



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
A Skilled and Ethical Society

**REPORT ON MONITORING THE STATUS OF
COMPETENCY BASED CURRICULUM (CBC)
IMPLEMENTATION IN SPECIAL NEEDS EDUCATION
(SNE) SCHOOLS AND UNITS IN KENYA**

MARCH, 2026

KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
P.O BOX 30231- 00100
NAIROBI
TEL: 3749900-9
Email info@kicd.ac.ke
www.kicd.ac.ke

ISBN:

© KICD

All rights reserved. No parts of this publication may be reproduced in any retrieval system or transcribed in any form or by any means; electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the copyright owner.

FOREWORD

Kenya's curriculum reform underscores the importance of preparing learners with 21st century competencies vital for global competitiveness. Equally, it prioritizes inclusivity through the integration of special needs education, thereby advancing equity and broadening access for diverse learners. This combined emphasis fosters resilience, promotes holistic development, and ensures alignment with both national educational priorities and international benchmarks.

Special Needs Education (SNE) seeks to ensure that learners with special needs and disabilities enjoy equitable access to inclusive, high-quality education. Assessing the current state of SNE implementation is essential for reinforcing inclusive practices, enhancing learner outcomes, and addressing systemic gaps within the Competency Based Education (CBE) implementation, thereby advancing equity and educational excellence.

This report presents the findings of a nationwide study on the implementation of the Competency Based Curriculum (CBC) in SNE schools and units across all 47 counties. The study highlights that inclusive education is a fundamental component for the effective delivery of CBC and provides an evidence-based understanding of current practices, challenges, and opportunities in SNE. The findings serve as an essential reference for policymakers and education stakeholders in designing interventions that advance access, equity, and quality for learners with special needs and disabilities.

The study represents a collaborative undertaking involving diverse stakeholders. We extend our appreciation to the research team for their expertise in data collection, analysis, and reporting, which has yielded a strong evidence-based data to inform practice and policy. We are grateful to the Kenya Primary Education Equity in Learning (KPEEL) Program for their financial, technical, and moral support throughout the project. Special thanks go to the Kenya Institute of Curriculum Development (KICD) and the Teachers Service Commission (TSC) for their technical guidance and institutional support in promoting inclusive education within schools.

We further acknowledge the invaluable contributions of education officers, whose support during data collection ensured the accuracy and contextual relevance of the findings. In addition, the editorial team and peer reviewers offered critical insights and constructive feedback, significantly enhancing the clarity, rigour, and overall quality of this report.

PROF. CHARLES ONG'ONDO, PhD., MBS
DIRECTOR/CHIEF EXECUTIVE OFFICER
KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

TABLE OF CONTENTS

FOREWORD	iii
LIST OF TABLES	vii
LIST OF FIGURES	vii
ACRONYMS AND ABBREVIATIONS	viii
OPERATIONAL DEFINITION OF TERMS	x
EXECUTIVE SUMMARY	xi
CHAPTER ONE	1
INTRODUCTION	1
1.1 Introduction	1
1.2 Context of the Study	1
1.3 Statement of Need	5
1.4 Objectives of the Study	5
1.4 Scope of the Study	6
1.5 Rationale of the Study	7
1.6 Chapter Summary	8
CHAPTER TWO	9
REVIEW OF RELATED LITERATURE	9
2.1 Introduction	9
2.2 Definitions of key concepts	9
2.3 Review of related theories	13
2.3.1 Behaviourist Theory	13
2.3.2 Cognitive Theory	13
2.3.3 Social Constructivist Theory	14
2.3.4 Multiple Intelligence Theory	14
2.3.5 Humanistic Theory	14
2.3.6 Ecological Systems Theory	15
2.3.7: Universal Design for Learning	15
2.3.8 Social Model of Disability	16
2.4 Review of relevant policy documents	16
2.5 Review of Related Previous Research	21
2.5.1 Availability and adequacy of adapted curriculum designs, curriculum support materials and Interactive Digital Content	21
2.5.3 Adequacy and suitability of infrastructure, auxiliary personnel and support services available in special schools and units	26
2.5.4 Strategies in place for identifying, nurturing and supporting the talents of learners with special needs and disabilities	34
2.5.5 Parental Empowerment and Engagement in supporting the education of learners with special needs and disabilities	37
2.5.6 Learner placement, progression and transition across different education levels and pathways	42
2.6 Key issues from the related literature	48
2.7 Chapter Summary	49
CHAPTER THREE	50
RESEARCH METHODOLOGY	50
3.1 Introduction	50
3.2 Research Design	50
3.3 Research Approaches	50
3.3.1 Quantitative Approach	50

3.3.2 Qualitative Approach	50
3.4 Research Methods	51
3.4.1 Quantitative Methods	51
3.4.2 Qualitative Methods	51
3.5 Sampling	51
3.5.1 Target population	51
3.5.2 Quantitative Sampling	52
3.5.3 Qualitative Sampling	52
3.5.4 Sample size	52
3.6 Data Generation Procedure	52
3.6.1 Quantitative Data Generation	52
3.6.2 Qualitative Data Generation	53
3.7 Data analysis	53
3.7.1 Quantitative Data Analysis	53
3.7.2 Qualitative Data Analysis	54
3.8 Trustworthiness of the study	54
3.8.1 Trustworthiness of quantitative research	54
3.8.2 Trustworthiness of qualitative research	54
3.9 Ethical Considerations	55
3.10 Chapter Summary	56
CHAPTER FOUR	57
PRESENTATION OF FINDINGS	57
4.1 Introduction	57
4.2 Response Rate	57
4.3 Availability and Adequacy of Adapted Curriculum Designs, Curriculum Support Materials and Interactive Digital Content	58
4.3.1 Availability and Adequacy of Adapted Curriculum Designs	58
4.3.2 Availability and adequacy of Curriculum Support Materials	62
4.3.3 Availability and Appropriateness of Interactive Digital Content and Assistive Technologies	71
4.4 Capacity of Teachers to Effectively Deliver Curriculum for Learners with Special Needs and Disabilities	75
4.4.1 Teacher capacity to effectively implement the SNE curriculum	76
4.4.2 Teacher-related challenges in implementation of CBC in special schools and units	84
4.4.3 Support needed by teachers and learners in curriculum implementation	91
4.5 Adequacy and Suitability of Infrastructure, Auxiliary Personnel and Support Services	99
4.5.1 Adequacy and Suitability of Infrastructure	100
4.5.2: Availability of Resources	103
4.5.3 Availability and Adequacy of Auxiliary Personnel	107
4.5.4 Status of Support Services Required for Effective Curriculum Implementation	114
4.6 Strategies in Place for Identifying, Nurturing, and Supporting Talents of Learners with Special Needs and Disabilities	120
4.6.1 Systems and opportunities schools provide for identifying, nurturing and supporting learners' talents	121
4.6.2 Strategies for identification and nurturing of talents	123
4.6.3 Factors Hindering Identification and Nurturing of Learners' Talents	128
4.6.4 Parental Involvement in Talent Identification and Development in Learners	130
4.7 Parental Empowerment and Engagement in Supporting the Education of Learners with Special Needs and Disabilities	132
4.7.1 Parent-School Engagement Forums as a Structured Strategy	134

4.7.2 Disability Awareness and Sensitisation Initiatives to enhance Learner Acceptance and Positive Attitudes	135
4.7.3 Ongoing Communication and Follow-up Using Phones, WhatsApp and Digital Platforms	137
4.7.4 Provision of Basic Needs and Learning Materials.....	138
4.7.5 Home-based Learning Support and Monitoring of Learner Progress.....	139
4.7.6 Strengthening Parent Capacity.....	141
4.7.7 Variations in Parental Involvement	142
4.7.8 Structural Barriers and Targeted Support Linkages.....	144
4.8 Effectiveness of Placement, Progression and Transition for Learners with Special Needs and Disabilities.....	145
4.8.1 Levels of Agreement with Statements on Learner Placement, Progression and Transition	146
4.8.2: Views of Respondents on Structures for Placement, Progression and Transition for LSND.....	147
4.8.3 Learners' Views on Progression	162
4.9 Chapter Summary	164
CHAPTER FIVE	168
DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS	168
5.1 Introduction.....	168
5.2 Discussion of Findings.....	168
5.2.1 Availability and Adequacy of Adapted Curriculum and Learning Materials	168
5.2.2 Capacity of teachers in effective delivery of the curriculum for learners with special needs and disabilities	172
5.2.3 Adequacy and suitability of Infrastructure, Auxiliary Personnel and Support Services	176
5.2.4 Strategies for identifying, nurturing and supporting the talents of learners with special needs and disabilities	179
5.2.5 Parental Empowerment and Engagement in supporting the education of learners with special needs and disabilities.	181
5.2.6 Discussion of findings on learner placement, progression and transition	185
5.3 Conclusions.....	187
5.4 Recommendations.....	189
REFERENCES	191
APPENDICES	205
APPENDIX 1: LIST OF SNE SCHOOLS & UNITS VISITED	205
APPENDIX II: DATA GENERATION TOOLS	211

LIST OF TABLES

Table 1: Sample Size	52
Table 2: Response Rate.....	57
Table 3: Heads of Institutions Responses on Availability and Adequacy of Adapted curriculum and other Materials	58
Table 4: Teachers Responses on Availability and Adequacy of Adapted curriculum and other Materials	59
Table 5: Findings from Field Observations	60
Table 6: HoIs and Education Officers responses on teacher capacity in delivering curriculum to LSND	78
Table 7: Capacity of teachers as observed by the researchers	79
Table 8: Perceptions of Heads of Institutions on Adequacy and Suitability of Infrastructure	100
Table 9: Teachers' and Education Officers' Responses on Resource Availability	103
Table 10: Observation Findings on Infrastructure	106
Table 11: Education officers and teachers' responses on availability of auxiliary personnel.....	108
Table 12: Education officers and teachers' responses on the overall availability of support services	115
Table 13: HoIs' responses on school systems and opportunities for talent identification and support	121
Table 14: Teachers' Responses on Structures for Identification and Nurturing of Talents.....	122
Table 15: Observation on systems and opportunities for identification, nurturing and supporting talents	122
Table 16: Heads of Institutions' Ratings on levels of Parental Empowerment and Engagement in Supporting LSND	133
Table 17: Observation Ratings on Evidence of Parental Empowerment and Engagement	134
Table 18: Teachers' Ratings on Parental Empowerment and Engagement	137
Table 19: HoIs responses on levels of agreement with statements on learner placement, progression and transition.....	146

LIST OF FIGURES

Figure 1: Special Needs Education Curriculum Model	3
Figure 2: Theoretical contributions to Special Needs Education.....	15
Figure 3: Evidence of adapted curriculum designs available in schools	61
Figure 4: Locally sourced materials.....	67
Figure 5: Evidence of digital devices fitted with assistive technologies available in schools.....	73
Figure 6: Teachers responses on their capacity in delivering curriculum to LSND	77
Figure 7: Head of Institutions responses on the availability and adequacy of auxiliary personnel ...	108
Figure 8: Heads of Institutions responses on the support services currently available in their schools	114
Figure 9: Teachers responses on selected support services currently available in their schools	115
Figure 10: Teachers' responses on levels of agreement with statements on learner placement, progression and transition	147

ACRONYMS AND ABBREVIATIONS

AAC	Augmentative Alternative Communication
ABA	Applied Behaviour Analysis
APA	American Psychological Association
BECF	Basic Education Curriculum Framework
CAST	Centre for Applied Special Technology
CBC	Competency Based Curriculum
CBE	Competency Based Education
CP	Cerebral Palsy
CRPD	Convention on the Rights of Persons with Disabilities
CSL	Community Service Learning
CPD	Continuous Professional Development
CSO	Curriculum Support Officer
DB	Deafblind
EASIE	European Agency for Special Needs and Inclusive Education
EBD	Emotional and Behavioural Disorders
EARC	Educational Assessment Research Centre
ECRI	European Commission against Racism and Intolerance
FGD	Focus Group Discussion
HI	Hearing Impairment
HoI	Head of Institution
ICF	International Classification of Functioning
ID	Intellectual Disability
IDD	Intellectual and Developmental Disabilities
IDC	Interactive Digital Content
IEP	Individualised Education Program
KICD	Kenya Institute of Curriculum Development
KNEC	Kenya National Examination Council
KPLP	Kenya Primary Literacy Programme
KSL	Kenyan Sign Language
LSND	Learners with Special Needs and Disabilities
MoE	Ministry of Education
NDD	Neurodevelopmental Disorder

OECD	Organisation for Economic Co-operation and Development
PI	Physical Impairment
QASO	Quality Assurance and Standards Officer
SLIs	Sign Language Interpreters
SNE	Special Needs Education
SNED	Special Needs Education and Disabilities
SoW	Schemes of Work
LSEND	Learners with Special Education Needs and Disabilities
TSC	Teachers Service Commission
UDL	Universal Design for Learning
WHO	World Health Organisation
VI	Visual Impairment
ZPD	Zone of Proximal Development

OPERATIONAL DEFINITION OF TERMS

Education Officers: Education officers are government-appointed officials within the Ministry of Education who oversee, supervise, and support the implementation of education programs and policies in schools. Education officers provide technical guidance, monitor curriculum delivery, and support teachers and schools in achieving learning outcomes. They include:

- i) Sub-County Education Officers (SCEOs):** Responsible for supervising schools at the sub-county level, ensuring curriculum standards are adhered to, and supporting teacher development.
- ii) County Education Officers (CEOs):** Coordinate education administration at the county level, oversee resource allocation, and ensure effective implementation of CBC policies across schools.
- iii) Curriculum Support Officers (CSOs):** Provide specialised guidance and training to teachers on curriculum delivery, assessment methods, and pedagogical innovations.
- iv) Quality Assurance and Standards Officers (QASOs):** Monitor school performance, assess teaching and learning quality, and ensure compliance with national education standards.

Enriched and Accelerated: It entails providing additional or advanced content, resources and assessment to learners who are gifted and talented.

Intervention programmes: These are programmes that are developed to support learners with profound disabilities who are either bedridden at home or in hospitals. They are mainly implemented by teachers, parents and caregivers.

EXECUTIVE SUMMARY

Introduction

The Kenya Institute of Curriculum Development (KICD), mandated by the KICD Act No. 4 of 2013, develops, reviews, and approves curricula and curriculum support materials for all education levels below the university. In line with this mandate, KICD conducted a study on the implementation of the Competency-Based Curriculum (CBC) in Special Needs Education (SNE) schools and units.

The objectives of the study were to;

1. assess the availability and adequacy of adapted curriculum designs, curriculum support materials, and interactive digital content,
2. evaluate the capacity of teachers to effectively deliver the curriculum,
3. determine the adequacy and suitability of infrastructure, teaching staff, auxiliary personnel, and support services,
4. establish the extent to which strategies exist for identifying, nurturing, and supporting the talents of learners with special needs and disabilities,
5. assess the level of parental empowerment and engagement in supporting their children's education,
6. determine the effectiveness of learner placement, transition, and progression across different education levels and pathways under CBC.

Research Methodology

The study adopted mixed methods research design to collect data from all the 47 counties. This approach enabled the triangulation of data, providing both breadth and depth in the analysis. A multi-stage sampling approach was employed to ensure a representative and manageable sample. Participants included head of institutions, teachers, parents, education officers, and learners, whose perspectives offered a rich and diverse understanding of the implementation of the CBC in SNE schools and units.

Data was collected using a combination of questionnaires, interviews, focus group discussions, and classroom observations, allowing the study to capture both quantitative and qualitative insights. Quantitative data was analysed using descriptive and inferential statistics, while qualitative data was examined thematically to identify patterns, challenges, and opportunities in CBC implementation. This comprehensive approach provided an evidence-based understanding of the practical realities of implementing CBC in SNE settings, highlighting successes, constraints, and areas for policy and practice improvement across diverse educational contexts.

Key Findings

The study found that teachers generally demonstrated a strong capacity to plan and deliver CBC lessons for learners with special needs and disabilities. Teachers showed considerable proficiency in preparing professional documentation and developing Individualized Education Plans (IEPs). They also expressed confidence in applying learner-centred and differentiated instructional approaches that support diverse learning needs. However, several notable challenges remain. These include limited support and guidance, insufficient time and institutional structures for developing adapted learning materials, and uneven proficiency in disability-specific communication methods such as Kenyan Sign Language (KSL), braille and other alternative communication systems.

Classroom observations indicate that many teachers employ inclusive pedagogical strategies and varied assessment approaches. Nonetheless, documentation and consistent updating of professional records such as schemes of work and lesson plans are sometimes inadequate. Overall, the evidence underscores the need for strengthened professional support systems, continuous capacity-building, improved staffing and workload management, and targeted training in specialised communication and practical skills.

Further the study revealed that auxiliary personnel and support services within special schools and units remain largely inadequate and overly institutionalised. Access to specialised professionals including therapists, interpreters, braille transcribers, nurses, and trained caregivers is limited, compelling teachers to assume additional support responsibilities beyond their instructional roles. Similarly, essential therapeutic, psychosocial, and sensory support services are inconsistently provided or altogether absent in many institutions. These gaps hinder effective curriculum implementation and restrict meaningful participation, thereby undermining equitable learning opportunities for learners with special needs and disabilities.

The findings also indicated that schools have moderately established systems and opportunities for identifying, nurturing, and supporting learners' talents, including those of learners with special needs, though effectiveness varies. Heads of Institutions reported a relatively high level of agreement (76.1%) that clear systems exist, particularly in talent identification and integration of talent-nurturing activities into classroom instruction, while documentation and monitoring of talent development were comparatively weak. Teachers expressed a moderate level of agreement (68.9%), with opportunities for diverse talent pathways and showcasing talents rated positively, but the availability of adapted equipment and resources identified as a major gap. Qualitative evidence further shows that talent identification largely occurs through curricular and co-curricular activities, curriculum-based and vocational pathways, learner-centred pedagogies, and assignment of responsibilities that reveal

leadership and other abilities. However, some schools lack deliberate strategies and face constraints such as inadequate resources, limited trained personnel, insufficient facilities, weak follow-up, and poor documentation, resulting in missed or underdeveloped talents.

Observations reported high participation in co-curricular activities (80.4%). It was further established that most schools have talent identification structures (77.6%) and platforms for showcasing talents. However, documentation is only moderate and often unsystematic. The main gap is the lack of adapted equipment, which limits access and inclusion. Parents and learners agreed that schools play a central role in identifying and nurturing talents. Teachers communicate progress, while parents support development at home. Learners build their skills through classroom and co-curricular activities, especially sports and vocational programmes, with support from teachers, peers, and sponsors. Despite this commitment, poor communication, limited facilities, financial constraints, and restricted opportunities for some disabilities hinder full and equal participation. Parental empowerment and engagement in supporting learners with special needs and disabilities was primarily facilitated through school-driven initiatives, notably structured parent–school forums that provided guidance, regular updates, and collaborative follow-up on learner progress.

Schools also used sensitisation and disability-awareness activities to improve acceptance, although denial and low awareness still limited engagement in some contexts. Communication and follow-up were strengthened through phone calls, SMS, WhatsApp groups, and occasional digital reporting, but access to such platforms remained uneven. Parental support was most visible in provision of basic needs and learning materials, alongside home-based monitoring and academic support, though communication barriers, particularly limited Kenya Sign Language skills, constrained support for learners with hearing impairment. Participation varied widely across schools, with strong involvement in some settings but poor turnout and weak follow-up in others, often shaped by poverty, distance, transport costs, and disability-related resource demands, with a few schools responding through targeted linkages such as home visits, referrals, and certification support.

The findings on effectiveness of learner placement, progression and transition revealed that there were mixed perceptions across the different categories of stakeholders. Heads of Institutions (HoIs) reported relatively strong confidence in placement and transition processes (81.8%) while teachers expressed lower confidence (74.3%). Areas that were well rated were identified as documentation of transition plans, parental involvement in placement decisions, and alignment of placement with policy guidelines. The area that teachers rated lowest was provisions for LSND to transition across levels and pathways. The commonly reported barriers to smooth placement, progression and transition

included inadequate assessment capacity and equipment, shortages of specialist personnel (therapists, trained SNE teachers), insufficient adapted learning materials and assistive devices, weak collaboration between feeder and receiving institutions, and low parental awareness and involvement which is further compounded by stigma. The findings showed that attending school under CBC has delivered meaningful benefits for learners with special needs, especially when assessment, placement, transition plans, parental engagement, and adapted resources are in place. The report highlights some of the benefits to learners as: development of self-esteem/self-worth; acquisition of values or character building, acquisition of learning, social skills, life skills, vocational skills and core competences; identification of talents and abilities; and acquisition of orientation and mobility skills and sense of safety.

Conclusions

The study revealed that SNE schools and units in Kenya have made moderate progress in implementing the CBC for learners with special needs and disabilities, with adapted curriculum designs generally available and aligned to CBC. Teachers and HoIs acknowledge efforts in curriculum adaptation and quality assurance at the classroom level, demonstrating proactive implementation despite resource constraints. However, gaps persist in the availability and diversity of curriculum support materials, interactive digital content, and assistive technologies, which limit the full realization of inclusive and equitable learning. Observations corroborate these perceptions, showing substantial deficiencies in printed materials and functional devices across schools. Access to digital content is improving, yet integration into teaching remains inconsistent. Budgetary limitations and inadequate specialized resources continue to hinder effective implementation. Despite these challenges, schools exhibit commitment to learner-centered practices and online safety. Strengthening resource provision, teacher capacity, and equitable distribution of materials is critical to enhance CBC delivery. Overall, while foundational progress has been made, addressing resource gaps is essential to ensure that all learners with special needs and disabilities achieve their full potential.

The evidence clearly demonstrates that teacher capacity for delivering the CBC to learners with special needs and disabilities is present but not yet fully optimized. Teachers exhibit strong foundational competencies in planning, individualized instruction, and learner-centred pedagogy, and school leaders largely affirm this internal assessment. However, the comparatively lower ratings by education officers and the observational findings indicate gaps in consistency, depth of implementation, documentation practices, specialized communication skills, and systemic support structures. This divergence underscores that effective curriculum delivery is not sustained by individual competence

alone but by a robust ecosystem of continuous professional development, adequate staffing, structured mentorship, resource provision, and strong supervisory frameworks.

