.55 vs. 6.16) and auditory perception (7.55 vs. 6.58). Boys, however, performed slightly better in visual discrimination (4.05 vs. 3.91) and written expression (4.05 vs. 3.18). These findings are consistent with Otieno and Orodho (2023), who reported that access to adequate English resources significantly improved spelling and comprehension, particularly for female learners, as girls were more likely to engage with available materials. Similarly, Waweru and Gathigia (2021) found that female learners often made better use of assistive literacy resources such as phonics cards and audio books, which may explain their relatively higher scores. The implication is that while gender differences are evident, both boys and girls with LDs remain below the passing threshold of 30, suggesting that the inadequacy of teaching and learning resources affects all learners regardless of gender. Teachers therefore need to adopt gender-sensitive

approaches that leverage the strengths of each group while addressing weaknesses such as boys' lower spelling accuracy and girls' weaker written expression.

Further, performance in specific English skills was assessed where visual perception was marked out of 8 scores, spelling out of 8 scores, auditory perception out of 10, visual discrimination out of 4, auditory discrimination out of 4 scores and written expression out of 15 scores leading to a total score of 49. The results of the 37 selected learners with LDs were presented in Table 4.12.

Table 4.12: Performance in specific English skills

Skills	**Number of learners with various scores**															
	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Visual perception (max. score 8)	5	7	14	4	6	1	0	0	0	-	-	-	-	-	-	-
Spelling (max score=8)	9	0	10	0	5	0	9	0	4	-	-	-	-	-	-	-
Auditory perception (max score=10)	5	0	12	1	9	0	5	0	3	0	2					
Visual discrimination (max score=4)	26	0	0	4	3	4	-	-	-	-	-	-	-	-	-	-
Auditory discrimination (max score=4	29	4	5	0	0	-	-	-	-	-	-	-	-	-	-	-
Written expression (max score=15	24	0	7	0	5	0	1	0	0	0	0	0	0	0	0	0

As shown in Table 4.12,14 learners scored 2 out of 8, while 12 learners scored 3–4. Only 1 learner achieved 5 out of 8, and none scored above 5. Five learners (13.5%) scored

zero. This indicates that most learners with LDs had below-average visual perception skills. These results align with Kennedy, Deshler, and Lloyd (2021), who found that learners with LDs struggle to process and recall visually presented information unless supported by multi-sensory instructional tools. The implication for teaching is that reliance on traditional visual aids alone is insufficient. Teachers should integrate digital readers and highlighted texts that support visual recognition and comprehension. Performance in spelling was mixed. Table 4.12 shows that 9 learners (24.3%) scored zero, while another 9 learners achieved 6 out of 8. Only 4 learners (10.8%) scored the maximum of 8. This distribution suggests a split where some learners completely failed in spelling tasks while others managed moderate success. These findings support Alhassan and Abosi (2020), who demonstrated that assistive tools such as text-to-speech software improved spelling accuracy in learners with dyslexia. In the present study, the lack of widespread access to such tools likely explains the large proportion of learners who scored poorly. For practice, this implies that teachers in Murang'a need to provide structured phonics programs and technology-based spelling aids to improve outcomes.

Table 4.12 indicates that 12 learners scored 2 out of 10, 9 scored 4, and only 2 reached the maximum of 10. Five learners (13.5%) scored zero. This highlights significant weaknesses in learners' ability to process and retain auditory information. These results echo Mlay and Gabriel (2022), who found that auditory comprehension improved in Tanzanian classrooms where learners had access to audio resources such as recorded readers. In Kandara, the lack of auditory teaching resources may explain the weak performance. The implication is that teachers must integrate structured listening

activities, including the use of audiobooks, pronunciation drills, and interactive reading, to support auditory learners.

Further results indicate that 26 learners (70.2%) scored zero in visual discrimination out of a possible 4, while only 4 learners managed a score of 3 and 3 learners scored 4. This suggests widespread difficulty distinguishing letters, words, and punctuation. This finding contrasts with Otieno and Orodho (2023), who observed stronger outcomes in schools with access to structured reading games and visual organizers. The implication is that resource scarcity in Kandara exacerbates learners' inability to visually discriminate between words, thereby hindering reading fluency. Teachers should introduce visual literacy activities such as matching games and symbol recognition exercises.