Strengthening SNE curriculum delivery requires moving beyond confidence and compliance toward measurable instructional quality and sustained professional growth. Bridging the perception gap between self-evaluation and external assessment demands structured monitoring, targeted retooling, strategic deployment, and enhanced resource support. Only through coordinated policy action and systemic investment can teacher capacity fully translate into equitable, high-quality learning outcomes for learners with special needs and disabilities.

The study found that auxiliary personnel in special schools and units are insufficient and inadequately institutionalised. Access to therapists and other specialised professionals remains limited, and caregivers are often overstretched or lack formal training, resulting in teachers assuming additional caregiving and support responsibilities that increase their workload. Further, support services required for effective curriculum implementation are largely inadequate, inconsistently provided, or absent in many schools. Essential therapeutic, psychosocial, and sensory services are not systematically integrated into school structures, thereby limiting learner participation, equity, and achievement, particularly for learners with complex and multiple disabilities.

It was further noted that while many schools have established systems and opportunities for identifying and nurturing the talents of learners with special needs and disabilities, the implementation and effectiveness of these systems remain inconsistent. Curricular, co-curricular, vocational, and curriculum-based pathways provide key platforms for talent identification, and parents play a supportive role through observation, encouragement, and provision of resources at home. However, gaps persist, including limited adapted equipment, insufficient teacher capacity, weak documentation of learner portfolios, and minimal collaboration between some schools and parents. These findings suggest that although talent identification and development structures exist in theory, practical application is often limited, highlighting the need for targeted support, capacity building, and resource provision to ensure all learners' talents are effectively recognised and nurtured.

The findings showed that parental empowerment and engagement in supporting learners with special needs and disabilities was mainly enabled through school-initiated forums, sensitisation, and regular communication, alongside practical parental support such as provision of basic needs and home follow-up. However, engagement varied across schools and was less consistent in deeper areas such as parents' participation in reviewing learner progress and understanding CBC expectations, and it was constrained by poverty, distance, and communication barriers such as limited Kenya Sign

Language skills. Given these findings, the study concludes that the level of parental empowerment and engagement was moderate and uneven across settings.

The study revealed that while policy intentions under CBC strongly support inclusive placement, transition, and progression for LSND, implementation gaps remain. HoIs perceive systems more positively than teachers, but both acknowledge challenges related to resources, assessment capacity, parental awareness, and clarity of guidelines. Importantly, learners themselves report meaningful personal growth and skill development through schooling. Strengthening assessment systems, building stakeholder capacity, enhancing parental engagement, clarifying progression pathways (especially vocational routes), and investing in resources will be critical to ensuring that CBC fully realizes its inclusive vision for learners with special needs and disabilities.

Recommendations

1. KICD should develop audio visual resources for Kenyan Sign Language, Sign language Books, Braille supplementary books, easy to read books, and teachers' handbooks for different levels of the stage-based pathway in order to support accessible learning for learners with special needs and disabilities.
2. KICD in collaboration with other relevant stakeholders, to organise structured orientation programmes, coaching and mentorship programmes, for teachers on interpretation of the curriculum designs, the effective use of digital content and assistive technologies in Special Needs Education schools, units and integrated programmes.
3. KICD in collaboration with other relevant stakeholders to provide regular capacity building and professional training for teachers, caregivers and auxiliary staff to enhance their competence in supporting learners with special needs and disabilities.
4. MoE, TSC and other relevant stakeholders to recruit and deploy additional SNE-trained teachers, learner support assistants and other specialists to provide learner support.
5. KICD in collaboration with other relevant stakeholders to enhance Pre-service and In-service training to address special education realities by strengthening practicum experiences, disability-specific communication skills, curriculum adaptation competencies and vocational instruction skills.
6. MoE to expand and maintain physical and technological infrastructure in special schools and units to accommodate the diverse needs of learners.
7. MoE in collaboration with stakeholders to enhance avenues for talent identification, development and exposure for LSND.

8. KICD to develop and disseminate parental empowerment programmes on disability awareness and interventions to strengthen their role in the learning process of their children.
9. MoE and relevant agencies should strengthen learner assessment and placement systems by standardizing procedures, equipping centers with appropriate technologies, and deploying professionals to ensure accurate and timely placement.
10. KICD in collaboration with relevant agencies to conduct a study on implementation of CBE of LSND at Senior School and Vocational levels of education.
11. KICD in collaboration with relevant agencies to enhance implementation of value-based education for learners in SNE schools and units to strengthen character formation and nurturing of ethical citizens.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This chapter introduces the study on monitoring the status of implementation of the Competency Based Curriculum (CBC) in Special Needs Education (SNE) Schools and Units across Kenya. It provides background information on the CBC framework and its relevance to special needs education. The chapter further outlines the study context and articulates the rationale for undertaking this monitoring exercise. In addition, the chapter presents the objectives formulated for the study and defines its scope, highlighting the focus on assessing progress, identifying challenges, and documenting best practices in the implementation of CBC within special needs institutions.

1.2 Context of the Study

Education is a fundamental human right and a key driver of sustainable development, social cohesion, and economic transformation. The UNESCO Education 2030 Framework for Action calls on governments to ensure inclusive, equitable, and quality education while promoting lifelong learning opportunities for all, particularly for vulnerable and marginalized groups such as children with disabilities, girls, and learners from disadvantaged backgrounds. This right is articulated in Article 26 of the Universal Declaration of Human Rights and reinforced in Articles 13 and 14 of the International Covenant on Economic, Social and Cultural Rights. It is further strengthened by the Convention on the Rights of Persons with Disabilities and the Convention on the Rights of the Child (Articles 23, 28, and 29), which emphasise inclusive education and the full development of every learner. These commitments are operationalized through Sustainable Development Goal 4 of the United Nations, which seeks to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

The African disability Protocol (2018) reaffirms the responsibility of governments to provide reasonable, progressive and effective support measures to maximise academic and social development of persons with disabilities. The protocol also requires states to ensure educational institutions are equipped with the teaching and learning materials to support diverse educational needs of learners with disabilities.

Kenya has made notable strides in embedding Special Needs Education (SNE) within the CBC through the ratification of international and regional conventions and frameworks that promote inclusive

education. These reforms are firmly anchored in principles of inclusivity, equity, and learner-centred approaches. The Constitution of Kenya 2010, Article 43, (1)(f), guarantees the right to education of every child; further, Article 53, (1) (b) affirms to free and compulsory basic education while Article 54, (1) (b) stresses access to educational institutions and facilities for persons with disabilities that are integrated into society to the extent compatible with the interests of the person; regardless of disability.

The National Competency Based Education and Training Policy further reinforces this commitment by outlining a shift from objective-based learning to the demonstrable acquisition of competencies. The policy emphasizes flexible learning pathways, recognition of prior learning, and the promotion of lifelong learning. Within the CBC, emphasis is placed on ensuring that every learner is provided with an opportunity to learn, including learners with special needs and disabilities. These reforms therefore reflect a deliberate effort to enhance inclusivity, equity, relevance, flexibility, and adaptability within the education system, ensuring that the curriculum responds effectively to the diverse needs of learners and the evolving demands of society.

The curriculum for learners and trainees with special needs and disabilities is conceptualized in the Basic Education Curriculum Framework (KICD, 2017). The BECF outlines clear provisions for an inclusive curriculum that is responsive to the needs of all learners. This is in line with the guiding principles outlined in the BECF which are diversity and inclusion as well as differentiated curriculum and learning. These principles ensure that curriculum content, instructional approaches, and learning resources are adapted to address the diverse needs of all learners, including those with disabilities, thereby promoting equitable access to meaningful learning opportunities.

The BECF provides curriculum for learners with special needs and disabilities who follow the regular curriculum (age-based) pathway with adaptations. Further, the framework outlines the curriculum provisions for learners who follow the staged-based pathway (KICD, 2017).

The SNE curriculum model illustrated in Figure 1 indicates curriculum provision for learners with special needs and disabilities.

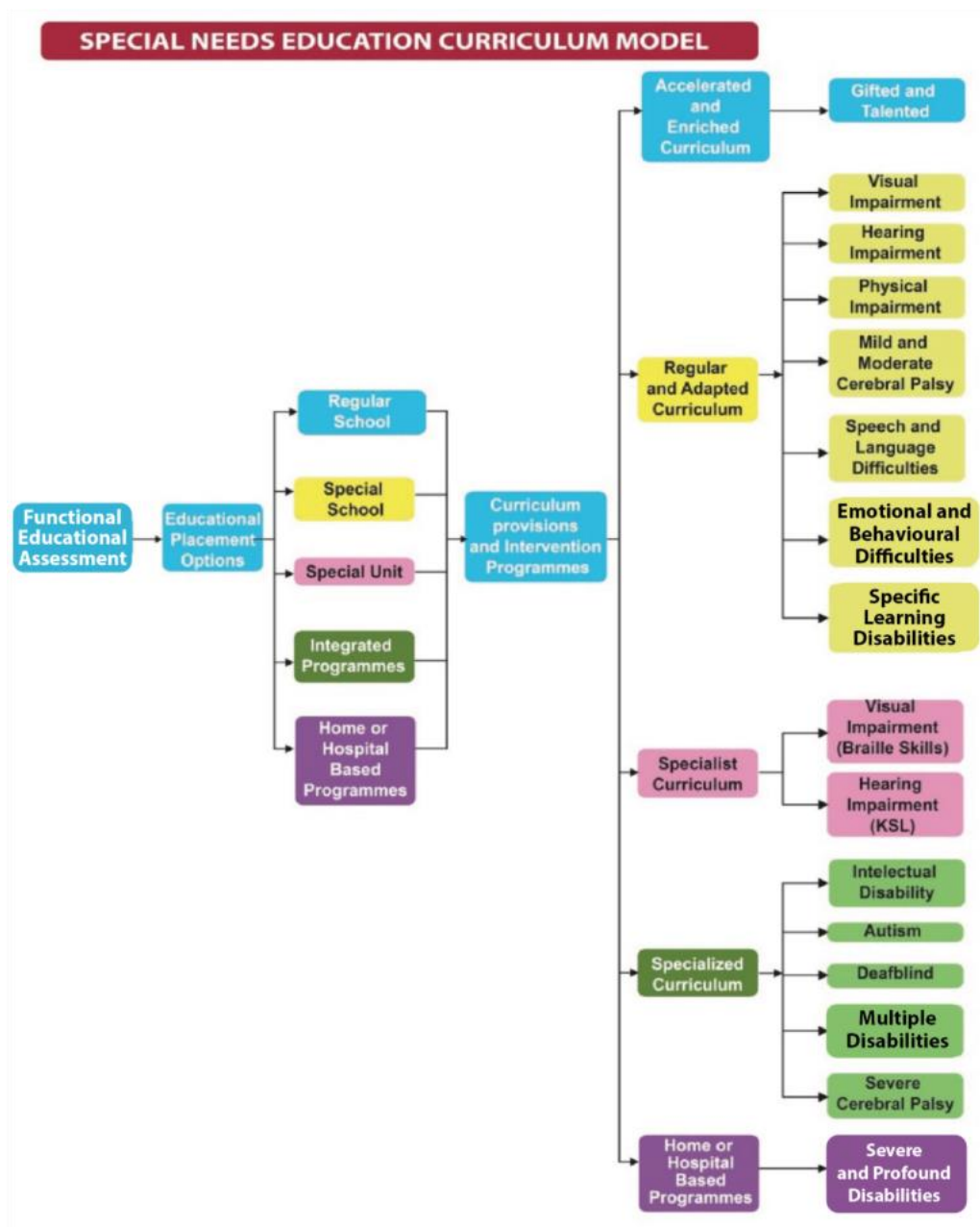


Figure 1: *Special Needs Education Curriculum Model*

According to the SNE curriculum model illustrated in Figure 1, the regular curriculum is primarily designed for typical learners but may be adapted to meet the needs of specific categories of learners with special needs. An adapted curriculum refers to modifications made to the regular curriculum to address the learning needs of learners with Visual Impairment (VI), Physical Impairment (PI), and Hearing Impairment (HI). The framework also provides a specialized curriculum designed for learners whose needs cannot be adequately addressed through the regular curriculum. This curriculum follows the stage-based pathway and targets learners with severe intellectual disability and developmental disabilities, deafblindness, severe autism, severe cerebral palsy, and multiple disabilities.

In addition, the framework provides specialist curriculum components that support learners with special needs to effectively access the curriculum. These include braille skills for learners with visual impairment and Kenyan Sign Language for learners with hearing impairment. The framework further provides enriched and accelerated programmes to extend learning opportunities for learners who are gifted and talented by advancing curriculum content, learning resources, and assessment. Intervention programmes are also included to guide teachers in supporting learners who require educational intervention such as those with specific learning disabilities and those with emotional and behavioural disorders. Furthermore, the framework outlines home- and hospital-based education programmes to guide teachers, parents, and caregivers in providing appropriate learning support and care for learners with severe and profound disabilities.

To date, KICD has developed and adapted curriculum and curriculum support materials for learners with VI, PI and HI in Grades 4 to 10. In addition, it has developed Interactive Digital Content (IDC) for Grades 1 to 6, as well as for the Foundation, Intermediate, and Pre-vocational levels for learners following the stage-based pathway. Further, the Institute with support of development partners has also developed and adapted Language Activities books for learners with Visual and Hearing Impairments in Grades 1 to 3.

A coordinated multi-agency approach has been adopted to strengthen teachers' capacity in implementing the SNE curriculum, focusing on inclusive pedagogical strategies and the use of Individualised Education Programmes (IEPs). These IEPs are designed to provide learners with tailored support that addresses their unique needs and learning trajectories. Such individualized approaches enable learners to acquire competencies at a pace aligned with their abilities, thereby fostering meaningful participation in both academic and social contexts.

Considering the foregoing, it is evident that despite the efforts by the MoE and KICD to implement the SNE curriculum, many learners with special needs and disabilities continue to face challenges that limit their access to equitable and inclusive quality education. In response, the Presidential Working Party on Education Reform (PWPER) (GOK,2023) emphasized strengthening the implementation of the CBC in SNE schools and units. The report highlights the need to adapt curricula to diverse learner needs, strengthen teacher capacity through professional development, and increase investment in accessible infrastructure, assistive technologies, and specialized learning materials. It further underscores the importance of continuous monitoring, evaluation, and collaboration among key stakeholders to ensure effective and sustainable implementation of inclusive education.

1.3 Statement of Need

The introduction of the CBC emphasises inclusive education and the holistic development of all learners, including those with special needs and disabilities. Successful implementation in special schools and units, however, depends on the availability of suitable curriculum that meets the unique needs of learners with special needs and disabilities. In addition, specialised curriculum support materials, well-trained teachers, appropriate infrastructure with assistive technologies, sufficient support personnel, and strong collaboration between schools, parents and other stakeholders.

Since the rollout of CBC in 2018, KICD has been undertaking annual monitoring of the curriculum implementation, including aspects related to SNE. However, the scope of these monitoring activities have been limited there has been no comprehensive evaluation specifically focusing on how CBC is being implemented in special schools and units. As a result, there remains insufficient evidence whether the curriculum adequately addresses the unique needs of learners with special needs and disabilities within the learning environments. This gap may limit the effectiveness for curriculum implementation and hinder realisation of equitable learning outcomes of this group of learners.

Learners with special needs require specialized teaching strategies, assistive resources and structured support systems to participate meaningfully and progress within the education system. In the absence of adequate teacher capacity, accessible infrastructure and coordinated support services the goals of inclusive education and competency development may not be fully achieved.

This underscores the need for a systematic monitoring and evaluation of the preparedness and capacity of special schools and units to implement CBC. Such monitoring and evaluation would help identify gaps, and generate evidence to inform policy decisions, guide resource allocation, and support targeted interventions aimed at improving access, participation and progression for learners with special needs and disabilities.

1.4 Objectives of the Study

The objectives of the study were to;

- a) assess the availability and adequacy of adapted curriculum designs, curriculum support materials, and Interactive Digital Content,
- b) evaluate the capacity of teachers to effectively deliver the curriculum,
- c) determine the adequacy and suitability of infrastructure, teaching staff, auxiliary personnel, and support services,

- d) establish the extent to which strategies exist for identifying, nurturing, and supporting the talents of learners with special needs and disabilities,
- e) assess the level of parental empowerment and engagement in supporting their children's education,
- f) determine the effectiveness of learner placement, transition, and progression across different education levels and pathways under CBC.

1.4 Scope of the Study

This study is designed to assess the status of CBC implementation across all forty-seven counties of Kenya, with particular attention to SNE schools, integrated programs, and regular schools hosting special units. Its aim is to examine the extent to which the curriculum is being implemented in different SNE settings and to provide comprehensive insights into the extent to which the CBC framework has been adopted and operationalized for learners with special needs. The study highlights comprehensive insights into prevailing practices, notable achievements, and persisting challenges, thereby informing strategies to strengthen inclusive, equitable, and effective curriculum delivery for learners with special needs.

In addition, the study involves key education stakeholders, including heads of institutions (HoIs), SNE teachers, and field officers such as SNE Curriculum Support Officers (CSO) and Quality Assurance and Standards Officers (QASO). Their participation provides both institutional and supervisory perspectives on the implementation of the CBC, enabling a comprehensive assessment of how the curriculum is being delivered in practice. This engagement helps to identify existing strengths, emerging best practices, and areas that require improvement to enhance effective and inclusive implementation.

The study examines key aspects of CBC implementation for learners with special needs and disabilities, including the availability and adequacy of adapted curricula and curriculum support materials, as well as the capacity of teachers to deliver the curriculum effectively and responsively. It also evaluates the adequacy and suitability of school infrastructure, the availability of qualified teaching staff and auxiliary personnel and the provision of essential support services to facilitate inclusive learning. Additionally, the study explores strategies for identifying, nurturing, and supporting learners' talents, assesses the level of parental empowerment and engagement in their children's education and examines the effectiveness of learner placement, transition and progression across different education levels and pathways to determine how well the system promotes continuity, inclusion and successful learning outcomes under the CBC framework.

1.5 Rationale of the Study

The Government of Kenya, through the Ministry of Education, began implementing the CBC in 2017; however, its rollout faced numerous challenges, including curriculum overlaps, low parental engagement, inadequate infrastructure and learning resources, and limited teacher capacity. In response to these challenges, the Presidential Working Party on Education Reform was established in 2022 to address the issues encountered during implementation. Its key recommendations underscored the need for rationalization of learning areas and the enhancement of teacher capacity.

The study is anchored in the imperative need to uphold inclusivity, equity, and excellence within the education system. While the CBC emphasizes learner-centered approaches, its effectiveness for learners with special needs requires systematic assessment. It will provide evidence on the extent of adoption, highlight best practices, and identify gaps in teacher preparedness, resource allocation, and learner outcomes. These insights are critical for informing policy development, shaping targeted interventions, and ensuring that learners with diverse needs derive maximum benefit from the Competency-Based Curriculum framework. Identified evidence-based interventions are crucial for improving learning outcomes and promoting inclusive education.

Despite various interventions by the MoE, through the KICD and other relevant agencies to enhance access, equity, and the relevance of education, significant gaps persist in the effective delivery of SNE. Challenges remain in the implementation of the CBC within SNE schools and units, highlighting the need for continued reforms, improved resource allocation, and sustained teacher capacity building.

There are significant gaps in the provision and implementation of adapted curricula, specialized learning materials, and assistive technologies for learners with disabilities. Transition pathways remain weak, limiting progression across education levels. Teachers also face challenges in applying learner-centered approaches, adapting resources, preparing professional documents, and communicating effectively using sign language, braille, and other alternative modes.

Inadequate infrastructure in many special schools and units limits effective implementation, while parental and community involvement remains low. Enrolment disparities persist, CBC implementation at various levels is inconsistent across counties, and placement decisions are often inappropriate. There is also a shortage of specialized teachers, support staff, and essential services such as therapists and interpreters. These challenges hinder the realization of inclusive and equitable education for learners with special needs and disabilities.

KICD recognizes the critical role of research in enhancing curriculum development and effective implementation for learners with special needs. In this context, a comprehensive and systematic study

is essential to assess the status of the CBC implementation in special schools and units across Kenya. Such a study will provide robust evidence on the challenges, successes, and gaps in the current system, thereby informing targeted policy decisions, guiding practical interventions, and strengthening the overall quality, relevance, and inclusivity of education for learners with diverse needs.

1.6 Chapter Summary

This chapter provides the basis for understanding the significance of monitoring and evaluation of CBC implementation in special schools and units in Kenya. It outlines past and ongoing initiatives while identifying challenges that hinder effective curriculum delivery in special schools and units. In doing so, it provides a structured analysis for developing intervention strategies aimed at strengthening inclusivity and equity in curriculum implementation. The chapter further serves as a prelude to the literature review, which expands upon these themes and offers deeper analysis in subsequent sections of the report.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

2.1 Introduction

This chapter provides a comprehensive review of the literature relevant to the study. It begins by defining key concepts as presented by various scholars. The chapter then explores the theoretical frameworks underpinning the study, with particular emphasis on their core principles and relevance to Special Needs Education (SNE). It further examines the policy, legal, and regulatory frameworks that guide the implementation of SNE. In addition, the chapter presents a review of empirical studies organised according to the study's objectives. The chapter concludes by highlighting key issues emerging from the literature and providing a summary of the main insights.

2.2 Definitions of key concepts

This sub-section outlines and defines the key concepts that guide the study. These concepts relate to SNE in Kenya.

Accessibility: Refers to ensuring that persons with disabilities have access, on an equal basis with others, to the physical environment, transportation, information and communications, including information and communications technologies and systems and other facilities and services open or provided to the public, both in urban and in rural areas. It implies that any place, space, item or service, whether physical or virtual, is easily approached, reached, entered, exited, interacted with, understood or otherwise used by persons of varying disabilities (UNCRPD, 2006).

Adaptation: This refers to the physical changes that can be made at home, school or any other context to meet a health or disability need. It includes altering the physical environment, activities and resources to suit the individual needs of children with disabilities and those with special needs. Adaptations can also include modifications and accommodations (UNHCR, 2024).

Adaptation of Curriculum: The adjustment to or modification of the curriculum to accommodate the learning requirements of learners with special educational needs in areas which cannot be accessed despite assistive aids and additional learning materials (KICD, 2017).

Assistive Devices: Tools and equipments that help a person with a disability perform tasks they would otherwise find difficult, improving independence and participation. Often considered part of a broader Assistive Technology framework (Cook & Hussey, 2002).

Assistive Technology: A broad field encompassing devices, services, and strategies designed to enhance functional abilities and participation for people with disabilities. Includes both hardware/software and the support processes needed to use them effectively (Cook & Hussey, 2002).

Disability: Disability is a physical, mental, intellectual, or sensory condition that limits an individual's ability to perform daily activities or interact with their environment, arising from the interaction between health conditions and contextual barriers (WHO, 2001).

Disability Inclusion: Refers to the meaningful participation of persons with disabilities in all their diversity, the promotion of their rights and the consideration of disability-related perspectives, in compliance with the Convention on the Rights of Persons with Disabilities. It involves adjusting the home, school and the larger society to accommodate persons with disabilities and those with special needs. Regardless of their differences, all individuals can interact, play, learn, work, and experience the feeling of belonging (UN Inclusion Strategy, 2019).

Disorder: Refers to a clinically significant disruption in an individual's cognition, emotional regulation, or behaviour. It may also result from an illness that impairs the normal functioning of a body system. Such conditions are typically characterized by irregular behaviours or physiological patterns, persistent or intense distress, and disruptions in psychological or physical functioning (APA dictionary of Psychology, 2018; WHO, 2022).

Inclusion: Philosophy which focuses on the process of adjusting home, school, and society so that all the individuals, regardless of their differences, can have the opportunity to interact, play, learn, work and experience the feeling of belonging, and experiment to develop in accordance with their potentials and difficulties (MoE, 2018).

Inclusive Education: An approach where learners and trainees with disabilities are provided with appropriate educational interventions within regular institutions of learning with reasonable accommodations and support (MoE, 2018).

Impairment: Impairment is any loss or abnormality of psychological, physiological, or anatomical structure or function (WHO, 2001).

Individualised Education Programme (IEP): A legally binding plan for a student with a disability that specifies present levels of performance, annual goals, related services, support, accommodations and how the student will participate in general education (Individuals with Disabilities Education Act, 2004).

Integration: The process of placing learners with disabilities into mainstream education settings for part or all day, with support as needed (Ainscow, 1999; UNESCO, 1994).

Inclusive practices: Refer to strategies, policies and behaviours that ensure individuals of all backgrounds, abilities, and identities are valued, respected and provided with equal opportunities to participate and succeed (Grossman, 2024).

Learners with special needs: Learners with disabilities are individuals with long-term physical, sensory, intellectual, or mental impairments that substantially limit their participation in education and everyday activities. Their learning is supported through accessibility measures, assistive technologies, adapted curricula, and inclusive policies designed to remove barriers and ensure equitable access to quality education (Ministry of Education, 2018).

Learners with disabilities: Learners with special needs are children who require additional educational support because of physical, cognitive, emotional, or social challenges that affect their ability to learn in a conventional classroom setting. This group includes those with learning difficulties, developmental delays, or exceptional abilities, and they benefit from individualized instruction, specialized resources, and inclusive practices to ensure equitable participation in education (UNESCO, 2017).

Special needs: Refers to conditions that require additional educational, medical, or social support to help individuals achieve their potential. These may include learning difficulties, developmental delays, emotional or behavioural challenges, or exceptional abilities. In education, the term highlights the need for tailored interventions and inclusive practices to ensure equitable participation and achievement (UNESCO, 2017).

Parental empowerment: Refers to equipping parents with the knowledge, skills, confidence, and resources they need to actively participate in and influence their child's learning journey (KISE, 2023).

Parental engagement: Refers to a collaborative relationship among families, schools and the wider community. It involves raising parents' awareness on the value of their participation in their children's education and equipping them with the necessary skills to support learning effectively (Cherui and Kipkenei, 2025).

Reasonable accommodation: Refers to the necessary and appropriate modifications or adjustments made, without imposing a disproportionate or undue burden, to ensure that persons with disabilities can fully enjoy and exercise all human rights and fundamental freedoms on an equal basis with others.

Its purpose is to remove barriers and create inclusive environments in homes, schools, workplaces, and society at large (UNCRPD, 2006).

Specialised Curriculum: Curricular content and design adapted or created to meet the learning needs of students with disabilities, ensuring accessibility, appropriate pacing, and progression (Booth & Ainscow, 2002; UNESCO, 1994).

Specialist Curriculum: A curriculum that is entirely different from the regular curriculum but is meant to support implementation of the regular curriculum (MoE, 2018).

Sensory Integration: A subject that involves the process of learning the skills of organisation, identification, and interpretation of sensory information to enable an individual to understand their environment (KICD, 2017).

Segregation: This refers to a state or action of setting someone apart from others. The act by which a (natural or legal) person separates other persons based on race, colour, language, religion, nationality or national or ethnic origin without an objective and reasonable justification (ECRI, 2021).

Education Officers:

Education Officers are government-appointed officials within the Ministry of Education who oversee, supervise, and support the implementation of education programs and policies in schools. Education Officers provide technical guidance, monitor curriculum delivery, and support teachers and schools in achieving learning outcomes. They include:

- i) **Sub-County Education Officers (SCEOs):** Responsible for supervising schools at the sub-county level, ensuring curriculum standards are adhered to, and supporting teacher development.
- ii) **County Education Officers (CEOs):** Coordinate education administration at the county level, oversee resource allocation, and ensure effective implementation of CBC policies across schools.
- iii) **Curriculum Support Officers (CSOs):** Provide specialized guidance and training to teachers on curriculum delivery, assessment methods, and pedagogical innovations.
- iv) **Quality Assurance and Standards Officers (QASOs):** Monitor school performance, assess teaching and learning quality, and ensure compliance with national education standards.

Interactive Digital Content (IDC) refers to digital learning materials delivered through multimedia formats such as videos, animations, simulations, digital quizzes, virtual laboratories, educational games, and interactive presentations that enable learners to actively engage with learning content (Susiani, 2025)

2.3 Review of related theories

This section reviews the key theories that inform and support the study. These theories guide teachers in designing interventions, pedagogical strategies and inclusive learning environments that respond effectively to diverse learner needs. The theories discussed in this study include: Behaviourist theories, Cognitive theories, Constructivist theories, Theory of Multiple Intelligences, Humanistic theories and Universal Design for Learning (UDL).

2.3.1 Behaviourist Theory

Behaviourism, rooted in the work of B.F. Skinner and Ivan Pavlov, emphasizes learning through stimulus-response associations strengthened by reinforcement. Within Special Needs Education (SNE), these principles underpin behaviour modification programmes, including positive reinforcement, token economies, and structured routines. A prominent application is Applied Behaviour Analysis (ABA), which applies behaviourist principles to understand and modify behaviour. Research demonstrates that ABA interventions are effective in reducing barriers to learning and improving social and academic outcomes for learners with autism spectrum disorder. For example, Anderson and Carr (2021) reviewed meta-analyses and systematic studies confirming ABA's effectiveness in supporting autistic learners, while Pitts (2020) documented the successful integration of ABA in the United Kingdom (UK) special schools, showing improvements in socially significant behaviours and educational participation. These findings affirm that behaviourist approaches, particularly ABA, remain central to evidence-based practice in SNE (Anderson & Carr, 2021; Pitts, 2020).

2.3.2 Cognitive Theory

Jean Piaget's Cognitive Development Theory emphasizes that children progress through distinct stages of cognitive growth, therefore learning activities should align with their developmental level rather than chronological age (Piaget, 1952). In SNE, this principle informs the use of concrete learning materials, structured skill progression, and individualized pacing. Research demonstrates that Piagetian approaches help teachers adapt strategies to the cognitive levels of learners with diverse needs. For instance, Zamfirov (2019) showed that applying Piaget's developmental tasks enables educators to design individualized programs for learners with special educational needs, while Shukri and Toran (2020) highlighted how Piaget's theory guides teaching strategies in Malaysian special education classrooms, ensuring instruction is developmentally appropriate. These findings confirm that Piaget's framework remains relevant for tailoring pedagogy in SNE.

2.3.3 Social Constructivist Theory

Lev Vygotsky's Social Constructivist Theory emphasizes the role of social interaction in learning, particularly through the Zone of Proximal Development (ZPD), where learners accomplish more with guidance than independently (Vygotsky, 1978). In SNE, this has informed practices such as scaffolding, peer tutoring, and cooperative learning, which enhance participation and skill acquisition. Gindis (1995) demonstrated how Vygotsky's paradigm supports special education by framing disability as a social construct, while Rodina (2007) highlighted the practical implementation of Vygotskian principles in inclusive preschool education, showing that guided instruction fosters inclusion and developmental progress. These findings affirm the relevance of Vygotsky's theory in shaping inclusive pedagogy for learners with special needs.

2.3.4 Multiple Intelligence Theory

Howard Gardner's Theory of Multiple Intelligences broadens the concept of intelligence beyond linguistic and logical skills, identifying diverse intelligences such as musical, bodily-kinesthetics, and interpersonal abilities (Gardner, 1983). In SNE, this theory supports a strength-based approach, encouraging teachers to differentiate instruction and provide varied learning opportunities that recognize and nurture learners' unique abilities. Nordin et al. (2024) demonstrated that applying multiple intelligences in teaching learners with visual impairments enhances engagement and achievement, while Altani (2020) argued that the framework offers a pathway for renewing inclusive education by valuing diverse learner strengths. These findings highlight how Gardner's theory informs inclusive pedagogy in SNE.

2.3.5 Humanistic Theory

Abraham Maslow's Humanistic Theory emphasizes meeting learners' basic and psychological needs as a foundation for effective learning, highlighting safety, belonging, and self-esteem as prerequisites for self-actualization (Maslow, 1943). In SNE, this framework supports the creation of safe and nurturing classroom environments and informs the development of Individualized Education Programs (IEPs) that address both academic and socio-emotional needs. Woolfolk (2019) notes that Maslow's hierarchy guides teachers in prioritizing learners' emotional security before academic instruction, while McLeod (2020) illustrates how addressing belonging and esteem needs enhances inclusion and participation for learners with disabilities. These findings underscore the relevance of Maslow's theory in shaping holistic SNE practices.

2.3.6 Ecological Systems Theory

Urie Bronfenbrenner's Ecological Systems Theory views child development as influenced by interconnected systems, from immediate family and school to broader community and societal structures (Bronfenbrenner, 1979). In SNE, this framework supports holistic interventions by encouraging collaboration among teachers, parents, therapists, and the community. Walker (2016) demonstrated how Bronfenbrenner's model can be used to design support systems for learners with special needs, ensuring that interventions address multiple ecological layers, while cultural studies such as Special Education Needs Coordinator (2023) highlight that ecological awareness helps educators understand how cultural and community contexts shape learners' challenges and achievements. These findings show that SNE practices informed by Bronfenbrenner's theory promote inclusion by recognizing the complex interplay of environmental, social, and cultural factors.

2.3.7: Universal Design for Learning

The framework of Universal Design for Learning (UDL), developed by the Center for Applied Special Technology (CAST), emphasizes designing curricula from the onset to accommodate diverse learners (CAST, 2018). By promoting multiple means of representation, engagement, and expression, UDL enables learners to access content and demonstrate knowledge in ways that reflect their strengths. In SNE, this proactive approach informs inclusive curriculum reforms and classroom practices. Rao et al. (2014) found that UDL principles improve access and participation for students with disabilities in higher education, while Al-Azawei et al. (2016) demonstrated that UDL fosters equity and flexibility in diverse learning environments. These findings highlight UDL's role in shaping instructional design, assessment, and learner support systems within inclusive education.

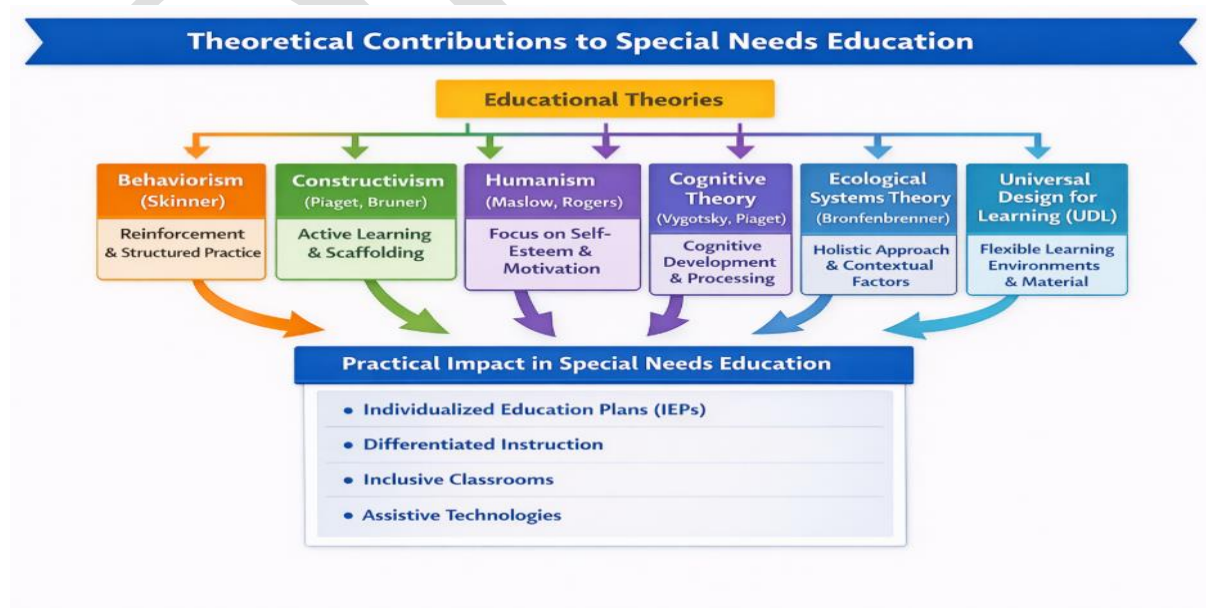


Figure 2: *Theoretical contributions to Special Needs Education*

2.3.8 Social Model of Disability

The social model reframes disability as an outcome of how schools are organized rather than an individual deficit. In practice, this means removing barriers across three domains: organizational (IEP processes, accessible communications, timely accommodations and inclusive planning), physical (accessible buildings and learning spaces, transport, and classroom design) and attitudinal (high expectations, respectful language and genuine student participation in decisions). Inclusive education then relies on universal design for learning, multiple means of representation and assessment and flexible supports (assistive technology, co-teaching, peer supports and adapted materials) so students with disabilities can learn alongside peers. An IEP becomes a tool to identify and erase barriers, not merely to provide services, ensuring equal access to general education and meaningful participation. Effective implementation requires strong leadership, policy alignment and ongoing collaboration among teachers, families and specialists, as well as continuous progress monitoring to adjust practices. This shift moves away from fixing the student toward transforming the environment to enable participation, belonging and equitable academic and social outcomes (Oliver, 1983).

2.4 Review of relevant policy documents

Global Frameworks: The Universal Declaration of Human Rights frames education as a universal, inalienable right, with Article 26 guaranteeing free and compulsory elementary education and merit-based access to higher education intended to foster the full development of the human personality while respecting human rights and fundamental freedoms; Article 2 reinforces equality and non-discrimination “without distinction of any kind,” including disability, thus providing a rights-based justification for equal educational opportunities. Article 26(3) also protects parents’ prerogatives from choosing the kind of education for their children, which has implications for decisions about special education or inclusive settings.

This is further elaborated in the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The CRPD (2006) is an international human rights treaty that promotes, protects and ensures the full and equal enjoyment of all human rights by persons with disabilities, marking a shift from viewing disability as a medical issue to understanding it as a matter of human rights and social inclusion. Article 24 addresses education and requires State parties to ensure inclusive education at all levels from early childhood through primary, secondary, tertiary and lifelong learning. Therefore, learners with disabilities are not excluded from the general education system based on disability. Inclusion must go beyond mere physical placement to ensure meaningful participation and achievement.

Additionally, the Salamanca Statement and Framework for Action on Special Needs Education (1994) asserts that education is a universal right and that governments must ensure access to regular schooling for all children, including those with disabilities or special needs, with the necessary support. It endorses inclusive education as the norm, urging reforms to transform regular schools into inclusive institutions by removing barriers such as architectural, curricular and attitudinal by providing flexible curricula, diverse teaching approaches, assistive technologies, and accessible facilities. The framework calls for early identification, fair and timely assessment and placement and progression based on ability rather than disability, with adequate resources and specialist support where needed. It emphasizes the need for well-trained teachers and ongoing professional development, as well as the deployment of support personnel such as special educators and therapists. Parental and community involvement in planning and decision-making is highlighted, along with coordinated action across education, health and social services and sufficient financing. It also frames inclusive education as a core human right with social and economic benefits and urges international cooperation to share best practices and resources to sustain these reforms.

The Sustainable Development Goal (SDG) No. 4 outlines provisions to ensure inclusive, equitable, high-quality education and lifelong learning opportunities for all, with disability inclusion embedded across access, learning environments and outcomes. In its target, it aims to eliminate disparities and ensure equal access for vulnerable groups, including persons with disabilities. Disability-specific implementation outlines building inclusive, disability-sensitive educational facilities and safe, non-violent learning environments, providing scholarships and opportunities to support students from developing countries, increased supply of qualified teachers through training and recruitment and promoting international cooperation to improve education systems with disability inclusion. Key mechanisms to achieve inclusion encompass universal design for learning, accessible materials, sign language and assistive technology, inclusive pedagogy and reasonable accommodations with ongoing progress monitoring and the collection of disability-disaggregated data to track progress and inform policy.

Regional Frameworks: The African Charter on the Rights and Welfare of the Child Article 13 stipulates that every child with mental or physical disabilities shall have the right to special measures of protection that respect the child's dignity, promote self-reliance and enable active participation in the community. It obliges States parties, subject to available resources, to help the child with disabilities and their caretakers, including access to education-related training, preparation for employment and recreation opportunities aimed at achieving the fullest social integration and

individual development. Additionally, it directs States to progressively ensure greater movement and access to public facilities for persons with disabilities.

The Eastern and Southern African Protocol on Education and Training obliges member states to promote inclusive education and to integrate special needs education into national systems, mandating policies, curricula and practices that are accessible and responsive to learners with disabilities, along with the provision of essential resources, teacher training and support services. It calls for accessible infrastructure and learning materials, including assistive devices and alternative communication methods such as sign language and Braille, and requires adaptive assessment and flexible learning pathways to enable meaningful participation and progression toward higher education and employment, all within a framework of equity, non-discrimination, and shared regional cooperation.

National Frameworks (Kenya): The Constitution of Kenya, 2010 enshrines education as a fundamental right and a cornerstone of national development, with Article 43(1)(f) affirming the right to education and Article 53(1)(b) guaranteeing free and compulsory basic education for every child, while Article 21 obligates the State to respect, protect, promote and fulfil rights including education. In the reform era, the Competency-Based Education (CBE) framework operationalizes these guarantees by prioritizing learner-centred pedagogy, differentiated instruction, continuous assessment and flexible pathways that accommodate diverse abilities and needs. SNE is an integral part of this framework, requiring inclusive systems with appropriate accommodations, assistive devices, specialized personnel and adapted learning materials for learners with physical, sensory, intellectual, developmental or multiple disabilities. Article 55 further obligates access to relevant education and training for youth, collectively forging a constitutional vision of an inclusive, competency-driven education system that promotes social justice, equity and national transformation, underpinned by ongoing emphasis on inclusion, non-discrimination, curriculum adaptation, teacher preparation and supportive learning environments.

The Basic Education Act (2013) operationalizes these constitutional provisions within the education sector. It underscores inclusion, equity and access for all learners, including those with special needs and disabilities. The Act requires the government and education providers to make reasonable adaptations in infrastructure, curriculum delivery, assessment procedures and instructional materials to cater for diverse learning needs. It further promotes the integration of learners with disabilities into regular schools where appropriate, supported by specialized services and trained personnel.

Kenya's Sector Policy for Learners and Trainees with Disabilities (2018) provides a comprehensive, rights-based framework for inclusive education across 14 thematic areas that include assessment and

early intervention, access to quality education, safe barrier-free learning environments, specialized learning resources and assistive technology, capacity building, public participation, advocacy and awareness, equity and gender mainstreaming, differentiated curriculum and assessment, financing and sustainability, partnerships and coordination, research and data management, inclusive disaster preparedness and mentorship/national values. It mandates early identification and multidisciplinary assessment through Education Assessment and Resource Centres (EARCs), strengthened data systems and active involvement of families and communities, while aiming to enhance access, retention, progression and transition to higher education or employment. It requires accessible materials, assistive devices and ICT integration, plus qualified staff and inclusive pedagogy and promotes participation of learners with disabilities in governance and co-curricular activities, affirmative action and gender-sensitive resource allocation. It also calls for sustainable financing, cross-sector partnerships, continuous monitoring, evaluation and policy revision to ensure universal, high-quality education for all learners with disabilities.

A more focused policy direction is provided by the National Special Needs Education Policy Framework (MoE, 2009). This framework defines Special Needs Education broadly to include modifications in curriculum, teaching strategies, communication methods such as Braille and Kenyan Sign Language, assistive devices, and the learning environment. It promotes inclusive education as a key strategy while recognizing the continued role of special schools and specialized units. The policy outlines strategic interventions such as capacity building for teachers, early identification and assessment of learners with special needs, provision of adapted learning materials, and strengthened collaboration among stakeholders including parents, communities and development partners.