Similarly, 29 learners (78.4%) scored zero in auditory discrimination, while only 4 learners scored 1 and 5 learners scored 2. No learner scored above 2 out of 4. This shows a near-total inability among learners with LDs to distinguish sounds and phonemes. These findings are consistent with Waweru and Gathigia (2021), who observed that learners without adequate auditory tools struggled with phonemic awareness, a core foundation for spelling and reading. For practice, this underscores the urgent need for sound-based teaching resources, including phonics software and speech-to-text tools, to strengthen auditory processing.

Based on the written expression was the weakest skill, 24 learners (64.9%) scored zero out of 15, while 7 learners scored 2, and only 1 learner scored 6. None scored above 6. This indicates pervasive difficulties in expressing ideas in writing. Common errors

included poor handwriting, letter reversals, omissions, grammar mistakes, and incomplete work. This finding supports Njoki (2015) and the more recent work of Otieno and Orodho (2023), who both highlighted that lack of adapted resources, such as graphic organizers and word processors, contributed to poor written expression among learners with LDs. The implication is that teachers in Kandara should prioritize scaffolding strategies, including sentence starters, guided writing templates, and assistive writing tools to improve expression.

Across all domains, the results in Tables 4.11 and 4.12 demonstrate that learners with LDs in Kandara Sub-County performed poorly in English, with most failing to reach the minimum threshold of 30 out of 49. While girls generally performed better than boys, both groups struggled across nearly all language domains. The findings confirm regional trends noted by Mlay and Gabriel (2022) and Otieno and Orodho (2023) that inadequate instructional resources negatively affect English literacy outcomes for learners with LDs. Importantly, this study reveals that specific skill areas auditory discrimination and written expression are disproportionately weak, highlighting the urgent need for targeted instructional interventions. The implication for preschool and primary education is that early and consistent exposure to multi-sensory instructional resources is critical to building foundational skills. Schools in Murang'a should therefore adopt resource-rich strategies that combine visual, auditory, tactile, and kinesthetic tools, supported by teacher training in differentiated instruction.

4.6 Organization of teaching/learning resources in the classroom for LWLDs in standard five

The fourth objective of this study sought to determine the organization of teaching/learning resources in the classroom for learners with learning disabilities in standard five in Murang'a County. In this endeavor, the respondents were asked to indicate whether teachers had learning centers in their classrooms. Results showed that slightly more than half of head teachers agreed that teachers had learning centers in their classrooms while the rest reported that they were not sure. On the contrary, considerately more than half of teachers said that they had learning centers in their classroom. This discrepancy between the teachers' ad head teachers' report might be as a result of teacher supervision by the head teachers during class activities.

Observations regarding to organization of teaching/learning resources in the classroom during lessons were also made. The purpose of this observation schedule is to obtain information on how teachers use the resources in the teaching/learning of English to learners with learning disabilities. A total of 10 English lessons were observed and the results were presented in Table 4.13.

Table 4.13: How teachers use the resources in the teaching/learning of English

ACTIVITY	YES		NO	
	Freq	%	Freq	%
1. Are instructional steps for the lesson clearly specified	4	40.0%	6	60.0%
2. Does the teacher provide direct instructions for active learner involvement and response?	5	50.0%	5	50.0%
3. Does verbal instruction flow in a clear logical manner?	6	60.0%	4	40.0%
4. Does the resource provide for teachers modeling and demonstration appropriate to enhance the skills and concepts taught?	7	70.0%	3	30.0%
5. When using the resources, are teacher's instructions clear and complete when using the resources?	6	60.0%	4	40.0%
6. Is the resource designed to meet learner's learning style?	5	50.0%	5	50.0%
7. Are there learning centers in the classroom?	7	70.0%	3	30.0%
8. Are the learning centers accessible to the learners?	5	50.0%	5	50.0%
9. Are chats and pictures displayed on the classroom walls?	8	80.0%	2	20.0%
10. Is the learner's work displayed on classroom walls?	5	50.0%	5	50.0%

Table 4.13 presents findings on how teachers use the resources in the teaching/learning of English to learners with learning disabilities. Results indicate that instructional steps were clearly specified in 4(40.0%) of the lessons, while 6(60.0%) did not specify steps. This demonstrates that the majority of lessons lacked structured sequencing. According to Vincent (2020), effective lesson structuring is crucial for learners with LDs, who depend on predictable routines to comprehend and retain content. Direct instructions that encouraged active learner involvement were provided in 5(50.0%) of the lessons, while 5(50.0%) did not include such strategies. Chumo (2024) found similar outcomes in Nandi County, where limited instructional scaffolding reduced participation among learners

with disabilities. This suggests that half of the learners in Murang'a may not be actively engaged in English lessons.