Further reinforcement is found in Sessional Paper No. 1, of 2019 which presents a comprehensive framework for reforming education and training in Kenya. This policy aligns Special Needs Education with broader national goals of sustainable development and CBE. It reaffirms the importance of inclusive practices, flexible curricula, learner-centered pedagogies and supportive learning environments. The Sessional Paper recognizes the need for systemic reforms to ensure that learners with special needs are fully integrated into the education system and benefit equitably from ongoing curriculum reforms.

The Basic Education Curriculum Framework (KICD, 2017) endorses an inclusive education approach in basic education, stressing early identification and support for learners with special needs within mainstream classrooms, along with differentiated and flexible teaching and assessment practices. It calls for accessible learning environments, including assistive technologies and emphasizes teacher professional development in inclusive pedagogy. It also recommends active collaboration with

families and provision of learning support services to ensure participation, progression and equitable outcomes for students with disabilities or other special needs.

More recent recommendations on SNE emanate from the Presidential Working Party on Education Reforms (2023) which outlines a system-wide push for equity and inclusion, including integrating SNE into universal basic education. It advocates early identification and intervention, expanded resources for SNE such as trained personnel and assistive devices, inclusive curricula and assessment. It also stipulated the provision of accessible school infrastructure and strengthened governance, funding and data systems to monitor progress. The goal is mainstreaming SNE while providing targeted support such as learning support units, trained staff to ensure equal access to quality education for learners with disabilities.

Moreover, the persons with Disabilities Act (2025) establishes inclusive education by prohibiting denial of admission to a person with a disability based on disability if they can acquire substantial learning in a course. It requires learning institutions to consider the special needs of persons with disabilities in entry requirements, pass marks, curriculum, examinations, auxiliary services, use of school facilities, class schedules, physical education and similar considerations. It calls for the establishment of special schools and institutions, especially for learners who are deaf, blind and those with intellectual disabilities, to provide formal education, skills development and self-reliance. The Council, in consultation with relevant government agencies, should develop provisions in all counties for an integrated system of special and non-formal education for persons with all forms of disabilities and, where possible, establish Braille and recorded libraries for persons with visual disabilities.

Conclusion on policy fit: The policy frameworks outlined demonstrate strong alignment between global commitments (the Salamanca Statement, UNCRPD, the African Charter and the ESA Protocol) and Kenya's national frameworks and laws (the Constitution of Kenya 2010, Basic Education Act 2013, Basic Education Curriculum Framework (2017), Presidential Working Party on Education Reform (2023) Persons with Disabilities Act 2025,) as well as sector policies. They support inclusive, competency-based education with Special Needs Education integrated into mainstream systems, ensuring accessibility, appropriate resources, trained staff and active participation by learners, families and communities.

2.5 Review of Related Previous Research

2.5.1 Availability and adequacy of adapted curriculum designs, curriculum support materials and Interactive Digital Content

Adapted curriculum designs, curriculum support materials and interactive digital content are critical determinants of effective facilitation of learning for learners with special needs and disabilities in educational settings. This sub section reviews related literature on availability and adequacy of curriculum designs, support materials and access to interactive digital content for learners with special needs and disabilities.

i) Availability and adequacy of adapted curriculum designs

Research consistently demonstrates that the availability and adequacy of adapted curricula are central to effective inclusive education in special schools and units. In this vein, Saikia (2025) investigated Curriculum adaptations for Children with Diverse Needs in India and found that curriculum adaptations not only enhance academic outcomes but also support the social, emotional and holistic development of learners. This underscores that adaptation is a vehicle for both achievement and well-being, reinforcing the case for inclusive schooling that caters for multiple dimensions of student growth.

Despite this, curriculum adaptation is frequently identified as a policy priority while real-world implementation gaps persist. Studies indicate that adapted curricula are often poorly aligned with learner needs, inadequately planned and not supported by sufficient teacher training (Gulati et al., 2022; Lee & Kim, 2021). In under-resourced settings, limited access to specialized and differentiated curriculum designs further undermines equitable participation and learning outcomes for learners with special needs (Harris & Smith, 2020). These tensions reveal a troubling disconnect between policy rhetoric and classroom practice, highlighting the need for more deliberate alignment and capacity-building at the point of delivery.

Empirical evidence from African contexts reinforces these concerns. Emeagwali (2021), in a study on curriculum adaptation in Nigerian special schools, found that teachers had limited access to guidelines and structured support for adapting the mainstream curriculum. Similarly, Wafula (2019) reported that Kenyan special schools often rely on generic curriculum materials, which fail to adequately address the diverse learning profiles of learners with special needs and disabilities.

National planning frameworks, such as Kenya's National Education Strategic Plan (2023-2027), emphasize curriculum adaptation and material development. However, the distribution of usable and accessible formats remains inconsistent, especially for learners with complex needs. Weak monitoring

systems also contribute to uneven implementation of adapted curricula across schools (Njoroge & Achieng, 2023). Bridging these gaps will require robust dissemination, accessible design, and stronger accountability mechanisms to ensure that policy commitments translate into equitable, inclusive learning experiences.

ii) Availability and adequacy of curriculum support materials

The availability of appropriate curriculum support materials significantly influences the quality of inclusive education. Research shows that shortages of tactile materials, assistive devices, augmentative and alternative communication (AAC) tools and alternative format resources constrain learner participation (Wafula, 2019).

A study conducted by Osman et al. (2020) in Dadaab Sub-County, Kenya, examined the availability and use of teaching and learning resources for learners with special needs in regular primary schools. The study revealed that material shortages contributed to low retention and recommended increased government budgeting and NGO support to improve access to appropriate resources. Similarly, Beyene et al. (2020), in their study on inclusion and accessibility in Ethiopian higher education institutions, emphasized that inclusive education extends beyond physical placement in mainstream classrooms. They identified barriers such as lack of educational resources in alternative formats, absence of comprehensive accommodation guidelines and institutional weaknesses. They further argued that libraries could serve as critical hubs for bridging the digital divide and ensuring equitable access to educational resources in diverse formats.

Owino et al. (2022) conducted a study in Kenya on Material Resources Adaptation and Implementation of CBC for Early Years Learners with Disabilities in Primary Schools in Nairobi City County, Kenya. Findings from the study revealed that most materials in SNE schools were those belonging to the standard classroom for regular learners. Those materials available belonging to SNE were never used despite their availability. The study inferred that this could imply that most schools did not have material resources for learning by learners with disabilities but had material resources meant for regular learners. Additionally, shortages of adapted curriculum support materials, including Braille machines, large-print textbooks, sign language resources and assistive ICT tools, remain prevalent (Mutua & Mwangi, 2023). Overall, the literature underscores that curriculum support materials must be available in sufficient quantity, appropriate formats and aligned with learner needs to ensure meaningful inclusion.

iii) Availability and access of Interactive Digital Content (IDC)

IDC has emerged as a powerful tool for enhancing engagement and access for learners with special needs and disabilities. Studies show that when digital resources are developed using universal design principles and responsive features, learners demonstrate improved engagement and comprehension (Ali & Rahman, 2021; Gulati et al., 2022). However, availability and effective utilization remain uneven. In many contexts, digital inclusion is constrained by inadequate infrastructure, limited device access, poor connectivity and insufficient teacher capacity to integrate digital tools pedagogically (Lee & Kim, 2021; Malechwanz et al., 2026). Research conducted in South Africa by Adams and Brown (2020) found that despite supportive policy frameworks, few interactive digital resources were accessible to learners with sensory and cognitive impairments.

Likewise, Beyene et al. (2020) highlighted the digital divide and lack of alternative format digital resources as major barriers to quality education for learners with disabilities. Even where interactive digital tools exist, their impact is diminished without structured teacher support and sustainable infrastructure.

Collectively, the literature affirms that IDC must not only be available but also accessible, contextually relevant, and pedagogically integrated. Without coherent planning, adequate resourcing and professional development, digital innovations remain underutilized, limiting their transformative potential in special education settings.

Teacher capacity is consistently identified as a pivotal determinant of whether curriculum content is delivered effectively to learners with special needs and disabilities. Capacity is understood as a composite of teachers' knowledge of SNE, pedagogical skills for differentiation, assessment practices and access to appropriate resources and supports (Andiema, 2020). Literature reviewed provides diverse views on the aspect of teacher capacity.

In the Philippines, Jala, (2025) conducted a narrative inquiry of special needs teachers in educating learners with special educational needs and disabilities. The study revealed that Special Needs Education (SNED) teachers aligned their instructions to insights from the family of Learners with Special Education Needs and Disabilities (LSEND). Teachers were found to apply continuous innovative teaching strategies supported by a wider scope of collaboration. SNED teachers were also found to have high levels of adaptability and resilience though faced challenges stemming from mental-physical fatigue and the complexity of IEP design.

SNED teachers according to Jala (2025) excelled by practicing self-care, mustering the courage to ask for help, establishing stronger partnerships with stakeholders and implementing practical interventions. The teachers attached their aspirations on more authentic inclusive practices for LSEND education, stronger advocacy of independent learning for the LSENDs and placement of more trained and proficient SNED teachers. Trained and experienced SNED teachers were found to be driven by personal and professional motivations, find fulfilment in supporting learners despite challenges and remain committed to promoting inclusion, independence and improved placement and teacher training (Jala, 2025).

This view is supported by Dumilig and Abdulrahman (2024) who posit that the educational environment for learners with special educational needs and disabilities (LSENDs) has become increasingly complex. Teaching these learners requires SNED teachers to show strong dedication, resilience and a deep understanding of diverse learning challenges. However, they note that SNED teachers often face obstacles such as limited resources, outdated school facilities and social stigma about disabilities. Therefore, to effectively support their learners, SNED teachers must remain committed, adaptable, creative and emotionally strong (Dumilig & Abdulrahman, 2024).

Implementing inclusive education requires more than legislative change. It demands a fundamental transformation in how teachers are prepared to meet the diverse needs of learners. Teachers play a central role in this process, designing flexible and accessible learning environments and applying strategies that accommodate all learners (Fränkel et al., 2023; Johnson & Erasmus, 2024). This underscores the central claim that teacher capacity, the combination of pre-service preparation, ongoing professional development, pedagogical skills and dispositions act as the engine translating inclusive policies into tangible learning outcomes for learners with special needs and disabilities.

Broader conceptions of learner diversity call for a reorientation in teacher preparation. While disability remains a focal concern in inclusive practice, contemporary pedagogy emphasizes an expansive view of diversity, recognizing that effective inclusion should address multiple, intersecting dimensions such as language, socioeconomic status and cultural background (Mendoza & Heymann, 2024; Mpolomoka et al., 2025). Consequently, capacity-building for SNE teachers must extend beyond disability-specific competencies to encompass holistic inclusion, equipping teachers to address the whole spectrum of learner needs and identities.

Contextual evidence from Sierra Leone highlights persistent challenges in building this capacity. Lamin (2022) explored special educators' perspectives on constraints in delivering SNE in Sierra Leone. Using quantitative surveys and qualitative interviews, the study found that although special

educators often bring diverse training and substantial experience, there are notable deficits in staffing, qualifications and access to teaching and learning resources and infrastructure. The study recommended recruiting trained, qualified SNE teachers and enhancing capacity through ongoing professional development, including in-service training and short refresher courses, to strengthen teachers' competence to deliver SNE effectively. This case underscores the practical implications of capacity gaps for curriculum delivery in resource-constrained settings.

Jacob et al. (2024) employed a phenomenological design to assess how well the curriculum prepares pre-service teachers to teach learners with special needs at a government-funded university in South-South Nigeria. Using purposive sampling, they conducted semi-structured interviews with eight Post graduate students and analysed the data thematically. The findings showed a misalignment between teacher capacity and the requirements of inclusive instruction. There was a disconnect between teacher preparation and student needs. Teacher education curriculum fails to adequately accommodate teachers with special needs in terms of content, instructional materials and delivery methods. Evidence shows that notable lack of targeted instructional programs to equip teachers with the necessary skills and knowledge impedes their ability to teach students with disabilities (Jacob et al., 2024).

These findings are supported by Huang and Moon (2009) and Ngoben et al. (2020) who postulate that a teacher's educational background accounts for about 40-60% of the variance in student performance, indicating that credentials and preparation substantially influence student outcomes when considered within broader achievement. Complementary findings from Mumbu (2020) show that the availability of trained instructors is a key driver of academic performance. When well-trained teachers are in place, student outcomes improve, suggesting that capacity constraints can limit the realization of curriculum goals. Similarly, Ssengonzi and Muwanguzi (2020) found that most teachers lacked formal training in special needs education, leading to low confidence and competency in curriculum adaptation and instruction.

A study conducted by Kimanzi (2024) on School based factors influencing implementation of special needs education curriculum in special needs units in public primary schools in Kitui West sub-county, Kenya, found that there was a deficiency of professional skill training amongst teachers of special needs education that resulted to ineffective, poor curriculum implementation procedures and methodologies that were antagonistic to learners' academic achievements and outcomes. The study revealed that teachers perceived themselves as having ineffective and poor teaching skills which led to ineffective implementation of the SNE curriculum, a trend that could possibly lead to disengagement and demotivation of learners with special needs and disabilities.

Further insights reinforce the case for targeted capacity-building. Maithya et al. (2024) examined the effect of trained teachers in SNE on the academic performance of students with hearing impairment in Kenya. Their findings showed that increased training in SNE correlates with better learner outcomes. They advocated for continuous professional re-training to strengthen teachers' pedagogical content knowledge, skills, and attitudes. This evidence demonstrates that specialized capacity-building for SNE teachers can yield tangible gains beyond general credentialing.

Furthermore, teachers' capacity to deliver the curriculum effectively to learners with disabilities is constrained by curricula gaps and insufficient preparatory resources. To strengthen teacher capacity, revisions to curriculum content, enhanced instructional materials and varied delivery methods are necessary, alongside the development of explicit instructional programs focused on disability-specific pedagogy. There is a broader need for more robust teacher training initiatives for both pre-service and in-service that explicitly target inclusive curriculum delivery and practical competencies for teaching learners with disabilities (Jacob et al., 2024).

2.5.3 Adequacy and suitability of infrastructure, auxiliary personnel and support services available in special schools and units

This study sought to examine the adequacy and suitability of infrastructure, teaching staff, auxiliary personnel and support services available in special schools and units. Literature review analysis has focused on four main areas; physical facilities, learning resources, human capital and institutional support mechanisms.

i) Physical Infrastructure and Educational Facilities

Literature from various studies postulates that physical infrastructure plays a crucial role in the success of SNE. Educational facilities must be accessible, safe, and equipped to accommodate students with diverse physical and learning needs. According to a systematic review of 14 empirical studies, educational infrastructure for learners with special needs significantly influences both learning outcomes and accessibility, yet in many contexts the conditions remain inadequate (Maulana, 2023). This review highlights issues such as lack of adapted classrooms and insufficient assistive tools like hearing aids and braille equipment to support learners with diverse needs which can greatly improve academic engagement and achievement.

Lamin (2022) argues that many special schools have inadequate physical infrastructure, including amenities for extracurricular activities. He recommends that governments and relevant stakeholders make substantial investments in modern learning resources and technologies. He further asserts that

efforts should be made to improve physical infrastructure to align with government educational and human rights goals and the UN Sustainable Development Goals (SDGs).

A study on inclusive school infrastructure in Indonesia found that many schools lacked adequate facilities when seen through the lens of national standards. Additionally, only a minority of teaching staff had formal training specific to special needs education, which further limited the effectiveness of infrastructure investments (Simorangkir, 2021).

The benefits of learning resources to the education of learners with special needs has also been established. Dominic et al. (2020), conducted a study focused on Assessment of Availability, Adequacy and Condition of High-Tech Assistive Technology Resources in Special Education Schools in North-West Nigeria. They posit that different assistive technologies are used to provide individuals who have disabilities with educational opportunities, bringing out the cognitive potential in them, while enabling the curricula and teachers to achieve their objectives and the students to participate in the learning process.

In Baringo County, Kenya, it was argued that the effectiveness of inclusive schools in supporting visually impaired learners is significantly influenced by the availability and quality of specialized learning materials. This assertion is supported by a study conducted by Konga and Cheboi (2021) on the Influence of School Resources on Academic Performance of Visually Impaired Learners in Integrated Public Primary Schools. The findings revealed that schools equipped with assistive devices such as braille machines and talking calculators reported comparatively better academic performance among learners with visual impairment.

ii) Teaching Staff: Knowledge, Preparedness, and Collaboration

Studies indicate that teacher adequacy and suitability in SNE, particularly within inclusive education settings, remain a significant concern despite longstanding policy commitments to inclusion. Research shows that many teachers feel insufficiently prepared during their pre-service training to address the diverse learning, behavioural and developmental needs of learners with special educational needs and disabilities (SEND). Studies conducted in Israel report that teacher education programmes often lack clearly structured and comprehensive preparation in inclusive pedagogy, resulting in gaps between policy expectations and classroom practice (Gavish & Friedman, 2025). Similarly, research from Malaysia highlights that while special education components may be included in teacher preparation programmes, teachers frequently question the adequacy and practical relevance of such training for real classroom contexts (Rahman & Yasin, 2024).

International scholarship also underscores the importance of teacher attitudes and self-efficacy in determining suitability for inclusive practice. A large body of research published in journals such as *Teaching and Teacher Education* demonstrates that teachers with higher levels of specialised training tend to report greater confidence and more positive attitudes toward inclusion, whereas those with limited preparation often feel overwhelmed or resistant (Sharma & Sokal, 2016). Confidence and perceived competence are therefore closely linked to the depth and quality of professional preparation. Teachers' sense of efficacy significantly predicts their willingness to adapt instruction, collaborate with specialists and implement individualised education plans (Forlin & Chambers, 2011).

Beyond individual preparedness, studies outside Africa also reveal systemic challenges affecting teacher adequacy. Reports from the OECD indicate that many member countries experience shortages of teachers trained specifically in special education, particularly in rural and high-needs schools (OECD, 2019). This shortage places additional pressure on general classroom teachers who may not possess specialised competencies but are expected to implement inclusive practices. The UNESCO Global Report on Teachers similarly notes that global teacher supply gaps disproportionately affect learners with disabilities, as specialised support staff and trained personnel are often insufficient to meet demand (UNESCO, 2023).

Moreover, research consistently emphasizes that one-off workshops or short-in-service courses are inadequate for building meaningful competence in SNE. Instead, effective teacher development requires sustained professional learning, mentoring, collaboration with special education specialists and opportunities for reflective practice. Teachers who engage in continuous, practice-based professional development demonstrate stronger instructional adaptation skills and improved outcomes for learners with Special Education Needs and Disabilities (SEND) (Florian & Rouse, 2009). This suggests that suitability for SNE is not solely determined at the point of initial qualification but evolves through ongoing structured support.

Overall, international evidence suggests that while inclusive education is widely endorsed in policy frameworks, teacher adequacy and suitability remain uneven. Many teachers outside Africa report gaps in specialised knowledge, limited practical preparation and insufficient systemic support. However, where robust pre-service training, sustained professional development, and institutional backing are provided, teachers demonstrate greater competence, confidence, and commitment to inclusive education.

Research shows consistent concerns about teaching staff's adequacy and suitability as far as special and inclusive education (SNE) is concerned. Across contexts, teachers broadly value inclusion but

often feel insufficiently prepared to translate inclusive ideals into practice. Teachers' knowledge and preparedness are frequently reported as moderate to limited. In Saudi Arabia, special education teachers demonstrated only moderate levels of knowledge and attitudes toward inclusive practices for students with autism, with training and experience influencing these outcomes (Alassaf, 2025).

Similarly in Kenya, gaps in teacher preparedness have been identified. Andiemba (2020) conducted a study to establish Teachers Competencies in Evaluation of Competency Based Curriculum Among Special Needs Learners in Kenya. Findings from the study showed that majority of special needs teachers were not adequately prepared to undertake evaluation and assessment of children with special needs in line with the new curriculum. The lack of adequate understanding and application of formative assessment methods by special needs teachers denied the special needs learners' opportunity to acquire competencies and skills as per CBC curriculum.

Broader reviews emphasize that theoretical training alone is insufficient; both coursework and structured practical experience are necessary to build competence and confidence for inclusive teaching (Australas. J. Special & Inclusive Educ., 2025). Collaboration among teaching staff emerges as a key facilitator of inclusive practice. Studies on collaborative models such as lesson study show that structured collegial work enhances teacher awareness of diverse learner needs, supports joint planning, and fosters innovative instructional strategies tailored to inclusion (Basister, Petersson, & Baconguis, 2025). Such collaborative processes can strengthen partnerships between general and special educators, broadening access to expertise within schools. However, enthusiasm for inclusion does not always align with confidence in applying inclusive pedagogy, highlighting a global implementation gap (Havik, 2025).

Narrative and empirical work indicates that initial teacher education and ongoing professional development remain disconnected in many countries, weakening the ability of teacher preparation systems to equip educators with the full range of pedagogical and professional skills required in today's classrooms (Taylor, Deacon, & Robinson, 2019). This review highlights the need for stronger partnerships between teacher education institutions and schools to ensure that pre-service learning and continuous professional development reinforce one another effectively (Taylor et al., 2019).

Specific studies further illustrate issues related to teacher readiness for instructional innovations. Research in rural South African schools found that many teachers lack sufficient technological knowledge and training, face severe resource constraints and struggle to align available technologies with curriculum requirements, factors that undermine efforts to integrate instructional technologies effectively (Sepadi, Kgaphola, & Molapo, 2025). Similarly, a systematic review of interactive

technologies in online teacher education across Africa underscores how uneven infrastructure and training contribute to wide disparities in teachers' ability to benefit from digital tools and calls for greater policy coordination and collaborative approaches to professional learning (Oubibi et al., 2024).

Studies focusing on institutional collaboration have also highlighted limitations in teacher educators' involvement in curriculum design and implementation. In Ghana, a quantitative investigation found that teacher educators' participation in curriculum reform and collaboration with other stakeholders was statistically insignificant, suggesting that existing mechanisms do not sufficiently support joint curriculum development efforts (Yidana, 2025). This limited collaboration points to broader structural challenges in fostering shared ownership and collective professional growth among educational stakeholders in teacher education systems.