Verbal instruction flowed in a clear logical manner in 6(60.0%) of the observed lessons, while 4(40.0%) did not demonstrate such organization. This inconsistency may confuse learners with LDs, who require clearly sequenced communication. Simiyu, Maiyo, and Manasi (2022) similarly reported that unclear instructional delivery restricted inclusive learning in Trans Nzoia. Teachers modeled and demonstrated concepts in 7(70.0%) of the lessons, while 3(30.0%) did not. This is a positive finding, as modeling is widely acknowledged as effective for learners with LDs (Muflih, 2019). However, the 3(30.0%) of lessons without demonstration represent missed opportunities for learners to observe and practice targeted skills.

Teacher instructions were clear and complete in 6(60.0%) of the lessons, while 4(40.0%) lacked clarity. As Seliane and Kgothule (2022) emphasize, ambiguous directions reduce the effectiveness of teaching/learning resources. This suggests that a significant number of learners in Murang'a may not benefit fully from the resources provided. Resources were designed to meet learners' learning styles in 5(50.0%) of the observed lessons, while in the other 5(50.0%) they were not. This indicates that half of the learners did not have access to resources adapted to their sensory or cognitive needs. Kabwos, Moige, and Omwenga (2024) found a similar lack of adapted resources in Belgut Sub-County preschools, where learners with disabilities struggled to access learning effectively.

Learning centers were present in 7(70.0%) of classrooms, while 3(30.0%) lacked them. However, accessibility of these centers was confirmed in only 5(50.0%) classrooms,

while 5(50.0%) were inaccessible to learners. Gray (2011) emphasizes that learning centers are only effective when learners can interact with them independently. Thus, many centers in Murang'a may exist in name but not in practice. Charts and pictures were displayed in 8(80.0%) of classrooms, while 2(20.0%) did not display them. Learners' work, however, was displayed in only 5(50.0%) classrooms, while the other 5(50.0%) had none. Muflih (2018) noted that displaying learner work fosters motivation and inclusion. For learners with LDs, displaying written work can reinforce confidence in English learning.

Overall, Table 4.13 shows that resource organization in many Standard Five classrooms remains inconsistent. The findings highlight strengths in teacher modeling (7, 70.0%) and use of charts (8, 80.0%), but weaknesses in specifying lesson steps (6, 60.0% lacking), adapting to learning styles (5, 50.0% not addressed), and ensuring accessible learning centers (5, 50.0% inaccessible). These results are consistent with Chumo (2024), Simiyu et al. (2022), and Kabwos et al. (2024), all of whom reported that inadequate organization of instructional resources negatively affects inclusive education outcomes. To improve English performance among learners with LDs, schools in Murang'a must invest in structured training for teachers, focused on differentiated instruction and resource organization.

CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The purpose of this study was to assess the impact of teaching /learning resources on English performance among learners with learning disabilities in class five Kandara Sub-County Murang'a County, Kenya. The chapter focuses on summary of the findings, conclusions drawn and recommendations for the improvement of pre-primary participation. The chapter winds up with suggestions for further research.

5.2 Summary of Research Finding

The first objective of the study sought to identify the learners with LDs among standard five primary school learners in Kandara Sub-County Murang'a County, Kenya. The findings revealed that that out of the 37 learners exhibiting LD-related characteristics, more than three quarter experienced problems related to accurate reading, grammar, composing, and copying. The results also showed that most of the learners struggled to communicate in English and were slow to complete activities. In overall, somewhat more than half of the learners lacked organization. Nearly half of the learners lacked self-assurance, motivation, and concentration and never asked questions.

The second objective sought to determine types of teaching/ learning resources for learners with learning disabilities in Standard five in Murang'a County. Findings showed that both visual and tactile resources accounted for slightly less than half of the total schools. Findings further demonstrated audio and kinesthetic accounted for less than a quarter of the schools. All teachers agreed that they used books as teaching and learning

resources for English language. Not all types of teaching and learning resources were equally utilized by the English teachers as many schools did not have audio materials for teaching listening and decoding skills.

The third objective of this study sought to establish to establish the performance in English for learners with in Standard five in Murang'a County. Learners performed most poorly in written expression. However, there were significant differences in auditory perception, and spelling where girls performed better than boys. the common types of errors noted in English include; poor visual-motor coordination, difficulty copying accurately from a model, spacing of letters and words, letter and word reversals, poor handwriting, some repetition of sentences, omission of some words and letters, overprinting to correct mistakes, grammar mistakes (punctuations, spellings and capitalization), inadequate expression of ideas and vocabulary, poor organizational skills, unreadable letters and words.

The fourth objective in this study sought to establish the adequacy of teaching/learning resources for learners with learning disabilities in Standard five in Murang'a County. Majority of head teachers reported that teaching/learning resources were inadequate. Similarly, results further indicate that most teachers said that lack of enough teaching/learning resources was a major challenge in their school. Further findings showed that English teachers confirmed that the available resources were inadequate as the head teachers rarely made considerations in purchasing special needs requirements despite the government's capitation made to these schools.

The fifth objective of this study sought to determine the organization of teaching/learning resources in the classroom for learners with learning disabilities in standard five in Murang'a County. Findings revealed that slightly more than half of head teachers agreed that teachers had learning centers in their classrooms while the rest reported that they were not sure. However, considerately more than half of teachers said that they had learning centers in their classroom.

5.3 Conclusions of the Study

The study concludes that learners with learning disabilities (LDs) exist in the primary schools under study, exhibiting challenges such as difficulties in sentence structure, writing mechanics, organizing written work, memorization, attention span, impulsivity, and social skills. More than half of the learners had a combination of these characteristics.

The study concludes that books were found to be the most commonly used teaching and learning resource for English among these learners. The study also concludes that learners with LDs performed very poorly in English, with most scoring zero, indicating difficulties in effectively communicating in the language.

The study concludes that head teachers perceived the main challenge in using teaching/learning resources for learners with LDs as teacher incompetence rather than inadequacy or inappropriateness of resources. Additionally, some teachers did not organize available resources in a way that supported the achievement of learning objectives.

5.4 Recommendations

The following recommendations were made based on the study findings:

5.4.1 Recommendations to Teachers

1. Special needs education teachers and regular class teachers should collaborate in organizing and effectively using teaching/learning resources to support learners with learning disabilities (LDs) in English.
2. Teachers should identify the most dominant learning challenges among learners with LDs and adapt instructional strategies to target these areas, such as grammar, handwriting, and visual-motor coordination.
3. Regular in-service training should be undertaken to equip teachers with skills for inclusive teaching and effective use of available instructional resources.

5.4.2 Recommendations to Head Teachers/School Managers

1. Head teachers should ensure the availability and proper organization of diverse teaching/learning resources, including books, visual aids, and learning centers, to enhance English literacy among learners with LDs.
2. Schools should strengthen partnerships with professional groups, special schools, development partners, and other stakeholders to acquire additional resources and improve infrastructure for inclusive education.

5.4.3 Recommendations to County Government

1. Murang'a County education officials should support schools by facilitating training programs and providing supplementary instructional materials tailored to learners with LDs.

5.4.4 Recommendations to the Ministry of Education

1. The Ministry should allocate budgetary provisions for a wider range of teaching/learning resources beyond textbooks, including materials that support learners with LDs.
2. The Ministry should expedite implementation of the National Policy on Literacy and Early Reading Skills and provide guidance on establishing learning centers in all public schools to enhance English literacy.

5.5 Recommendation for Further Studies

This study was confined to few selected schools and in effect, had limitations in terms of generalization to other similar situations except by replication. The study suggests the following for further research:

1. This study should be replicated in other counties, apart from Murang'a County, in the country in order to give a general picture of the nature and prevalence of learners with LD in the whole country.
2. A study should be carried out on the perceptions of both the parents and class teachers on learners with LD.
3. A comprehensive study should be conducted focusing on talents that learners with LDs could possess which are not well represented in the school curricula. Some

learners with LDs possess superior abilities in other areas such as music, athletics, or art which need to be nurtured.

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APPENDICES

Appendix 1: Headteacher'S Questionnaire

Dear respondent I am Lucy W. Mwangi a learner at Kenyatta University Nairobi- Kenya. I am conducting a research on the impact of teaching/learning resources on English performance among learners, with learning disabilities. The purpose of the study is to fulfill the requirement for the ward of a master degree in education special Need. The information you give will be treated with confidentiality and will be used only for the purpose of this study, kindly do not indicate your name.

SECTION 1: DEMOGRAPHIC INFORMATION

Please answer the following question to the best of your knowledge. Tick (√) appropriate answers or fill in your opinion where applicable

Name of school …….