Several studies from across the region suggests that while efforts to strengthen teacher knowledge and professional practices are underway, insufficient preparation, gaps in specialized skills such as technology integration, and weak collaborative structures hinder progress. To improve teacher readiness and support meaningful professional collaboration, the literature consistently recommends reinforcing continuous professional development, building stronger partnerships between education institutions and schools, and enhancing mechanisms for stakeholder collaboration in curriculum and policy development (Taylor et al., 2019; Sepadi et al., 2025; Yidana, 2025; Oubibi et al., 2024).

The quality and readiness of teaching staff is consistently highlighted as a determinant of successful special needs education. A study of Kenyan secondary school teachers found that both pre-service and in-service training on inclusive practices was inconsistent, and many educators felt unprepared to support students with mild disabilities. Teachers reported limited exposure to structured inclusive pedagogies during their initial training and minimal opportunities for sustained professional development. The study further highlighted that the absence of formal training and the lack of sustained professional development opportunities remain major barriers to effective inclusion in secondary schools, with limited ongoing support emerging as a critical obstacle (Flora, 2025).

iii) Auxiliary personnel: Support Specialists and Service Providers

Beyond classroom teachers, specialized support personnel such as interpreters, counsellors, therapists, and health professionals play a critical role in strengthening special needs education systems. According to UNESCO (2020), inclusive education requires multidisciplinary collaboration to address the academic, social, emotional, and health needs of learners with special needs and disabilities. The report emphasizes that effective inclusion depends not only on trained teachers but also on access to

support services such as speech and language therapists, psychologists, occupational therapists, and social workers (UNESCO, 2020).

Similarly, the WHO and World Bank (2011) observe that children with complex disabilities often require coordinated services involving education, health, and social protection sectors. Their joint report highlights that the absence of adequately trained healthcare workers and paraprofessionals in schools limits learners' participation and educational attainment (WHO & World Bank, 2011). These findings underscore the importance of integrated multidisciplinary teams in special needs schools. Inadequate staffing, continuous professional development and intersectoral collaboration, inclusive education policies remain difficult to implement effectively, particularly for learners with complex educational and health needs.

Research conducted in Ireland during and after the COVID-19 pandemic demonstrated that, in addition to professional staff, peer-support systems and collaborative educator networks can function as important informal support mechanisms, particularly where formal institutional structures are weak or under-resourced (Gavade, Sidotam, & Varanasi, 2023). For example, studies of teachers in low-income school contexts documented the emergence of hybrid support networks like informal communities of practice formed through digital platforms, peer mentoring, and shared resource exchanges to address instructional, emotional, and technological challenges during school disruptions (Irish, Wells, Davis, Peck, & Clayton, 2023).

Although this body of research did not focus specifically on special needs education, its implications are relevant. The findings suggest that informal collegial collaboration can enhance resilience, facilitate knowledge-sharing, and provide psychosocial support among educators (Gavade et al., 2023). However, such networks cannot substitute for structured investments in systemic infrastructure, including qualified special needs personnel, specialized instructional materials, assistive technologies, and institutional policy support (Irish et al., 2023). In the context of special needs education, therefore, peer-support mechanisms should be viewed as complementary rather than compensatory, strengthening professional practice while operating alongside, not in place of, formal support services and adequately funded institutional frameworks (Gavade et al., 2023; Irish et al., 2023).

In South Africa, the Department of Education (2001) through Education Whitepaper 6: *Special Needs Education; Building an Inclusive Education and Training System* acknowledges that the success of inclusive education depends on institutional-level support and district-based support teams composed of educators, therapists, psychologists, and health professionals. However, subsequent evaluations

have shown that insufficient specialized training for teachers and healthcare workers complicated policy implementation, limiting holistic support to learners (Donohue & Bornman, 2014).

Research on education in Kenya during the COVID-19 pandemic and beyond shows that, much like in other contexts, informal support mechanisms among educators played a role where formal systems were strained. Studies on teacher psychosocial support documented that teachers experienced anxiety, stress, and isolation during the rapid transition to remote and blended teaching, and that colleagues, peers, and informal teams were often the first line of emotional and professional support, even though structured psychosocial services were generally lacking in schools (Kyule & Ronoh, 2025).

In addition, research on peer mentorship programmes in informal settlement schools in Nairobi County demonstrated that peer-to-peer mentoring and support structures among students and teachers can have positive social outcomes, such as reducing disruptive behaviours and promoting positive engagement (Limisi, Kipruto, & Ngeno, 2023). Beyond the pandemic period, a broader review of teacher mentorship and support programmes in Kenya found that a variety of in-service mentorship and support initiatives exist, enabling teachers to engage in ongoing professional learning and collegial interaction, though many of these programmes remain uncoordinated and vary in effectiveness (Echaune & Maiyo, 2023).

iv) Support Services and Inclusive Practices

Support services include administrative, psychological, and professional systems that enable inclusive education. Holistic support systems in school play a critical role of enhancing educational policies and practices (Mahmood et al, 2024). Specifically, administrative support contributes to special education teachers' job satisfaction and retention, suggesting that organizational systems are as critical as classroom resources.

Inclusive education and support services for learners with special needs have become increasingly central to educational research across the African continent, particularly in contexts where education systems are transforming to meet diverse learner needs. Scholars have emphasized that inclusive practice must go beyond policy rhetoric and become embedded in day-to-day classroom and school support structures (Armstrong & Wray, 2023). In southern Africa, inclusive education policy frameworks such as South Africa's whitepaper 6 demonstrate a commitment to equity, yet the translation of these policies into effective support services within schools remains uneven (Mokoena, 2017). Teachers often face barriers including limited training, insufficient learning support personnel, and a lack of resources to implement differentiated instruction for learners with disabilities (Smith & Nkosi, 2021).

Research on school support systems highlights the essential role of school-based support teams in promoting inclusive practices. These teams are intended to coordinate assessment, curriculum adaptation, and peer support, yet in practice they confront logistical challenges and ambiguity over professional roles (Jones, 2020). Similarly, investigations into learning support provision underscore how advisors working in mainstream schools struggle to bridge gaps between policy ideals and classroom realities, particularly in contexts with high learner-to-teacher ratios and scarce specialist personnel (Van der Merwe, 2019).

Studies focusing on specific learner groups further illustrate the complexities of inclusive pedagogy in low-resource settings. For instance, research on autism inclusion in South African mainstream classrooms indicates that although teachers value inclusivity, many lack the curriculum knowledge and pedagogical skills needed to support neurodiverse learners effectively (Dlamini & Peters, 2024). Linked to this, theory-driven frameworks for inclusive education advocate for systemic planning that aligns policy with practical support mechanisms including structured professional development, leadership engagement, and community involvement (Khumalo & Beukes, 2022).

In West Africa, the experience of Ghanaian special educators offers additional insight into how support services are actualized in schools. Educators report varied understandings of inclusive practice, with some interpreting it as mere physical placement of learners with disabilities rather than substantive participation and learning support (Osei-Boateng, 2018). This reflects a broader continental theme: that inclusive education requires not only formal policy but also coherent support systems, teacher preparation, and community awareness to be effective.

Beyond individual countries, regional and continental studies highlight structural barriers and opportunities for inclusive education across Africa. A key policy review by the African Committee of Experts on the Rights and Welfare of the Child demonstrates pervasive gaps in services for children with disabilities, including insufficient assessment services, limited assistive technology, and weak coordination among ministries and stakeholders (African Committee of Experts on the Rights and Welfare of the Child, 2024). Such reports call for strengthened national frameworks that prioritize both rights and practical support mechanisms, including teacher training programmes, resource allocation and monitoring of inclusive outcomes. Challenges such as inadequate teacher preparation, resource constraints, and a disconnect between policy and practice have also been underscored. Addressing these challenges requires both localized school-level strategies and broader policy commitments that recognize the diverse ways learners experience support (Mensah & Yeboah, 2019).

Grenzer et al. (2025) focused on ICT integration in specialized rehabilitation schools in Nairobi County and noted that administrative support including access to qualified trainers and proper ICT resources directly affects programme success. Lack of this kind of support was a major barrier to meaningful technology integration for learners with emotional and behavioural disorders. Digital inclusion research in Kenyan public university libraries has also documented the importance of implementation support mechanisms such as staff training, financial investment, policies promoting accessibility, interdepartmental collaboration and systematic monitoring for students with disabilities (Maina, Svard & Mwai, 2026). These findings align with broader education studies showing that comprehensive support services are necessary to extend inclusion beyond physical spaces to digital and learning environments.

2.5.4 Strategies in place for identifying, nurturing and supporting the talents of learners with special needs and disabilities

Effective support for learners with special needs and disabilities requires a multi-layered approach built on early identification, individualized planning and collaborative partnerships. It shows that targeted interventions such as tailored instructional methods, assistive technologies and differentiated learning design, help nurture each learner's unique talents while ensuring equitable access to educational opportunities. Progress monitoring plays a central role, allowing educators and parents to adjust strategies in real time and sustain growth (Meda et. al, 2026).

Review of scholarly studies provides varied views into these approaches. Hamirta et al. (2025) examined how identification and support for learners with special needs are operationalized in Indonesian inclusive elementary schools. The study revealed a lack of formal identification procedures with schools relying on parental reports and teacher observations. This gap in practice limits the extent to which identification and support for learners with special needs is given consideration.

The lack of support for learners with special needs has been associated with challenges of inadequate teacher preparedness, limited resources and low parental involvement driven by stigma and financial constraints. SNE curriculum in practice was found not fully accommodating diverse learning needs despite existing inclusive education policies. To address these gaps in learner support in SNE schools, there is a need for teacher capacity building, increased resource allocation and educational programs for parents. (Hamirta et al. 2025).

Eghan (2025) explored teacher preparedness for inclusive classrooms in Ghana and found that many educators lacked confidence and adequate training to effectively support learners with diverse needs. The study revealed that limited access to special education services and insufficient professional

development opportunities constrained teachers' ability to identify and nurture the talents of learners with disabilities.

Stakeholder engagement has also been noted as a crucial element in the support for learners with special needs and disabilities. Studies suggest that collaborative strategies involving educators, families and specialists enhance the identification of learner talents, enabling tailored interventions that support both academic and non-academic strengths (Genovesi, 2025). These strategies include using individualized learning plans, differentiated instructional pathways and mentorship programs that provide personalized support and opportunities for skill development.

Undie and Dada (2025) argue that inclusive education should move beyond deficit-based models of disability to embrace strengths-based approaches that recognize and nurture diverse learner talents. They note that talent identification must include creative, vocational and social competencies, cultivated through co-curricular and community engagement programs. By adopting systematic assessment practices that focus on learners' abilities rather than limitations, schools can create environments where learners with disabilities report higher levels of engagement, improved self-confidence and stronger academic outcomes. This underscores the fact that inclusive education is most effective when it values the full spectrum of learner potential and integrates holistic support systems.

Mutoni (2025) in a literature review of studies on strategies for supporting students with disabilities in schools posited that teachers need to develop appropriate strategies for supporting diverse students with disabilities in inclusive educational contexts. Inclusive formative assessment practices must be developmentally appropriate and take into account each learner's unique needs.

In the classroom, teachers need to adapt classroom layout, instructional practice and assessment practice to allow students with exceptionalities to access the curriculum. To create a learning environment in which "all" students can succeed, teachers should organize the physical space to promote communication and engagement. To organise a physically safe learning environment, teachers need to consider how the layout of the physical classroom may restrict or support learner interactions. Class layout should promote social interactions by facing students in a circular formation during instruction (Sekulova et al 2022; Grouw et al 2024).

To determine the capabilities of learners with exceptionalities, like those with learning disabilities, additional formative assessments can be applied to ensure each learner is passing a threshold before they move on is necessary. How a teacher organizes formative assessments can have a large impact on the learning behaviour model (Sundararam et al. 2021; Burau et al. 2022)

Families who show greater acceptance of their children with physical and mental disabilities offspring envision high prospects for their educational, economic and social independence, whereas community acceptance and lack of stigma, as well as availability of services, support and opportunities were seen as enhancing learner independence. Inclusive practices in educational settings are essential to ensure a better life for all children and youth, including those with disabilities and developmental difficulties (Mutoni, 2025).

Collaboration and communication among stakeholders are vital in supporting the success of students with disabilities in schools. This includes building partnerships between major stakeholders, including teachers, families, and specialists. When various key players, such as teachers, parents, specialized staff members and community representatives, are properly connected, they are generally able to support learners with disabilities in their efforts to address their academic, social, emotional and personal development clearly and effectively (Zeng & Huang 2021; Rodriguez et al. 2021).

In schools and out-of-school settings, young people are more likely to garner consistent support from the important adults in their life if these adults cooperatively communicate, plan and pursue aligned educational, therapeutic and pro-socializing strategies. For these reasons, teachers, specialists, and paraprofessionals need to keep in touch with parents and caregivers. Inquiries and concerns expressed by family members need to be recognized and addressed promptly, sensitively, and effectively. Educators and specialists need to ensure they conduct parent-teacher conferences regularly and discuss the academic and personal development of learners with disabilities expressly and fairly (Clark 2015; Teng 2022).

There is a rapidly growing number of assistive technology devices and tools. Identifying the most appropriate tool is important to meet the needs and enhance the abilities of the learner with special needs and disabilities. Consideration should be given to the type of disability, the functional capabilities of the child, the desired level of support and the tasks that are difficult for the child to complete independently. One key factor that is often overlooked regarding the appropriateness of assistive technology is whether the learner can engage in academic or functional activity if the assistive technology devices are removed. An example of this is a learner with Cerebral Palsy who is unable to hold a pencil to write. Specialized devices, software and other assistance can be provided to allow the learner to take class notes through a computer. If that learner did not have access to assistive technology, he or she would not be able to take notes and would not have access to information typically taken for granted in a classroom (Magableh & Abdaullah 2021; Cavioni et al. 2024).

Yoro et al., (2020) conducted a study on Learning support strategies for learners with neurodevelopmental disorders in South Africa. The study revealed that teachers employ a variety of support strategies such as cooperative learning, peer learning, ability grouping, extensive visual aids, and curriculum differentiation to support learners. The support provided by the teachers was evident in their performance as learners with neurodevelopmental disorders (NDD) were able to learn and understand the lessons irrespective for their barrier to learning.

Recent literature highlights that many teachers struggle to adequately support learners with diverse needs due to limited skills, training, and specialized knowledge. While newly qualified teachers often attempt to employ a range of strategies to assist learners with NDDs, these approaches tend to resemble general teaching and learning methods rather than targeted interventions. As a result, the support provided may not fully address the unique challenges faced by learners with NDDs in mainstream classrooms. This underscores the need for more specialized and context-specific strategies that go beyond generic practices to ensure meaningful inclusion and effective learning outcomes (Yoro et al., 2020).

Kenya's Basic Education Curriculum Framework (KICD, 2017) stipulates four interlinked pillars for learners with special needs that align with talent development: One principle is opportunity which stipulates providing varied pathways to identify needs and gifts while guaranteeing equal access to education to keep learners engaged and reduce wastage. Excellence stipulates nurturing each learner to excel in their strongest interests and abilities, with emphasis on meaningful achievement rather than rote competition.

Diversity and inclusion involve creating an inclusive learning environment grounded in two dimensions: appreciating Kenya's diversity and accommodating different learning needs through reasonable accommodations, flexibility, responsiveness and support. Differentiated Curriculum and Learning stipulate development of adapted content and instructional approaches that allow teachers to tailor what, how and when material is taught. Together, these provisions underpin strategies such as differentiated instruction, inclusive curricula, targeted interventions, ongoing progress monitoring, and collaboration among teachers, families, and specialists to cultivate and realize each learner's talents while ensuring equitable access (KICD, 2017).

2.5.5 Parental Empowerment and Engagement in supporting the education of learners with special needs and disabilities

The study by the Kenya Institute of Special Education (2023) focuses on the importance of parental empowerment and engagement in supporting the education of children with special needs and

disabilities. It emphasizes that when parents are actively involved, learners benefit not only academically but also in their social, emotional, and behavioral development. The research highlights that effective parental participation requires clear strategies, supportive systems and overcoming challenges such as stigma and limited resources. By positioning parents as partners in the educational process, the study argues that schools and policymakers can foster stronger collaboration between families and institutions, ensuring that learners with special needs receive holistic and inclusive support.

Finnerty (2022) in a study on parent perspectives on special education knowledge and family-school partnership in Iowa United States, found that most parents of learners in special schools do not believe resources and information about special education are readily available to them. A few parents identified indicated that they prefer to receive information and resources via parent trainings and workshops or via conversations with their child's special education team.

Muliadi et al (2022) in a study on parental role in supporting inclusive education for children with autism found that parents act as the primary supporters, who not only provide motivation but also play a crucial role in communication with teachers and in monitoring their child's development. Additional findings showed that parental support has been proven to enhance children's self-confidence and social skills, thereby creating a more inclusive learning environment. Involving parents in the planning and evaluation of educational programs can significantly improve children's learning outcomes.

Further research in both mainstream and special schools indicates that *structured parental involvement* such as participation in individualized education planning, consistent engagement with school activities and attendance at training workshops is positively associated with improved student outcomes and more effective home-school partnerships (Hoover-Dempsey & Sandler, 1995; Gaspar & Sahay, 2025).

Findings grounded in ecological and family-systems models highlights that family and school collaboration fosters academic achievement, student motivation, and socio-emotional wellbeing when parents are actively invited to participate in planning and decision-making (Hoover-Dempsey & Sandler, 1995; Şengönül, 2022). Other studies also show that empowering parents is more effective when schools proactively communicate, recognize parental knowledge, and provide accessible forums for collaboration and shared planning (Gaspar & Sahay, 2025; Fan et al., 2025). Nevertheless, socioeconomic, cultural and institutional barriers including work schedules, limited access to information, language differences and perceptions of exclusion often constrain sustained parental engagement, highlighting the need for systemic strategies that enhance information access, cultural

responsiveness, and mutual trust between families and educators (Hornby & Lafaele, 2011; Şengönül, 2022).

Research from some African countries shows that parental empowerment and engagement play a meaningful role in the education of learners with special educational needs. For example, a study conducted among parents of hearing-impaired students in Savelugu, Ghana found that higher levels of parental involvement and stronger parental self-efficacy were significantly associated with greater motivation to learning among learners with hearing impairment. In this context, parents who were more confident in their ability to support their children's learning also had children who displayed higher learning motivation, suggesting that empowering parents can positively influence learner engagement and educational outcomes (Frontiers in Psychology, 2025).

South African studies similarly highlight the importance of understanding and building partnerships between parents and schools. In one study of parents with children who have severe intellectual disabilities, many parents reported having limited knowledge about what home-school partnerships are and how to participate effectively in them. The findings suggest that without adequate understanding of their role within these partnerships, parents are less able to engage meaningfully, and that training and education for parents are necessary to enable them to participate as confident partners with schools (Springer, 2025). Other South African research with parents of children who have physical disabilities found that listening to parents' perspectives helped educators understand what kind of school supports were helpful and where communication needed improvement, reinforcing the value of collaboration and dialogue between home and school (African Journal of Disability, 2025).

Research conducted in Ghana highlights that structural and contextual barriers significantly hinder parental engagement in inclusive education settings. A study in the Tamale Metropolis found that parents of children with disabilities often face challenges such as limited access to information, inadequate resources, and insufficient support, all of which restrict their active participation in their children's schooling. The findings suggest that addressing these barriers through targeted training, improved communication between schools and families, and the establishment of community-based support systems could enhance parents' capacity to engage meaningfully with both their children's learning and the broader school environment (Alhassan, Issaka, & Iddrisu, 2025).

Smith (2022) conducted a critical review of parental involvement in the education of children with disabilities across Sub-Saharan Africa. The review highlighted that stigma, financial constraints, and the absence of structured engagement programs significantly reduced parental participation, thereby weakening the support system for learners with special needs.

Taken together, these studies from Ghana and South Africa suggest several common themes. First, active parental engagement, especially when parents feel confident and supported, is linked to improved learner motivation and participation. Second, parental empowerment requires not just involvement, but also knowledge and understanding of how to engage effectively with schools. Finally, contextual barriers such as lack of resources and communication challenges can reduce parents' ability to participate, indicating a need for multi-level support that includes schools, communities, and policy frameworks.

Parental empowerment and engagement are consistently identified as critical determinants of positive educational outcomes for learners with special needs, with research highlighting that active parental involvement enhances learner participation, communication and transition planning. Studies reveal that parents often provide vital insights into learners' needs and serve as advocates for adapted instruction and support services, yet many parents report feeling excluded from decision-making processes, communication channels and school-based planning efforts. Parental perspectives from special schools indicate both appreciation for inclusive initiatives and frustration with inadequate collaboration and information sharing from education professionals. Parental engagement is not merely beneficial but essential for meaningful inclusive education, and that schools must intentionally cultivate parent-school partnerships through policies, practices and supports that recognize and value parental contributions (Sibuyi et al., 2025).

Further research on parental roles in special needs education in Kenya highlights both the importance of parent involvement and the significant challenges parents face in engaging effectively with their children's education. A national conference organized by the Kenya Institute of Special Education underscored the principle of parental empowerment and engagement as essential for nurturing the potential of children with disabilities, noting that despite its policy recognition within Kenya's educational reforms, it remains under-researched and under-implemented in practice (KISE, 2023).

These findings are in tandem with Oranga et al. (2022) who conducted a study in Kenya on Parental Involvement in the Education of Learners with Intellectual Disabilities. The findings revealed that parents did not get involved in their children's school activities neither did they expose them to educational environments. Parental engagement was also found to be low as parents did not volunteer at school or provide sufficient learning resources. The study reveals further gaps in representation and decision making as parents did not enlist as members of school committees and associations and failed to engage in communication with the school to enquire about their children's academic progress and wellbeing (Oranga et al. 2022).