- Your gender: male ( ) female ( )
- Your age : under 25 years ( ) 26-40 years ( ) above 40 ( )
- What is your current highest qualification?
  Post graduate ( ) degree ( ) diploma ( ) P1 certificate ( )
- What is your current professional qualification?
  Post degree in special needs ( ) degree in special needs ( ) Certificate in special needs ( )
- How long have you taught in this class at present school?
  Below 5 years ( ) 6-10 years ( ) 11 years and above ( )

SECTION II: IDENTIFICATION OF LEARNERS WITH LEARNING DISABILITIES

- Do you support learners disabilities? Yes ( ) No ( )

If YES specify ……..

…….

If NOT, why ……..……
……..
……..

7. Do you have learners with learning disabilities? YES ( ) NO ( )

8. List the unique characteristics of learners with learning disabilities……
……
……

SECTION III: TYPES OF TEACHING/LEARNING RESOURCES

9. Indicate the types of teaching/learning resources used in teaching English in your school (kindly, tick where possible)

- Visual teaching/Learning resources

  Pictures ( ) diagrams ( ) flash cards ( ) word webs ( ) graphic organizers ( ) computers ( ) projection screens ( ) Text ( ) colour for highlighting ( ) charts ( )

- Audio teaching/learning resources

  Book on tapes ( ) computerized text readers ( ) peer assisted reading films ( ) digital CD- Roms ( ) language games ( )

- Audio- visual teaching/learning resources

  Films ( ) video recording ( ) text to speech programme ( ) DVD ( )

- Tactile teaching/learning resources

  Clay ( ) paper Mache ( ) sand trays ( ) play dough ( ) word building kits ( ) raised line papers ( ) finger paints ( ) puzzle ( ) sensory putty ( )

- Kinesthetic teaching/learning resources

  Jumping rope ( ) speaking rhymes ( ) language game ( ) bean bag tossing ( ) flash card races ( )

10. Indicate by ticking in the bracket(s) the sources you obtain teaching /learning resources for your school. Ministry of Education Science and Technology ( ) Kenya Institute of Curriculum Development ( ) Teacher Improvisation ( ) Donation ( )

SECTION IV: PERFORMANCE OF ENGLISH LANGUAGE FOR LEARNERS WITH LEARNING DISABILITIES

Average ( ) Below average ( ) poor ( )

SECTION V: ADEQUACY OF TEACHING/LEARNING RESOURCES

11. Are teachers teaching English trained in the use of teaching/learning resources for learners with learning disabilities? Yes ( ) No ( )

If YES specify ……..

…….

If NO, why ……

……..

……..

12. How often do your teachers use teaching/learning resources to teach learners with learning disabilities English in class five?

Everyday	Rarely	Once	A week	None at all

13. How would you rate the adequacy of the above teaching/learning resources in your school?

Very adequate	Adequate	Inadequate	Not sure

14 . Suggest who should be providing teaching/learning resources in your school?

15. Do you think it is appropriate for teachers of English to use teaching/learning resources in teaching learners with learning disabilities?

Very appropriate ( ) appropriate ( ) inappropriate ( )

SECTION VI: ORGANIZATION FOR TEACHING/LEARNING RESOURCES IN THE CLASSROOM.

16 . Do teachers have learning centers in their classrooms? Yes ( ) No ( )

If YES, Specify…….

If NO, Why…….....

THANK YOU FOR YOUR CO-OPERATION

APPENDIX II: TEACHERS QUESTIONNAIRE

SECTION 1: DEMOGRAPHIC INFORMATION

Please answer the following question to the best of your knowledge. Tick (√) appropriate answers or fill in your opinion where applicable

Name of school …….

- Your gender: male ( ) female ( )
- Your age : under 25 years ( ) 26-40 years ( ) above 40 ( )
- What is your current highest qualification?
  Post graduate ( ) degree ( ) diploma ( ) P1 certificate ( )
- What is your current professional qualification?
  Post degree in special needs ( ) degree in special needs ( ) Certificate in special needs ( )
- How long have you taught in this class at present school?
  Below 5 years ( ) 6-10 years ( ) 11 years and above ( )

SECTION II: IDENTIFICATION OF LEARNERS WITH LEARNING DISABILITIES

- Teachers of English should identify learners with learning disabilities
  Please indicate by ticking in the following box/table

Very adequate	Adequate	Inadequate	Not sure

- Do you use screening tools to identify learners with learning disabilities? Yes ( )
  No ( )
  If YES specify ……..
  …….
  If NO, why ……
  ……..

8. List the unique characteristics of learners with learning disabilities……

…….....

.....

.....

SECTION III: TYPES OF TEACHING/LEARNING RESOURCES

9. Learners should be exposed to a variety of teaching/learning resources to participate actively through manipulation

Very adequate	Adequate	Inadequate	Not sure

10. Arrange the following types of teaching/learning resources in order of use of merit in teaching English graphic organizers computer, diagrams, flash cards, highlighters, sand day, pictures, word webs, charts ( ) films ( ) DVD ( )

11. Tick the type of teaching/learning resources used to teach English in your school

Books ( )	Tape recording cassettes ( )	DVD ( )	Television	Flash card	Computers	Highlighter

12. In your opinion that do you think should provide teaching/learning resources. (Tick your opinion)

MOEST	Teachers should improvise	Parents should be involved

- The school lacks fund to a cause teaching/learning resources (tick one)

Strongly agree	Agree	Disagree	Strongly disagree

SECTION IV: PERFORMANCE OF ENGLISH LANGUAGE

- How is the performance of English language for learners with learning disabilities?

Average ( ) Below average ( ) Poor ( )

SECTION V ADEQUACY OF TEACHING/LEARNING DISABILITIES

15. Are you trained in the use of teaching/learning with learning disabilities? YES ( ) NO ( )

If YES specify ……..

…….

If NO, why ……

……..

……..

16 .How often do you use teaching/learning resources to teach learners with disabilities English?

Daily	Once a week	Rarely	Never

17. What is the level of adequacy of teaching/learning resources used to teach English (Tick one)

Adequate	Slightly adequate	Inadequate	None

(18) Does the adequacy of teaching/learning resources affect the performance of English for learners with learning disabilities? YES ( ) NO ( )

If YES, how … ……..

…….

If NO, why ……

……..

……..

- Are there recommended teaching/learning resources available for use in the teaching of learners with learning disabilities English in your class

YES ( ) NO ( ) Don't know ( )

SECTION VI: ORGANIZATION OF TEACHING LEARNING RESOURCES IN THE CLASSROOM

20.Do you have learning centers in your classroom? YES ( ) NO ( )

If YES, Specify……

……

If NO, Why…….

……

THANK YOU FOR YOUR CO-ORPERATION

APPENDIX III: LESSON OBSERVATION SCHEDULE

The purpose of this observation schedule is to obtain information on how teachers use the resources in the teaching/learning of English to learners with learning disabilities

Schools……

RESPONSE

YES	NO	ACTIVITY
		1. Are instructional steps for the lesson clearly specified
		2. Does the teacher provide direct instructions for active learner involvement and response?
		3. Does verbal instruction flow in a clear logical manner?
		4. Does the resource provide for teachers modeling and demonstration appropriate to enhance the skills and concepts taught?
		5. When using the resources, are teacher's instructions clear and complete when using the resources?
		6. Is the resource designed to meet learner's learning style?
		7.Are there learning centers in the classroom?
		8.Are the learning centers accessible to the learners?
		9.Are chats and pictures displayed on the classroom walls?
		10.Is the learner's work displayed on classroom walls?

APPENDIX IV: SCREENING TOOL CHECK LIST FOR LEARNING DISABILITY

(For teachers of English in standard five)

Kindly respond to the checklist accurately and honestly by filling in the questionnaire as required and comment where possible. Checklist adapted from lists developed by the following organizations: learning disabilities association. Amenta, for employers, 1990. Eric clearing house on disabilities and gifted education, examples of learning disability characteristics, 1991. The Orton Dyslexia society annual of Dyslexia, volume XLII, and the council for learning disabilities, info sheet (October 1993). Please answer the questions by ticking (√) or write a comment

Learner……

Do you,	√	Moment
1. Perform similar tasks differently from day to day		
2. Read well but not write well		
3. Learn information presented in one way but not in another		
4. Have a short span, impulsivity and difficulty manipulating focus		
5. Difficulty with social skills		
6. Misinterpret social skills?		
7. Difficulty memorizing information		
8. Difficulty following a schedule being on time or meeting deadlines		
9. Misread or miscopy		
10. Confuse similar letters, words or phrases when writing		
11. Problems with sentence structure, writing mechanics and organizing written work		
12. Confuse upland down, left and right?		
13. Hear sounds, words or sentences incorrectly		
14. Unable to tell what has just been said		

THANK YOU

APPENDIX V: ENGLISH SKILLS ASSESSMENT TOOL FOR LEARNERS WITH LEARNING DISABILITIES

Purpose:To assess the English language performance of learners with learning disabilities in Standard Five, focusing on visual perception, spelling, auditory perception, visual discrimination, auditory discrimination, and written expression.