Studies focusing on transition outcomes for learners with intellectual disabilities in Nairobi City County found that teachers perceive parental involvement as critical for successful transitions from school to employment, yet there are notable gaps in communication, understanding of needs and structured engagement opportunities between schools and parents (Kerubo & Makanya, 2024). Research on learners with hearing impairment in Meru and Isiolo counties reported minimal parental involvement in educational participation, suggesting the need for greater sensitization of parents to their roles and responsibilities (Nthuku, Kibaara & M'Ngaruthi, 2024). Additionally, investigations into the assessment process for identifying children with special needs revealed that parents are often not sufficiently involved in assessment activities, despite their potential to contribute valuable background information and support (Bonjo, Edward, & Nyangara, 2017). Collectively, this body of work indicates that while parental engagement is recognized as vital for inclusive education and student outcomes, barriers such as limited empowerment, communication challenges and inconsistent opportunities for involvement remain pervasive across SNE contexts in Kenya.

In line with the implementation of the CBC, Cherui and Kipkenei (2025) posit that since the focus of the curriculum is on the competencies, feedback from parents is very vital in complementing teachers' role especially in guiding their children to choose the right pathway in senior school. They emphasise the need for constant communication between the teachers and parents adding that parents need to be sensitized on their role in supporting learning. This magnifies the importance of parental empowerment and engagement in the curriculum.

Globally, parental empowerment has been shown to hinge on explicit skills that enable parents to support children with diverse disabilities. In Canada and Australia, Sharma and Sokal (2021) found that parents trained in communication skills such as Braille literacy and sign language reported greater confidence in supporting children with visual, hearing, and intellectual disabilities. The study emphasized that enthusiasm for inclusion was insufficient without these communication skills, which directly facilitated parental engagement in inclusive classrooms. In the United States, Turnbull, Turnbull, and Wehmeyer (2021) highlighted the importance of advocacy skills and knowledge of assistive technologies. Parents who were empowered to advocate for their children's rights and trained to use assistive devices such as screen readers and mobility aids were more effective in supporting children with autism and multiple disabilities, particularly through home-based learning strategies. Similarly, the World Federation of the Deafblind (WFDB, 2021) documented that parents of children with deafblindness require specialized communication skills (tactile sign language, object symbols) and benefit from collaborative support groups, which empower them to facilitate inclusion in both home and school settings.

In the African context, Smith (2022) reviewed parental roles in Nigeria, Ghana, and Uganda, identifying psychosocial support and resource mobilization skills as critical for parents of children with intellectual and physical disabilities. Parents trained to provide emotional support and mobilize community resources for assistive devices significantly improved educational participation, though the study noted that lack of structured training programs limited parental effectiveness. Kitsao-Wekulo et al. (2021), evaluating a community-based parenting empowerment program in Kenya and Zambia, showed that parents of children with autism and developmental disabilities benefited from home-based strategies and nurturing care skills, which reduced stigma and strengthened parental resilience.

Kenyan studies provide further evidence of the importance of parental empowerment. Angoye (2021), reporting on the Regional Education Learning Initiative (RELI) in Kajiado County, documented how parents were empowered with home-based learning strategies and curriculum adaptation skills during the COVID-19 crisis, enabling them to sustain learning for children with hearing and visual impairments. Obare and Winga (2021), studying inclusive primary schools in Nyanza region, found that parents engaged in collaboration with teachers and provision of psychosocial support enhanced the psychological adjustment of pupils with learning disabilities. More recently, the Kenya Institute of Special Education (KISE, 2023) emphasized that parental empowerment in curriculum adaptation, advocacy, and resource mobilization is essential for broadening access and ensuring meaningful participation of learners with multiple disabilities. Gachoki (2024), examining parental experiences of raising children with autism in Kenya, highlighted the importance of support groups and advocacy skills in countering stigma and strengthening parental resilience. Bunning et al. (2022), in Kilifi County, showed that community-based parent support groups empowered caregivers of children with intellectual and developmental disabilities through shared training in communication and psychosocial support. Similarly, Kupenda for the Children (2022) documented how parent gatherings in informal settlements provided training in sign language, home-based care, and advocacy, forming sustainable networks that catered for families of children with multiple and complex disabilities, including deafblindness.

2.5.6 Learner placement, progression and transition across different education levels and pathways

Learner placement, progression, and transition are three interlinked pillars of inclusive education that shape the path from home, schooling to post-school life. Placement refers to the initial decision about the most appropriate learning setting for a learner with special needs and disabilities, guided by functional educational assessments, available support, and personal goals. Progression refers to structured, individualised advancement of a learner through stages of learning, skills development, and

personal growth, ensuring that each step builds on their abilities and potential. It emphasises measurable improvement rather than rigid age-based or grade-based movement. Transition entails the purposeful planning and coordinated actions that help learners move smoothly between educational levels (e.g., from early childhood to primary, across school stages) and into post-school pathways such as employment or further training.

Globally, inclusive education systems emphasise structured placement procedures, early identification and individualized transition planning. According to OECD (2021), education systems with formalized transition frameworks and individualized education plans demonstrate improved retention and progression outcomes for learners with disabilities. Empirical studies show that coordinated transition planning, particularly between primary, secondary and vocational pathways, significantly enhance educational continuity and post-school outcomes (European Agency for Special Needs and Inclusive Education, 2022). In Africa, empirical studies reveal that placement decisions are frequently influenced by the availability of special schools or units rather than systematic multidisciplinary assessments (African Union, 2020). Transition from primary to secondary and vocational education remains a critical gap, with high dropout rates among learners with disabilities.

Anal et al. (2025) highlights that the readiness of key stakeholders such as teachers, learners and families, is fundamental to the success of school-based transition initiatives. They define readiness as a combination of knowledge, practical skills and attitudes that collectively enable effective planning, delivery and collaboration to meet diverse learner needs. Importantly, the study emphasises that readiness is not static but rather a dynamic quality distributed across the educational ecosystem. To sustain meaningful transition practices, ongoing professional development, active family engagement and strong school and community partnerships are required to align support with the individual needs of learners. Educators occupy a pivotal role in fostering learner resilience and adaptability in the face of changing contexts. The study notes that teachers help cultivate competencies such as problem-solving, self-advocacy and adaptability, which are essential as students navigate transitions.

Consequently, there is a persistent call for targeted professional development that enhances teachers' capacity to design individualised transition plans, collaborate with families and connect students with appropriate work learning and community support. In this regard, transition to careers is increasingly framed as an empowerment strategy. Mazzotti et al. (2020) argue that when well designed and implemented, transition-to-career efforts can enhance employability, self-determination and long-term labour market success. This perspective reinforces viewing transitions not merely as procedural sequences but as developmental processes that benefit from intentional, empowerment-oriented support across contexts.

European policy and data perspectives provide valuable insights into inclusive education. Early thematic work by the European Agency for Special Needs and Inclusive Education (EASIE) in the 2000s revealed significant variation across countries in how inclusion was defined and implemented, shaped by organizational structures, teacher attitudes and resource distribution. More recent cross-country analyses, such as the 2022/2023 EASIE report, present a comprehensive overview of where learners with identified special educational needs are educated, highlighting participation patterns, placement trends and persistent gaps. Complementary studies, including comparative work published in PROSPECTS (2025), note that while robust data on academic achievement and well-being in inclusive settings remain limited, policy frameworks and accountability mechanisms strongly influence opportunities for learners with disabilities in mainstream schools. Systematic reviews of Universal Design for Learning (UDL) and inclusive practices across Europe point to meaningful shifts in pedagogy and policy, though they also stress the need for more implementation-focused research. Reports from Erasmus and the European Trade Union Committee for Education further underscore ongoing challenges related to legislation, teacher preparation and working conditions, while also highlighting the benefits of transnational cooperation and professional learning in advancing inclusive education.

In a study in Botswana (Ookeditse, 2025) on Vocational Transition Challenges for Students with Disabilities (SWDs), participants perceived that there was limited training of teachers, shortage of staff in school and limited funding to support the transition planning process. Vocational teachers agreed more than their counterparts in South-East region that poor collaboration with external entities, unclear transition guidelines and mismatch between vocational courses and employment goals negatively impacted the transition planning process.

Similarly, Ryan et al. (2019) posited that it may be more difficult for individuals with disabilities to maintain successful independent lives than their counterparts without disabilities. This may result from limited exposure to equal opportunities to participate in societal activities and limited range of choices, degree of freedom, autonomy and self-determination in daily living. One of the important pathways to obtaining gainful employment is vocational education and training. Successful transition from vocational education to post school settings can be particularly challenging for SWDs in the absence of appropriate transition planning practices to promote a seamless transition process (Brunetti & Corsini, 2019; Ookeditse, 2025). Vocational education and training are critical for helping SWDs develop values, skills, competencies, social networks and positive attitudes towards life (Delubom et al., 2020).

Teachers' possession of adequate knowledge and skills for successful implementation of transition programmes is a steppingstone towards Learners with disabilities (LWDs) attainment of successful post-school outcomes. Unfortunately, only a limited number of educators have the knowledge and skills required for supporting LWDs' transition goals (Morningstar & Mazzotti, 2014; Rowe et al., 2021; Shogren et al., 2016).

Dogbe (2015) carried out a study involving 228 teachers to explore their perceptions, knowledge, involvement and the relevance of transition skills. The findings revealed that while teachers acknowledged the importance of transition practices, policies, and barriers, they generally rated their own knowledge of these areas as moderate. This suggests that although teachers are engaged in transition processes, there remains a need for further professional development to strengthen their understanding and application of essential transition principles.

In Sub-Saharan Africa, placement, transitions, and progression in inclusive education remain constrained by persistent structural and contextual barriers. Although inclusive policies exist in many countries, their implementation is uneven, and research beyond focal contexts such as Kenya is limited. Evidence shows that initial placement decisions are critical for determining access to schooling, and the supports learners receive, with inappropriate or unsupported placements often linked to social isolation and academic underachievement. Key barriers include ad-hoc assessment and placement practices, shortages of trained teachers, inadequate infrastructure, limited learning materials and cultural stigma surrounding disability, which hampers early identification and enrollment. Transitions between educational stages are particularly fragile, as many systems lack structured transition frameworks, reducing continuity of support and increasing dropout risks. These challenges underscore the need for systematic assessment, investment in teacher training, and community-based approaches to strengthen inclusive pathways across the region (World Bank, 2023; JICA, 2022; Ewa, 2023).

Keitany et al. (2020) highlight the need for improved early identification competencies among pre-school teachers in Kenya, advocating for targeted professional development to support timely interventions. Kerubo and Makanya (2024) synthesize evidence showing that parental involvement is central to successful transitions from school to employment for learners with intellectual disabilities, calling for policy and practice reforms that position parents as equal partners, accompanied by accessible communication, person-centered transition planning, universal design for learning, and assistive technologies. The Senegalese experience offers a constructive counterpoint, showing that with targeted teacher training and resources, integration of deaf and hard-of-hearing students into mainstream classrooms can yield meaningful engagement and progression. Across the region, the literature consistently calls for more empirical research across diverse contexts to illuminate how

placement decisions are made, how transitions are supported institutionally, and which practices most effectively promote academic and social advancement.

Although inclusive education has made notable progress, literature continues to highlight substantial gaps. Scholars emphasise the need for longitudinal and cross-context studies that can track transition frameworks and learner outcomes across multiple educational levels, while also examining how socioeconomic status shapes disparities or opportunities in transition practices. There is a growing call for scalable, ecologically informed interventions that integrate school-based strategies with community and employer engagement, alongside research into technology-enabled supports that enhance readiness and access. Further exploration is required to establish contextual evidence, cross-cultural applicability, and long-term employment outcomes, as well as to assess the transferability of best practices across diverse settings (European Agency for Special Needs and Inclusive Education, 2023; UNESCO, 2020; Florian & Beaton, 2023; Black & Simon, 2022). Keitany et al. (2020) and Kerubo and Makanya (2024) assert that advancing inclusive progression depends on strengthening teacher competencies, enabling authentic family engagement, and embedding person-centered planning within broader policy and practice reforms.

Key findings on placement and transition in Finland (European Association of Service Providers for Persons with Disabilities, 2023) show a systemic shift toward inclusive placement within mainstream education through a structured three-tier support model, accompanied by a substantial decline in special schools (from 195 in 2002 to 62 in 2022). Tier 1 provides universal support via differentiated instruction in regular or special schools; Tier 2 offers intensified support for about 20% of learners with special needs (e.g., part-time special education); Tier 3 serves roughly 5% who do not respond to earlier interventions and are placed in special schools, where they receive individualized syllabi, with those with severe disabilities sometimes accessing basic education up to 11 years to complete 9 grades. Overall, the model aims to ensure effective placement and progression for learners with special needs within mainstream systems, though its success requires sustained resources and cross-system coordination to maintain inclusion while addressing diverse needs.

The Finland three-tiered support model was also previously glorified by Suhonen, (2020) research as being able to maximize use of school resources and student success by placing student with special needs in regular schools. The case study supported the Finland inclusion model in placement of special needs as it groups learners with special needs based on the severity in their placement. For example, those with developmental and sensory disabilities are placed in special schools and classes based on their age groups (Suhonen, 2020).

Globally, various countries implementing the Competency Based Curriculum (CBC) have also applied multiple placement options for learners with special needs. For example, the recent research by Snozzi, Müller, & Zurbriggen, (2025) on Switzerland school placement trajectories of 11 years, for learners with special needs depicted that most of special needs schooled in regular schools without special needs support, others attended inclusive schooling while others are placed in special and private schools. In the 11th year of the trajectory, the research depicted that 34% of special needs students schooled in regular schools, 25% in inclusive schooling and 40% in special and private school placement. Switzerland has a special introductory class after kindergarten for one year that eases transition to primary school. In Australia, Rheinberger et al. (2025) note that transition of children with disability is challenged by segregation. They postulate that segregation in education hinder the learners with special needs transition to primary school.

In African, countries that have embraced the CBC education model have different placement, transition and progression models for learners with special needs. For example, in Zambia, Mandyata et al., (2025) noted that there are gaps in education for learners with disability a factor that has led to establishment of the proposed *Zambian Inclusive Education Model*. This model proposes an education system that promotes equitable transition, placement and progression of learners with special needs and disabilities. In the *Zambian Inclusive Education Model*, the first phase targets Early Childhood Education (ECE) to Grade 3 where learners with special needs will attend specialised classes with teachers trained in special needs. Learners are introduced to foundation skills such as braille, sign language among others. Phase 2 will target transition and placement of learners with special needs from Grade 4 to Form 6 whereby learners with special needs transition to mainstream classrooms alongside the regular learners. This will be a full integration involving peer support and inclusive teaching and learning. The research depicts that the proposed *Zambian Inclusive Education Model* is intended to ensure transition of special needs learners when adequately prepared and supported to join inclusive classrooms (Mandyata et al., 2025).

Since Kenya adopted the CBC curriculum in 2017, researchers have increasingly analysed the transition, placement and progression of learners with special needs. In a Kenya-specific case study, Haga and Murungi (2019) critically examined the considerations and strategies designed to ensure that all learners with disabilities can transition in the spirit of ‘leaving no one behind’. They argue that achieving 100% transition for learners with disabilities requires urgent, systematic attention to several interrelated areas: effective implementation of education policies, stronger accountability mechanisms, targeted investment in the training of teachers and other education personnel, addressing the affordability of assistive technology and other learning resources and fostering a policy environment

that actively promotes partnerships with non-state actors who are essential to advancing inclusive transitions.

On the other hand, other researchers have taken a different lens to measure the transition and progression of learner with special needs from special schools to the community and labour market in Kenya. Mbeja, (2022), carried out a study among 347 Learners with Intellectual Disability who graduated from Busia County special schools provides insights on transition of learners with special needs and disabilities from schools to community. The study noted that there exist opportunities for progression of learners with social and vocational skills in the community. However, the study noted that lack of school and community linkage, isolation from community, prolonged stay in school and poverty hinders the progression of learners with disabilities in the community.

2.6 Key issues from the related literature

The literature reveals a persistent policy-to-practice gap in inclusive education for learners with disabilities. Strong policy commitments exist, but implementation lags due to misalignment with learner needs, weak planning, and insufficient teacher training, creating a disconnect between policy intentions and classroom realities in special schools and units. National frameworks call for adaptable materials, yet usable formats are unevenly distributed and monitoring is weak. Teachers often lack formal guidelines and structured support, relying on generic materials that reduce effectiveness. Curriculum supports such as tactile resources, AAC tools, large-print and Braille formats, sign language supports and other assistive ICT are scarce or poorly formatted, constraining meaningful participation and access. Although interactive digital content has potential to boost engagement, its impact is limited by infrastructure gaps, limited device access, poor connectivity and constrained teacher capacity, perpetuating the digital divide. To close the gap, literature advocates holistic strategies: targeted capacity-building, adequate resource allocation, and robust collaboration among teachers, families and specialists, with policy, curricula and infrastructure aligned to inclusive goals. Persistent gaps separate teacher preparation from classroom demands, while outdated facilities and scarce instructional materials, alongside stigma and limited ongoing professional development, undermine readiness for inclusive practice. Expanding attention to language, culture and socioeconomic factors is recommended, supported by holistic capacity-building and disability-focused pedagogy within revised curricula. Inconsistent infrastructure, shortages of trained special educators and insufficient multidisciplinary support personnel impede holistic learner support, and administrative coordination is often underdeveloped. Parental knowledge, confidence and collaboration are central, yet barriers include limited resources and communication gaps, requiring parents to be recognized as equal partners.

Non-formalized placement procedures, late or absent early identification, fragmented transition planning and lack of longitudinal data linking placement to outcomes hinder continuity. Regional gaps vary with Europe having variations in definitions and accountability in Europe, while Sub-Saharan Africa faces staffing shortages, infrastructure gaps and stigma. The evidence converges on a staged, resource-aware, policy-aligned approach to inclusion that preserves targeted support while expanding mainstream opportunities, underpinned by comprehensive stakeholder collaboration and ecologically valid interventions.

2.7 Chapter Summary

This chapter reviewed literature relevant to Special Needs Education (SNE) by defining key concepts, outlining the theoretical foundations including learning theories, behavioural theories and Ecological Systems Theory. It has defined the key concepts in the study and elaborated policy frameworks underpinning the study. Empirical evidence shows that policies guiding inclusive education exist, but real change is slow because schools do not fully meet diverse learner needs and teachers lack clear, practical guidance. Accessibility and support materials are often hard to use, and technological support is held back by lack of adequate devices or poor internet connectivity. To improve on accessibility and availability of support materials, previous studies recommend a broad, staged plan with more funding, real collaboration among teachers, families, specialists and curricula that consider language, culture and social factors. Placement and transitions are frequently inconsistent, with regional differences and staffing gaps. Studies suggest adopting a more practical, resource-smart approach that preserves core supports while expanding mainstream options through wide collaboration and real-world interventions.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the methodology employed in the study, detailing the research design, target population, sampling techniques, data collection instruments and procedures, as well as the approaches to data analysis. In addition, it outlines the ethical considerations that informed and guided the conduct of the study.

3.2 Research Design

The study adopted a concurrent mixed methods design. In this design, quantitative and qualitative data were collected during the same phase of the study, analysed separately, and then integrated during interpretation. Mixed methods design enables researchers to draw on the strengths of both numerical measurement and contextual explanation to provide a comprehensive understanding of a phenomenon (Creswell and Plano Clark, 2018).

The concurrent design was appropriate given the study's objective of examining the status of CBC implementation in SNE schools in terms of curriculum and teacher capacity. The integration of both strands enhanced complementarity and strengthened the validity of the interpretations.

3.3 Research Approaches

The study employed both quantitative and qualitative approaches, integrating numerical precision with contextual depth to enable a comprehensive exploration of the phenomenon in its entirety.

3.3.1 Quantitative Approach

The study adopted a quantitative approach to evaluate the extent of CBC implementation within Special Needs Education (SNE) schools and units integrated into regular schools. This approach emphasized the generation of numerical data amenable to statistical analysis. Quantitative methods are particularly suitable when the objective is to measure trends, identify patterns, and compare groups using structured instruments (Saunders et al., 2019; Zikmund et al., 2021).

3.3.2 Qualitative Approach

The study employed a qualitative approach to investigate participants' contextual realities concerning CBC implementation in Special Needs Education (SNE) schools and units within regular schools. This method facilitated the capture of learner experiences, teacher reflections, and stakeholder perspectives

that, while not quantifiable, were indispensable for comprehending the implementation process. As Creswell and Poth (2018) emphasize, qualitative inquiry is particularly suited to exploring complex educational phenomena by foregrounding meaning, context, and lived experience.

3.4 Research Methods

Research methods denote the specific procedures and techniques employed to gather and analyze data within a study.

3.4.1 Quantitative Methods

The quantitative component employed structured questionnaires administered to education officers, heads of institutions, and teachers, alongside researcher-led observations using observation guides. Questionnaires are particularly effective for collecting standardized data from large populations and allow for statistical comparisons across respondents (Creswell, 2018; Saunders et al., 2019). This method was appropriate for assessing the extent of CBC implementation in SNE schools and units.

3.4.2 Qualitative Methods

The qualitative component employed focus group discussions and interviews. Focus groups are suitable for examining shared experiences and collective perspectives (Korstjens & Moser, 2018), whereas interviews provide opportunities for in-depth probing of contextual issues (Palinkas et al., 2020). These methods were deemed appropriate given that CBC implementation entails complex contextual dynamics that cannot be adequately represented through numerical data alone. The integration of quantitative and qualitative approaches enhanced methodological triangulation and thereby strengthened the validity and robustness of the study's findings (Creswell & Plano Clark, 2018).

3.5 Sampling

3.5.1 Target population

The target population for this study comprised public special schools and special units across Kenya. Key respondents included education officers at different levels, such as County Directors of Education, Teachers Service Commission County Directors, Quality Assurance and Standards Officers (QASO), and Curriculum Support Officers (CSO) in Special Needs Education. At the institutional level, the study engaged HoIs from special schools, integrated programmes, and regular schools with special units, alongside teachers trained in Special Needs Education (SNE). In addition, learners with special needs and disabilities enrolled in both age-based and stage-based pathways formed part of the study population, together with the parents and caregivers of learners in age-based and stage-based pathways, whose insights were critical in supporting the education and holistic development of these learners. A total of 188 special schools, integrated schools and units in Kenya were targeted.