1. Visual Perception (Max Score: 8)

Objective: Assess the learner's ability to recognize and interpret visual information.
Tasks: Identify pictures of objects and match them with words (4 items).
Complete a sequence in a pattern or shape (4 items).

Scoring Rubric:

Score
Description
0
Unable to identify or match any items correctly
1–2
Correctly identifies 1–2 items
3–4
Correctly identifies 3–4 items
5–6
Correctly identifies 5–6 items
7–8
Correctly identifies 7–8 items

2. Spelling (Max Score: 8)

Objective: Assess ability to spell common Standard Five English words.
Tasks:

Spell a list of 8 familiar words dictated by the examiner.

Scoring Rubric:

Score Description

0 0 words correct

1–2 1–2 words correct

3–4 3–4 words correct

5–6 5–6 words correct

7–8 7–8 words correct

3. Auditory Perception (Max Score: 10)

Objective: Assess the learner's listening comprehension.
Tasks:

Listen to short sentences and answer questions (5 items).

Follow multi-step verbal instructions (5 items).

Scoring Rubric:

Score	Description
0–2	Unable to follow instructions or answer questions correctly
3–4	Partially answers 1–2 items correctly
5–6	Correctly answers 3–4 items
7–8	Correctly answers 5–7 items
9–10	Correctly answers 8–10 items

4. Visual Discrimination (Max Score: 4)
Objective: Assess ability to notice differences and similarities in visual forms.
Tasks:

Circle the letter or word that is different in a group (4 items).
Scoring Rubric:

Score	Description
0	None correct
1–2	1–2 correct
3	3 correct
4	All correct

5. Auditory Discrimination (Max Score: 4)
Objective: Assess ability to distinguish sounds in spoken language.
Tasks:

Identify the word that does not belong in a group (4 items).
Scoring Rubric:

Score	Description
0	None correct
1–2	1–2 correct
3	3 correct
4	All correct

6. Written Expression (Max Score: 15)
Objective: Assess the learner's ability to communicate ideas in writing.
Tasks:Copy a short paragraph from the board (5 points).

Write 3–5 sentences about a given topic (10 points).

Scoring Rubric:

Score	Description

Score	Description
0–3	Unable to write meaningful text; letters/words mostly unreadable
4–6	Limited ideas; frequent errors in handwriting, spelling, punctuation
7–9	Basic ideas expressed; some errors but generally readable
10–12	Clear expression of ideas; minor errors
13–15	Well-organized, coherent, and accurate writing

7. Total Scoring and Classification

Total possible score: 49 points
Classification:
Fail: <30 points

Pass: ≥30 points

APPENDIX VI: RESPONDENTS INFORMED CONSENT

My name is Lucy Wanjugu Mwangi. I am a Masters learner from Kenyatta University. Am conducting a study on "Impact of instructional resources on English performance among learners with learning disabilities in standard five in Murang'a County, Kenya."

The information will be used by the Ministry of Education and relevant stakeholders to improve the learners' academic achievement for learners with learning disabilities in primary schools in Kenya.

Procedures to be followed

Participation in this study will require that I give you questionnaires/interview schedule for you to answer relevant questions concerning the implementation of individualized educational plan in the school. You have the right to refuse participation in this study without any penalties. You will get the same treatment you will have received whether participated or not. Participation in this study is voluntary. You may ask questions related to this study at any time. You may refuse to respond to any question or stop being in the study without any consequences now and in the future.

Discomforts and risks

Some of the questions in the questionnaire you may find uncomfortable. You may refuse to answer these questions if you so wish. Answering this questionnaire may take about your ten minutes before you resume your routine services.

Benefits

If you participate in this study, you will help fellow teachers and other relevant stake holders to provide effective learning environment in teaching and learning process. This will help learners to acquire good results in general academic achievement for learners

with learning disability. You will also learn from the results of this study what strategies other teachers are using to improve the learner's academic achievement.

Reward

If you agree to participate in this study free writing materials will be provided.

Confidentiality

The results of this study will be kept confidential and used for the purpose of this study only. The accessibility of this study will be within the researcher and his supervisors and the findings will be kept at Kenyatta University library.

Contact information

If you have any questions you may contact **DR. Jessina Muthee** on 0720711896 or **DR. Beatrice Bunyasi** Department Chairperson on 0721943828 or the Kenyatta University Ethical Review Committee Secretariat on kuerc@ku.ac.ke

Participants Statement

The above information regarding my participation in the study is clear to me. I have been given a chance to ask questions and my questions have been answered to my satisfaction. My participation in this study is entirely voluntary. I understand that my records will be kept private and that I can leave the study at any time. I understand that I will get the same care and treatment whether I decide to leave the study or not and my decision will not change the care I will receive from the researcher today or that I will get from any other researcher any other time.

Name of participant…… Signature or thumbprint……..

Date……

Researcher's statement

I the undersigned have explained to the volunteer in a language he/she understands the procedures to be followed in the study and the risks and benefits involved.

Name of the researcher…….

Researcher's signature……Date……..

Appendix VII: Approval Letter From Graduate School

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 020-8704150

Internal Memo

FROM: Dean, Graduate School **DATE:** 8th October, 2020

TO: **Ms. Lucy Wanjugu Mwangi**
C/o Department of Early Childhood
& Special Needs Education

REF: E55/CE/25378/2013

SUBJECT: APPROVAL OF RESEARCH PROPOSAL

We acknowledge receipt of your Research Proposal after fulfilling recommendations raised by the Graduate School Board of 1st July, 2020.

You may now proceed with your Data collection, subject to clearance with the Director General, National Commission for Science, Technology & Innovation.

As you embark on your data collection, please note that you will be required to submit to Graduate School completed Supervision Tracking and Progress Report Forms per semester. The Forms are available at the University's Website under Graduate School webpage downloads.

Thank you.

KENYATTA UNIVERSITY OFFICE OF DEAN 03 NOV 2020 GRADUATE SCHOOL

JULIA GITU
FOR: DEAN, GRADUATE SCHOOL

CC. Chairman, Department of Early Childhood & Special Needs Education

Supervisors:

1. Dr. Jessina Muthee
   C/o Department of Early Childhood & Special Needs Education
   Kenyatta University

2. Dr. Chomba Munyi
   C/o Department of Early Childhood & Special Needs Education
   Kenyatta University

Appendix IX: Authorization Letter From Graduate School

KENYATTA UNIVERSITY
GRADUATE SCHOOL

E-mail: dean-graduate@ku.ac.ke
Website: www.ku.ac.ke

P.O. Box 43844, 00100
NAIROBI, KENYA
Tel. 020-8704150

Our Ref: E55/CE/25378/2013

DATE: 8th October, 2020

Director General,
National Commission for Science, Technology
and Innovation
P.O. Box 30623-00100
NAIROBI

Dear Sir/Madam,

RE: RESEARCH AUTHORIZATION FOR MS. LUCY WANJUGU MWANGI – REG. NO. E55/CE/25378/13

I write to introduce Ms. Lucy Wanjugu Mwangi who is a Postgraduate Student of this University. She is registered for M.Ed. degree programme in the **Department of Early Childhood & Special Needs Education.**

Ms. Mwangi intends to conduct research for a M.Ed. thesis Proposal entitled, **"Impact of Instructional Resources on English Performance among Learners with Learning Disabilities in Standard Five in Murang'a County, Kenya."**

Any assistance given will be highly appreciated.

Yours faithfully,

KENYATTA UNIVERSITY
OFFICE OF THE
03 NOV 2020
GRADUATE SCHOOL

PROF. ELISHIBA KIMANI
DEAN, GRADUATE SCHOOL

JC/ovvw

Appendix IX: Research Authorization From Nacosti

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **389354**

Date of Issue: **02/December/2020**

RESEARCH LICENSE

This is to Certify that Ms.. LUCY WANJUGU MWANGI of Kenyatta University, has been licensed to conduct research in Muranga on the topic: IMPACT OF INSTRUCTIONAL RESOURCES ON ENGLISH PERFORMANCE AMONG LEARNERS WITH LEARNING DISABILITIES IN STANDARD FIVE IN MURANGA COUNTY, KENYA for the period ending : 02/December/2021.

License No: **NACOSTI/P/20/7946**

389354

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Verification QR Code

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THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is Guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014

CONDITIONS

1. The License is valid for the proposed research, location and specified period
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3. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research
4. Excavation, filming and collection of specimens are subject to further necessary clearence from relevant Government Agencies
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