3.5.2 Quantitative Sampling

For the quantitative strand, multi-stage sampling was employed. Stratified sampling was used to identify schools and ensure proportionate representation. Within each county, stratified sampling ensured representation of rural, and urban schools. Subsequently, simple random sampling was then used to select four (4) schools per county.

Within each school, stratified sampling was used to select four teachers representing different categories of learners with special needs and disabilities, namely Visual Impairment (VI), Hearing Impairment (HI), Physical Impairment (PI), and stage based. All Heads of Institutions in sampled schools participated in the study. This probability-based approach minimised the risk of selection bias and enhanced representativeness, a critical requirement in quantitative research (Zikmund et al., 2021).

3.5.3 Qualitative Sampling

For the qualitative strand, purposive and stratified sampling techniques were used. Learners who participated in focus group discussions were selected through stratified sampling to ensure representation from Grades 4, 5, and 6, followed by simple random selection within each grade.

Education officers and parents were purposively selected based on their roles and relevance to CBC implementation. Purposive sampling is particularly appropriate in qualitative research, as participants are chosen for their knowledge and experience related to the phenomenon under investigation (Palinkas et al., 2020). This approach ensured the depth and richness of the information obtained.

3.5.4 Sample size

The sample size for this study comprised 1,236 participants, summarized in Table 1 as follows:

Table 1: Sample Size

No.	Category	Sample size
1.	HoIs	188
2.	Teachers	564
3.	Learners FGDS	188
4.	Parents	94
5.	Education Officers	94
6.	Observation checklists	108
	Total	1236

3.6 Data Generation Procedure

3.6.1 Quantitative Data Generation

Data collection for the study employed written questionnaires, oral interviews, a Focus Group Discussion (FGD) guide, and an observation guide. The questionnaires, administered to

education officers, heads of institutions (HoIs), and teachers, included both closed- and open-ended items aligned with the study objectives on curriculum implementation. Responses were numerically coded and entered into statistical software for analysis, enabling the computation of frequencies, percentages, and means to identify patterns and trends in CBC implementation in SNE schools and SNE units within regular schools.

3.6.2 Qualitative Data Generation

In every institution visited, oral interviews were conducted with parents of learners enrolled in the school. A Focus Group Discussion (FGD) guide was used to collect rich qualitative insights from the learners, while an observation guide was applied across all the institutions to capture contextual data. All interviews and FGDs were audio-recorded and later transcribed to facilitate systematic analysis. The use of multiple data collection methods was important because it allowed for the triangulation of data. According to Creswell (2014), triangulation can increase the validity and reliability of the findings. The use of different research tools offered a comprehensive and holistic perspective on the implementation of CBC in special schools and units in Kenya, thereby enabling the study to yield rich nuanced findings.

3.7 Data analysis

Data analysis transformed raw data into meaningful insights aligned with the study objectives. Through a mixed-methods approach, quantitative data were analysed statistically to identify trends and relationships, while qualitative data were analysed thematically to capture participants' experiences and contextual perspectives. The integration of both approaches strengthened accuracy, enhanced validity, and enriched the overall interpretation of CBC implementation in special needs education schools and unit.

3.7.1 Quantitative Data Analysis

Quantitative data collected through questionnaires and observation guides were analysed using descriptive statistics, including frequencies, percentages, and means, to summarize responses from education officers, teachers, and heads of institutions. Descriptive analysis is suitable for presenting data clearly and interpretably (Saunders et al., 2019; Zikmund et al., 2021). Prior to analysis, the data were cleaned to detect outliers and ensure consistency. The refined dataset was first entered into Excel and subsequently transferred to SPSS for precise and efficient processing (Creswell & Plano Clark, 2018), thereby facilitating the identification of patterns and trends in CBC implementation.

3.7.2 Qualitative Data Analysis

Qualitative data, derived from oral interviews, focus group discussions (FGDs), open-ended questionnaire items, and observations, formed the bulk of the findings. All interviews and FGDs were transcribed verbatim and subjected to thematic analysis to identify recurring patterns, themes, and categories related to the implementation of the CBC in special schools and units (Braun & Clarke, 2006; Creswell & Poth, 2018). Direct quotations from participants were incorporated to illustrate and support the findings, while a coding system was employed to ensure confidentiality and uphold the integrity of the data (Guest, MacQueen, & Namey, 2012).

3.8 Trustworthiness of the study

This involved the measures that were undertaken to ensure that the research process was conducted with integrity and reliability throughout.

3.8.1 Trustworthiness of quantitative research

Validity and reliability are key elements in determining trustworthiness of quantitative research. Validity in research refers to how well a research instrument measures what it is intended to measure. In this study, content validity was considered as one of the most important aspects in trustworthiness of the study. Content validity is defined as the degree to which items in an instrument reflect the content universe to which the instrument will be generalised (Straub, Boudreau et al., 2004). In this study, validity in the instruments was ensured through a process of validation by research and curriculum experts especially in special needs education. In addition, the instruments were further validated through a pilot exercise where items that appeared unclear were reviewed following the piloting. The instruments were then tested for reliability using Cronbach alpha test for reliability.

Reliability refers to the consistency and stability of the instrument in measuring the intended constructs. The overall reliability coefficient obtained was 0.88. This value was deemed highly reliable since a Cronbach's alpha of 0.70 and above is generally considered acceptable for social science research, while coefficients above 0.80 indicate good internal consistency. Therefore, the instruments demonstrated a high level of reliability, suggesting that the items consistently measured the constructs under investigation and that the data generated were dependable for analysis and interpretation.

3.8.2 Trustworthiness of qualitative research

Trustworthiness refers to rigour of the study. It refers to the degree of confidence in data, its interpretation, and methods used to ensure quality of the study. As pointed out by Lincoln and Guba (2005) and Lichtman (2014), there are four (4) aspects of trustworthiness in qualitative research. These are credibility, transferability, dependability and conformability.

Credibility is the extent to which the study investigates what it set out to investigate. The key concern of the study was to assess the status of the implementation of the CBC curriculum for learners where the curriculum is offered at the lower levels.

Data triangulation has been used to increase the trustworthiness of the study. This involves using multiple data sources to corroborate findings (Creswell & Clark, 2018). The use of multiple data sources also allows for the exploration of multiple perspectives and the identification of patterns and relationships between variables. Data was generated from different participants such as education officers, HoIs, teachers, learners, and parents or caregivers. Different data generation tools were used in the study. These included questionnaires, oral interview guides, FGDs as well as observation guides. Additionally, there was triangulation of data analysis methods. The study generated both quantitative and qualitative data. These were also triangulated to give a clear picture on implementation of CBC in special schools and units.

Transferability is the extent to which the findings of the study can be generalizable to other similar contexts. Sufficient details about the context of the fieldwork were provided to enable the reader to determine whether the findings can justifiably be applied to other settings.

Dependability is the extent to which the research procedures are clear enough to readers to enable other researchers carry out similar studies in the same or other related contexts. This aspect was taken care of in this study by providing a rich detail of the entire research process. Any researcher interested in replicating this study in Kenya or elsewhere, has a clear roadmap from the research problem, objectives, scope, rationale, literature and methodology to successfully do so.

Data generation process requires documentation to demonstrate that findings emerge from the data and not researchers' own predispositions. This is conformability of the study. To ensure neutrality in the study, the research process involved the researchers as well as other curriculum developers from the KICD. This was meant to avoid biases in the research process. Overall, the data generation process was conducted in a systematic and rigorous manner. The results of the data analysis are presented to different stakeholders in a clear and concise manner to facilitate interpretation and understanding.

3.9 Ethical Considerations

Ethical considerations for this study included obtaining informed consent from participants, maintaining confidentiality, and ensuring that the research did not cause harm to the participants. To obtain informed consent, participants were provided with detailed information about the study, including its purpose, methods and benefits. They were informed that participation is voluntary, and that they had an opportunity to ask questions or withdraw from the study at any time.

Ethical procedures for this study ensured that participants' rights were protected, and that the research was conducted in an ethical and responsible manner. To ensure efficiency of the process, the research team was guided on handling sensitive information and to conduct interviews in a sensitive and respectful manner. Participants were informed they were at liberty to skip any questions that they felt uncomfortable answering and were provided with a conducive environment when responding. Sensitivity to learners' levels of disability was considered, with appropriate accommodations such as interpreters, assistive devices, or smaller groups to allow equitable participation and avoid discrimination

3.10 Chapter Summary

This chapter outlines the research process adopted for the study. A mixed-methods approach was applied, generating both quantitative and qualitative data simultaneously. Multiple tools including questionnaires, interview guides, focus group discussions, and observation schedules employed to collect the data have been discussed. Quantitative data was analysed using descriptive statistics, while thematic analysis was used for qualitative data. Throughout the process, ethical standards were strictly observed to safeguard participants and uphold the trustworthiness of the findings.

CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Introduction

This chapter presents the findings of the study. The findings are organised according to the study objectives, focusing on the availability and adequacy of adapted curriculum designs, curriculum support materials, interactive digital content, teacher capacity, infrastructure, and the use of assistive technologies. Data was generated from heads of institutions, teachers, learners, parents, education officers and through direct observations within schools.

4.2 Response Rate

The response rate for the study is presented in Table 2.

Table 2: Response Rate

Category	Target	Achieved	%
Heads of Institutions	188	187	99.5
Teachers	564	545	96.6
Education officers	94	88	93.6
Parents	94	80	85.1
Learner FGDS	188	159	84.6
Observations	108	104	96.3
Overall	1236	1163	94.1

The study targeted a total of 1,236 respondents across all categories, out of which 1,163 participated, yielding an overall response rate of 94.1%. This response rate is considered excellent for social science research and provides a strong basis for reliable data analysis.

Specifically, 188 Heads of Institutions were targeted and 187 participated, resulting in a response rate of 99.5%. For teachers, 564 were targeted and 545 responded, giving a response rate of 96.6%. Among education officers, 94 were targeted and 88 participated, yielding a response rate of 93.6%. For parents, 94 were targeted and 80 responded, translating to 85.1%. Learner focus group discussions (FGDs) targeted 188 FGDs, of whom 159 were obtained, representing a response rate of 84.6%. Additionally, 108 observations were targeted and 104 were successfully conducted, resulting in a response rate of 96.3%.

According to Mugenda and Mugenda (2019), a response rate of 60% and above is adequate, 70% and above is very good, and 80% and above is considered excellent for purposes of analysis and reporting. Therefore, the response rates achieved in all categories, as well as the overall response rate of 94.1%, were highly satisfactory and sufficient to ensure representativeness and credibility of the findings.

High response rates reduce the likelihood of non-response bias and strengthen the validity of research findings (Creswell & Creswell, 2018).

4.3 Availability and Adequacy of Adapted Curriculum Designs, Curriculum Support Materials and Interactive Digital Content

4.3.1 Availability and Adequacy of Adapted Curriculum Designs

This section discusses the availability and adequacy of curriculum designs for learners with disabilities, focusing on both stage-based and adapted approaches, as reported by Heads of Institutions, teachers, and field observations.

i) Stage-Based Curriculum Designs

Stage-based curriculum designs are educational frameworks that organize learning into sequential stages, foundation, intermediate, pre-vocational and vocational phases, to align with the developmental progression and diverse learning needs of students. For learners with disabilities, these stage-based designs are particularly important because they provide structured pathways that can be tailored to individual abilities, pacing, and support requirements. This approach ensures that learners are not forced into a one-size-fits-all trajectory but can progress through the curriculum at a rate and manner suitable to their cognitive, physical, and social development. By aligning content, teaching methods, and assessment strategies with defined stages, educators can create more inclusive environments where learners with disabilities have equitable opportunities to acquire knowledge and skills.

Findings from the Heads of Institutions (HoIs) indicate that adapted curriculum designs aligned to the Competency Based Curriculum (CBC) are moderately available in schools serving learners with special needs and disabilities. The average level of agreement on the availability of curriculum designs was 63.6%. This is detailed in Table 3.

Table 3: Heads of Institutions Responses on Availability and Adequacy of Adapted curriculum and other Materials

Items	%
a) Adapted curriculum designs aligned to CBC for my learners' disability category are available.	72.2
b) The adapted curriculum designs are adequate for learning and assessment.	66.4
c) Curriculum Support Materials (CSM) align with competencies and aspirations of CBC.	68.6
d) Our school has sufficient variety of CSM for different disability categories (e.g., tactile, visual, auditory, simplified).	51.2

e) Interactive Digital Content is available for use by learners with special needs and disabilities.	55.0
f) The available digital content is appropriate for use by the category of learners in our school.	57.8
g) Assistive technology devices are available in our school (e.g., braille's, hearing aids, communication boards etc.).	49.4
h) Our school has adequate copies of the approved textbooks.	55.8
i) Teachers undertake curriculum adaptations at class level to suit the needs of individual learners.	79.2
j) Teachers undertake quality assurance at school level to check alignment with the curriculum.	80.6
Average	63.6

From Table 3, majority of Heads of Institutions (72.2%) reported that stage-based curriculum designs adapted for specific disability categories are available in their schools, and 66.4% considered them adequate for learning and assessment.

Teachers' responses corroborate this trend, though at slightly lower levels as illustrated in table 4.

Table 4: Teachers Responses on Availability and Adequacy of Adapted curriculum and other Materials

Availability and Adequacy of Adapted curriculum and other Materials	Percent
(a) Adapted curriculum designs aligned to CBC for my learners' disability category are available.	62.4
(b) The adapted designs are adequate for learning and assessment.	56.8
(c) Curriculum support materials align with competencies and aspirations of CBC.	62
(d) Our school has sufficient variety of CSMs for different disability categories (e.g., tactile, visual, auditory, simplified).	45.8
(e) Interactive digital content (IDC) is available for use by learners with special needs and disabilities.	53.8
(f) The available digital content is appropriate for use by the category of learners in our school.	54
(g) Assistive technology devices are available in our school (e.g., braille's, hearing aids, communication boards etc.).	45.4
(h) The school has adequate copies of the approved textbooks and other CSMs.	48.8
Average	53.6

About 62.4% of teachers agreed that adapted curriculum designs are available, while 56.8% perceived them as adequate for supporting teaching and assessment. This indicates that

although adapted curriculum structures have been introduced in line with CBC reforms, their adequacy in addressing the diverse learning needs of learners with disabilities remains moderate rather than optimal.

The moderate agreement levels suggest that the policy framework supporting inclusive curriculum implementation exists, but challenges remain in translating these frameworks into fully accessible instructional resources. Respondents also raised concerns regarding the shortage or absence of learning curriculum designs aligned to specific disability categories and levels.

Some institutions reported a complete lack of printed adapted curriculum designs, while others indicated that the materials were accessible only through online platforms. This mode of access reduced usability in areas with limited internet connectivity. These constraints affected lesson preparation, adaptation of learning activities, and the structured delivery of instruction.

Head of Institution: Lack of textbooks for learners for the respective levels per learning area, lack of designs (HOI-QN-MWA-PR-SP-IDD-TAT).

Education Officer: No textbooks, especially in MH schools from foundation to vocational curriculum designed, are just uploaded online (EO-QN-CSO-SNE-ELM).

Education Officer: Provision of textbooks for all levels at the right time. Customised curriculum designs to be provided (EO-QN-CSO-SNE-ELM).

Teacher: Curriculum designs for foundation level, assorted number of work materials and course books if available (T-QN-KAS-PB-SP-MD-KIT).

Teacher: By adapting the curriculum on our own using the curriculum used by regular learners (T-QN-CHE-SP-MD-TAR).

These statements indicate that although curriculum designs are officially available, accessibility is often constrained by distribution, format, and infrastructural limitations such as internet connectivity. However, direct field observations painted a different picture. Findings from observation study carried out is reported in table 5.

Table 5: Findings from Field Observations

Observed aspect	No	Yes
(a) Availability of SNE-adapted CBC curriculum designs	66.3	33.7
(b) Access to interactive digital content suitable for different disabilities of learners	52.0	48.0
(c) There is adequate assistive technology devices (tablets, laptops, digital Braille displays, communication boards among others)	44.4	55.6
(d) The school has adequate copies of the approved textbooks and other curriculum support materials	28.3	71.7

The findings in Table 5, show Only 33.7% of schools had visible copies of adapted CBC curriculum designs, while 66.3% lacked accessible copies during field visits. This gap between self-reported availability and actual, on-the-ground access suggests that while schools may have policies or digital copies in place, practical access to these vital resources remains limited for both teachers and learners. The implications are significant, as the absence of easily accessible stage-based designs can hinder effective lesson planning, individualized instruction, and the overall learning experience for students with disabilities. Ensuring that these curriculum designs are not only developed but also distributed in user-friendly formats and made physically available in schools is crucial for realizing the full benefits of stage-based education for all learners. Some of the adapted curriculum designs available are illustrated in **Figure 3**.

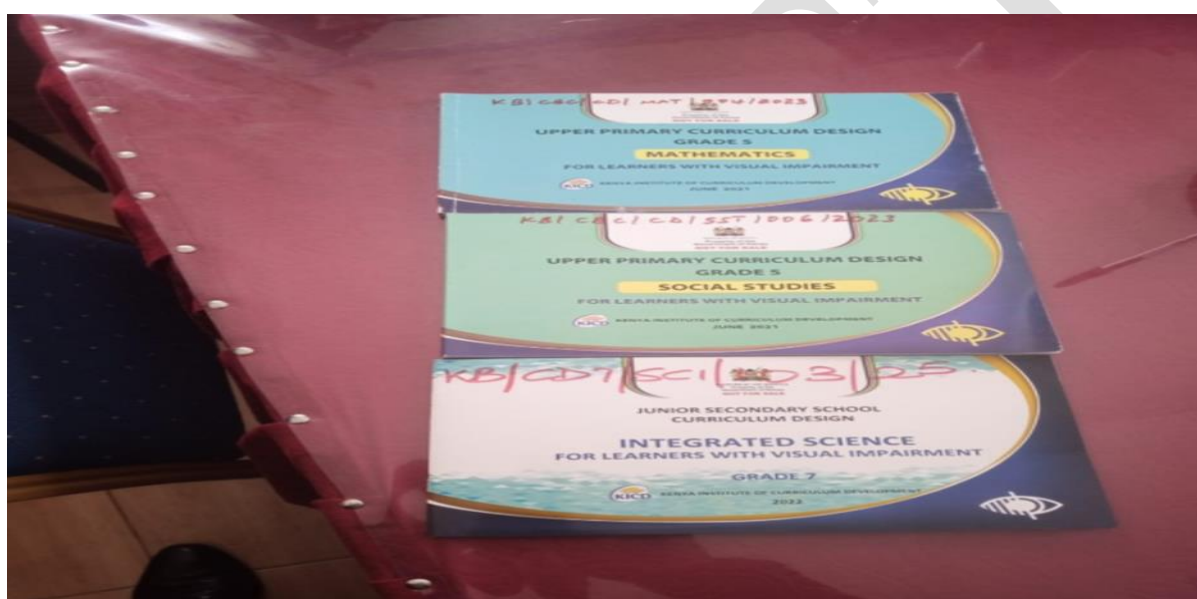


Figure 3: Evidence of adapted curriculum designs available in schools

ii) Adapted Curriculum Designs

Adapted curriculum designs involve the modification of standard curriculum content and instructional methods to meet the diverse needs of learners with disabilities. These adaptations are essential for ensuring that all students have equitable access to learning and assessment opportunities.

Data collected highlights the current state of adapted curriculum designs for learners with disabilities in schools; 72.2% of Heads of Institutions reported that adapted curriculum designs aligned to the Competency Based Curriculum (CBC) for specific disability categories are available in their schools. Heads of Institutions found that 66.4% of these adapted curriculum designs are adequate for learning and assessment. 62.4% of teachers agreed that adapted curriculum designs are available, while 56.8%

considered them adequate for teaching and assessment. Field observations indicated that only 33.7% of schools had visible, accessible copies of adapted CBC curriculum designs.

These findings reveal a notable gap between reported availability and actual, practical accessibility of adapted curriculum designs. While a majority of institutional leaders and teachers report the presence and adequacy of these designs, the low percentage of schools with accessible copies suggests that many learners with disabilities may still face barriers to fully benefiting from adapted curriculum resources.

These conclude that, although policy frameworks support the provision of adapted curriculum designs, there remains a persistent discrepancy between reported availability and practical access within schools. Ensuring that adapted curriculum designs are not only available but also physically and visibly accessible to both teachers and learners is critical for advancing inclusive education and supporting the diverse needs of learners with disabilities.

4.3.2 Availability and adequacy of Curriculum Support Materials

The study also sought to establish whether textbooks and learning materials are available, adequate and accessible to SNE learners. Focus was also on availability and suitability of assistive devices that support participation of learners with special needs and disabilities in the curriculum. Assistive devices facilitate reading, writing, listening, speaking and interaction with learning content. Findings were drawn from teachers, heads of institutions, field observations and learner-focused group discussions, providing a triangulated view of the level of availability, adequacy and potential gaps in curriculum support for SNE learners.

i) Availability and adequacy of Textbooks for learners with special needs and disabilities

Qualitative findings illustrate persistence of resource shortages across special schools and units. Heads of Institutions and Education Officers consistently reported inadequate supply of textbooks across levels, particularly at foundation and vocational stages. Schools serving learners with visual impairment and hearing impairment were disproportionately affected. Braille textbooks, large print materials, tactile diagrams, orbit readers, and Kenya Sign Language resources were reported as insufficient.

Teachers' responses reveal that there is a consistent pattern of shortages and inadequate adaptation of foundational materials essential for teaching and curriculum delivery. Several statements highlight missing or insufficient textbooks, limited contents, and a reliance on curriculum designs rather than adequately developed instructional resources. Teachers stressed the need for more comprehensive and

adapted textbooks, as well as broader teaching and learning resources. They indicated that scarcity of these resources, collectively impeded effective curriculum implementation and inclusive education.

Teacher: Lack of textbook, which has contents. Lack of resources for curriculum delivery. (T-QN-KHA-PB-SP-IDD-BUN).

Teacher: Lack of textbooks, we rely on curriculum designs (T-QN-MIC-PB-SP-IDD-EMB).

Teacher: Inadequate resources eg textbooks (T-QN-DEA-PB-SP-HI-KAK).

Teacher: Lack of adequate and adapted and adapted textbooks ...Lack of adequate and adapted teaching and learning resources (T-QN-SEC-PB-SP-IDD-TRN).

Teacher: Inadequate resources, such as textbooks and digital devices, ... remain significant barriers to effective inclusive education (T-QN-KIP-PB-SP-IDD-KER).

Field observations similarly identified the shortage of textbooks in SNE schools. The observers noted that teachers of LSND resorted to teaching with the curriculum design where no books were available. Some schools had not received books for lower and upper primary. Resource management concerns were revealed with an observer indicating that some books given to schools were torn.

Observer: Not even one left book, the teacher uses only curriculum design (OBS- KOI-PB-SP-MD-NAR).

Observer: The school has not received the lower primary books (1-3) and grade 5 &6 (OBS-CHEP-PB-SP-VI-ELM).

Observer: ... Grade 5 books lacking; 1 textbook for G4, available books are worn-out (OBS-UNO-PB-SP-PI-MAK).

ii) Kenyan Sign Language and Braille Materials

Teachers' responses additionally indicated that there were insufficient resources specifically tailored for Kenyan Sign Language (KSL), including the availability of rationalized or accessible textbooks and teaching materials for KSL learners.

Teacher: Lack of adequate learning -teaching resources especially for KSL (T-QN-NYA-PB-SP-HI-NYA).

Teacher: Lack of enough learning materials ie rationalized textbooks and textbooks for KSL (T-QN-KER-PB-SP-HI-KIR).

Moreover, schools serving learners with visual impairment and hearing impairment reported shortages of braille materials, large print books and Kenya Sign Language resources. Responses indicate a need for accessible materials and compatible print/braille resources, highlighting issues around braille books for learners with visual or multiple disabilities and the alignment between braille and print formats.

Head of Institution: Inadequate KSL resources (HOI-QN-KAF-PR-SP-VI-KWA).

Head of Institution: Provide adequate KSL textbooks and story books (HOI-QN-KAF-PR-SP-VI-KWA).

Education Officer: We have limited materials special for the V.I and KSL (EO-QN-CSO-SNE-BOM).

Education Officer: V.I school face shortage of large print materials and braille textbooks (EO-QN-CSO-SNE-BOM).

Education Officer: V.I school to be provided with enough larger print materials and braille books (EO-QN-CSO-SNE-BOM).

Teacher: Braille textbook and orbit readers; Tactile maps and diagrams; Closed circuit television (T-QN-CHE-PB-SP-MD-TAR).

Teacher: braille books for all grades (T-QN-CAT-PB-SP-MD-WAJ).

Teacher: Adapted textbooks, maps, teaching aids suitable for our learners (T-QN-KIZ-PB-SP-HI-KER).

Teacher: ... lack of rationalized braille books for lower primary and upper primary, ensure compatibility of braille and print books (T-QN-KER-PB-SP-HI-KIR).

Observations confirmed these views spotlighting the scarcity of textbooks for use in curriculum implementation. The shortages of braille textbooks, orbit readers, tactile diagrams, and KSL materials constrain access to content for learners who rely on alternative communication and reading formats. One observer noted that learners with VI were limited in participating in class activities since they were unable to interact with visual content.

Observer: The school lacks an SNE-adapted CBC curriculum design and has few copies of approved textbooks and do not have KSL learning materials (OBS-KAP- PB-SP-HI-UAG)

Observer: The materials available are the same as for the regular learners. There's need for adopted materials for learners with SNE especially the HI (OBS-LIS-PB-SP-PI-TAR)

Observer: The school is basically treating the VI learners as learners with no circumstance requirements when the other learners are reading or working at the blackboard, the learners with VI are left totally hanging. (OBS-NGU-PB-SP-VI-MAK)

Additionally, learners reported that essential materials such as Kenyan Sign Language books were not available, limiting their ability to fully participate in the curriculum. In several schools, learners requested government support to provide adequate textbooks, noting that the few available copies were insufficient to meet the needs of all learners. Observations corroborated the sentiments of the learners. Observers noted that schools lacked books to support curriculum implementation. The observers also noted that teachers are using old books that are not aligned to CBC.

Learner: Need fresh papers, large print textbooks for JSS. Textbooks for primary are lacking (L-FGD-LIK-PB-SP-VI-MSA).

Learner: Braille books, facility, stylus not enough, for JSS we have to wait for grade 9 to give us braille machines (L- FGD-LIK-PB-SP-VI-MSA).

Learner: Grade 5- no books at all; English none only one copy for teacher (L- FGD-MWA-PB-SP-CP-TAT).

Learner: We don't have KSL books (L- FGD-KWA-PB-SP-VI-KWA).

Learner: Few textbooks, government to help with textbooks (L-FGD-MUN-PB-SP-CP-BUS).

Learner: Textbooks are inadequate- govt o provide nice books (L-FGD-NGA-PB-CP-VI-NAK).

Observer: ... However, there is need for improvement, For example, in number of copies of textbooks (OBS-NAL-PB-SP-PI-BUN).

Observer: The school does not have the current CBE textbooks and curriculum support materials (especially large prints) ... (OBS-KAM-PB-SP-VI-ISI).

Observer: No books or support materials using old books (OBS-THU-PB-SP-IDD-MUR).

Observer: Books not available for the learners. Using old books (OBS-GAC-PB-SP-IDD-MUR)

Several statements from teachers' point to a paucity of adapted textbooks and learning aids, which directly constrain teachers' ability to deliver content in accessible formats. This scarcity extends to the broader ecosystem of adapted resources, including the absence of suitable adaptive technology. Teachers note that these gaps undermine the capacity to implement inclusive practices and tailor learning experiences to individual needs. Observations noted that schools have curriculum support materials but these materials are not adequate.

Teacher: Lack of assistive devices, insufficient adapted textbook and learning aids (T-QN-NYA-PB-SP-PI-HOM).

Teacher: Inadequate assistive devices, adaptation curriculum not available (T-QN-MAN-PB-SP-HI-MAN).

Teacher: No textbooks- no adapted materials for the learners with special needs. No suitable adaptive technology for learners with special needs... (T-QN-UNI-PB-SP-VI-MAR).

Teacher: Lack of adapted materials and assistive devices to learners, lack of cooperation from parents (T-QN-KER-PB-SP-HI-WEP).

Teacher: Lack of adapted materials, inadequate support on delivering curriculum, curriculum for LSND (T-QN-MAN-PB-SP-HI-MAN).

Observer: We have some support materials specific for SNE in our schools but they are not adequate ... (OBS-TOM-PB-SP-IDD-MSA).

Teachers perspectives were sought to identify adapted materials needed in school. In their responses specified that schools needed adapted course books. Specifically, they pointed out learning areas such as Creative Arts, Social studies, Science, Pre-technical studies and KSL where textbooks needed to be adapted. The teachers emphasized the need to have these books adapted to suit the category of learners who are expected to use the books.

Teacher: Adapted text books for learners with hearing impairments eg adapted C/A text books. Adapted Social Studies for grade 4 and 5. Adapted Science for grades 4-6 (T-QN-NYA-PB-SP-HI-NYA).

Teacher: Textbook for hearing impairment (T-QN-DEA-PB-SP-HI-KIS).

Teacher: KSL Dictionary, Kenya sign language textbook for all grades (Course books) (T-QN-PAU-PB-SP-HI-MIG).

Teacher: Textbooks and learning materials (T-QN-KAF-PB-SP-HI-KWA).

Teacher: Textbooks that are adapted to suit learners needs. KSL textbooks (T-QN-KWA-PB-SP-HI-KWA).

Teacher: Adapted books especially pre-technical studies. Adjustable desks and chairs adapted keyboards. Pen holders (T-QN-DIS-PB-SP-PI-MAC).

Similarly, heads of institutions mentioned adapted course books as a required resource in schools. They pointed out the need for course books for visually impaired learners written in Braille. They mentioned that lack of course books for KSL has made it difficult to implement the curriculum for learners with hearing impairment. The heads of institution highlighted the need for instructional materials to be adequate and appropriate. Furthermore, they noted that these materials should be provided in good time to support the implementation of the curriculum.

Head of Institution: Adequate and appropriate instructional materials to be provided in good time, lack of textbooks for KSL has made the curriculum implementation for HI difficult, prepare textbooks to go along with the designs (HOI-QN-SIP-PB-SP-IDD-LAI).

Head of Institution: Provide teachers, provide materials for teaching and learning like models, designs and books (HOI-QN-MOK-PB-SP-VI-LAM).

Head of Institution: provide braille books for the visually impaired (HOI-QN-CAT-PB-SP-HI-WAJ).

Head of Institution: Avail SNE books in the bookshops, involve class teachers in publishing SNE books (HOI-QN-MAN-PB-SP-VI-MAN).

These issues spotlighted by teachers and heads of institution are in validate findings on Table 3 and 4 where teachers had a level of agreement of 48.8% on adequacy of approved textbooks while Heads of institution had a level of agreement of 55.8% on the same aspect.

Additionally, the heads of institution specified that there was need to provide learning resources for Pre-vocational level. They urged KICD to develop learning materials for learners with hearing impairment, stressing that these materials should have more illustrations than writing since learners with HI are visual learners. The heads indicated that Stage based pathway required learning resources and urged relevant bodies to provide these materials.

Head of Institution: Provide learning materials/equipment for prevocational stage (HOI-QN-NYA-PB-SP-MD-HOM).

Head of Institution: Every learning institution to be provided with specialised services i.e. audiology, psychotherapist. KICD to develop KSL materials for better learning. Let the instructional materials have more illustrations than writings because the H.I learners are visual learners (HOI-QN-PAU-PB-SP-VI-MIG).

Head of Institution: KICD should send enough materials for the for the learners who are in stage based to enable them their skills well (HOI-QN-GIA-PB-SP-VI-KIS).

Head of Institution: Provide enough learning/teaching materials to help improve curriculum implementation... (HOI-QN-OMU-PB-SP-MD-NYA).

The observation findings corroborate the broader trends emerging from the data. Field observations reveal substantial inconsistencies in availability and adequacy of assistive technologies and textbooks. However, it was observed that schools have found ways to overcome some of these challenges.

Teacher adapted materials were seen to be used in some schools. Teachers adapted everyday items and community-based materials to develop tactile learning aids, visual charts, simplified reading materials and communication tools tailored to the needs of learners across different disability categories. For instance, locally sourced materials were used to develop tactile diagrams, number work aids, flashcards, and improvised manipulatives to support competency-based activities. These are illustrated in Figure 4.



Figure 4: *Locally sourced materials*

iii) Availability and adequacy of assistive technology and devices

Findings generally indicate a recurrent pattern of many learners lacking essential assistive devices. Teachers' responses noted non-availability or inadequacy of devices and teaching aids needed for effective learning. The teachers revealed that there was scarcity of devices such as braille machines, mobility aids, audio-visual aids, hearing aids and magnifiers.

Teacher: No assistive devices for the learners especially brailers and magnifiers. (T-QN-NGU-PB-SP-VI-MAK).

Teacher: lack of adequate adopted materials and assistive device (T-QN-HAB-PB-SP-MD-WAJ).

Teacher: Lack of audio visual aids, lack hearing aids, lack of resources for KSL... (T-QN-SCH-PB-SP-HI-BUS).

Teacher: There are no brailers, mobility aids, large print ... (T-QN-NGU-PB-SP-VI-MAK).

In their responses, teachers linked the cost of devices to limited access, highlighting that some learners cannot obtain necessary tools due to financial barriers. It was noted that some parents may not afford the assistive devices required by learners.

Teacher: High cost of resources, inadequate of teaching and learning resources, ... (T-QN-MAN-PB-SP-VI-MAN).

Teacher: Lack of assistive devices for some of the learners whose parents cannot afford (T-QN-LOK-PB-SP-PI-TUR).

Teacher: Lack of adequate assistive devices and materials, financial difficulties, especially trying to acquire the assistive devices (T-QN-THI-PB-SP-IDD-LAI).

Teacher: Inadequate assistive devices... (T-QN-MAN-PB-SP-VI-MAN).

There was a clear emphasis on gaps in braille provision, transcription capacity and alignment between braille and print materials, affecting access for learners with visual impairment. The teachers mentioned that some schools lack braille paper while others do not have braille transcribers.

Teacher: The school doesn't have enough braille paper, braille transcribers are not there completely so we cannot transcribe from print to braille, N.B We need a transcriber (T-QN-KOM-PB-SP-VI-MIG).

Teacher: Lack of braille papers used by learners who are VI and learning materials for learners who have low vision (T-QN-MIT-PB-SP-VI-TRN).

Teacher: ... lack of rationalized braille books for lower primary and upper primary, ensure compatibility of braille and print books (T-QN-FRA-PB-SP-VI-WEP).

Similarly, field observations spotlighted the limited availability of assistive devices and technologies to support learning. The schools had inadequate assistive devices or lacked assistive devices. The lack of ICT devices was linked to failure to interact with IDC.

Observer: ...The school is in need of adequate assistive technology devices i.e Braille, tablets, graphs for learners with different disabilities (OBS-LIK -PB-SP-IDD-KAJ)

Observer: There are no assistive technology devices. There are braille machine; but they are not adequate... (OBS-OLK-PB-SP-VI-KAJ)

Observer: There is lack of adapted materials. There are no adequate assistive technology e.g computer, laptops, digital content to assist the learners in their learning... (OBS-UNO-PB-SP-PI-MAK)

Observer: There is availability of adapted CBC curriculum but no tablets even though we have computers in display... (OBS-LUT-PB-SP-IDD-KSM)

Observer: They do not have computers but visit the lab (OBS-MUS-PB-SP-IDD-NYE)

The need for specific assistive tools such as walkers and penholders to support learners with physical impairments in performing daily academic tasks was also underscored. Lack of such basic adaptive devices constrained learners' ability to write, move independently, and fully engage in classroom

activities. Funding constraints were identified as a major factor contributing to the limited availability of assistive devices and mobility aids. Heads of Institutions emphasized that inadequate financial support for special learners affected the procurement and maintenance of essential equipment. This corroborates with the data on **Table 6** where budgetary provision existing for adapted materials and assistive technology was at 56.4%.

Head of Institution: Lack of mobility devices for the learners. Poor terrain in the classrooms. Inadequate funding for the special learners. (HOI-QN-UNO-PR-SP-MD-MAK)

Teacher: Walkers, penholders (T-QN-SAS-PB-SP-MD-BOM).

Teachers were asked to suggest key resources that were most needed but are not available. Their responses identified a number of assistive devices required by SNE learners. Some of the devices mentioned include hearing aids, communication boards, tactile maps, screen readers, audiometers, braille machines, Speech audio recorders, smart pens and graphic organizers.

Teacher: Assistive devices like hearing aids is required in this school to assist in curriculum delivery and support (T-QN-NYA-PB-SP-HI-HOM).

Teacher: Communication boards, Speech Audio Recorders and Smartpens, Graphic organizers (T-QN-KIR-PB-SP-IDD-MIG).

Teacher: Magnifiers to help those who cannot read well, Hearing Aids (T-QN-DEA-PB-SP-HI-KIS).

Teacher: Perkins Braille machine, style and slates (T-QN-BLI-PB-SP-VI-KIS).

Teacher: Visual alerting devices, assistive listening devices, weighted grip pen for learners with fine motor problems (T-QN-KED-PB-SP-HI-KER).

Teacher: Textbooks for both intellectual disabilities (ID) and autism, core-word boards, communication boards, and theme boards, as well as assorted jigsaws and pegboards (T-QN-KIP-PB-SP-IDD-KER).

Teacher: Tactile charts for social studies and maps, tactile diagrams for science and technology (T-QN-OLE-PB-SP-VI-NAR).

Teacher: Screen readers, amplifiers, audiometers, hearing aids (T-QN-KAF-PB-SP-HI-KWA).

The sentiments of teachers and heads of institutions agreed with learners' views. Learners reported significant gaps in the availability of assistive devices and mobility support. They indicated that essential equipment such as wheelchairs, walking rails and learning aids were often inadequate, limiting their independence and participation in both classroom and physical activities. The availability of vision-related aids was also a concern. Learners noted that insufficient spectacles, braille books, orbit readers, white canes, and large-print textbooks affected their ability to read, write, and fully engage in learning and recreational activities. These shortages were reported to hinder participation in games and other co-curricular activities. In addition, learners highlighted that inadequate mobility support affected access to hospital services needed by some of the learners.

Learner: Inadequate facilities, for example, wheelchairs and learning aids interpreters and walking rails(L-FGD-KAM-PB-SP-PI-BAR).

Learner: If we do not have spectacles you may not read well, inadequate braille and white canes, we need help to be able to participate in games, more white canes should be provided(L-FGD-EMI-PB-SP-VI-BAR).

Learner: ... wheelchair and crutches, provide facilities for hospital attendance(L-FGD-LOK-PB-SP-PI-TUR).

Learner: more braille machines, more orbit readers, more braille papers, more white canes large print textbooks (L-FGD-MOI-PB-SP-VI-BAR).

Education Officers also reported deficiencies in essential teaching and learning resources across many institutions. Key areas of concern relating to curriculum support materials was shortages of adequate textbooks aligned to Competency Based Education. Limited access to these resources restricts opportunities for practical learning experiences, particularly in vocational and talent development areas such as music and ICT. In several schools, access to learning resources depended largely on cloud based digital content despite limited internet connectivity and a shortage of digital devices.

Education Officer: A number of the much-needed resources are deficient, including adequate conducive classrooms, computer labs with ICT resources, adequate textbooks and other resources that would promote identification of talent like in music, ICT and other vocational areas. Learners need to interact with the resources practically, but they are deficient. What they are able to access is digital interactive content via. cloud. (EO-QN-CSO-SNE-BUS).

Education Officer: There are challenges with adequacy of learning resources. In the era of ICT schools lack computer labs, digital devices to promote learning and Internet connectivity. Textbooks and cost books are not adequate and even curriculum designs. Most teachers do not readily download curriculum designs for use. KICD or MoE to look into the possibility of procuring them for schools. (EO-QN-CSO-SNE-BUS).

Education Officers further emphasized the need for the provision of appropriate learning resources across all disability categories in order to support inclusive learning.

Education Officer: Provision of relevant learning resources for all areas of disabilities and special needs (EO-QN-CSO-SNE-ISI).

Despite the challenges reported in many institutions, evidence from some counties indicates efforts to strengthen inclusive education through the provision of assistive devices and assessment services. These initiatives demonstrate emerging efforts at county level to address some of the resource gaps.

Education Officer: some resources available include; assessment services, assessment devices, the county government has procured devices worth 15m to support persons with disability and inclusive education. (EO-QN-QAS-KAK).

Education Officers also highlighted the importance of adequate instructional materials and specialized equipment in supporting effective curriculum implementation. Access to such resources enables

teachers to prepare lessons more effectively and enhances the quality of instruction provided to learners with special needs and disabilities.

Education Officer: Provide adequate materials for effective preparations for learning (EO-QN-QAS-THA).

Education Officer: They demonstrate strong commitment and effort in delivering the curriculum, with adequate resources and support their effectiveness would improve further (EO-QN-CSO-SNE-MSA).

Education Officer: Equip the assessment centres with modern machines (EO-QN-CSO-SNE-NYE).

Education Officer: Facilitate the schools with the required gadgets/ facilities to enhance learning, enhance school meals programme and school transport for learners with special needs (EO-QN-CSO-SNE-TAR).

Education Officer: for VI provide white stick, stylers and braille machines, for HI provide hearing aids and a special room for testing the learners (EO-QN-CSO-SNE-WAJ).

Education Officer: ... Government to provide internet and power bank ups to schools (EO-QN-CSO-SNE-MAC).

4.3.3 Availability and Appropriateness of Interactive Digital Content and Assistive Technologies

The study also sought to establish the availability and appropriateness of Interactive Digital Content (IDC) adapted for specific categories of learners with special needs and disabilities. Additionally, the study also sought to assess the availability of assistive technologies that support functional abilities and participation of learners with special needs and disabilities in the learning process. Interactive Digital Content (IDC) refers to digital learning materials delivered through multimedia formats such as videos, animations, simulations, digital quizzes, virtual laboratories, educational games, and interactive presentations that enable learners to actively engage with learning content (Susiani, 2025). These resources allow learners to participate in the learning process through interactive actions such as clicking, dragging objects, responding to prompts, answering questions, and navigating digital learning content. In inclusive education contexts, particularly for learners with special needs and disabilities, IDC may incorporate assistive technologies such as captions, sign language videos, audio narration, screen readers, large-print formats, and adaptable interfaces to enhance accessibility.

Assistive Technologies (AT) refer to devices, software, equipment, or systems designed to support learners with disabilities in overcoming barriers to learning and participating effectively in educational activities (Saabi, 2025). These technologies help learners improve or maintain functional abilities related to communication, mobility, vision, hearing, cognition and access to information. Examples of

AT include braille machines, screen readers, hearing aids, communication boards, speech-to-text software, adapted keyboards, mobility aids, and digital braille displays.

i) Availability and appropriateness of Interactive Digital content and assistive technologies

The findings from the Heads of Institutions (HoIs) presented in Table 3 indicate that the availability and appropriateness of Interactive Digital Content (IDC) in special schools and units remains moderate. Specifically, 55.0% of HoIs reported that interactive digital content was available, while 57.8% indicated that the available digital content was appropriate for learners with special needs and disabilities. These results suggest that although digital learning resources have begun to be integrated into teaching and learning processes, their availability and suitability across different disability categories remains only partial. In contrast, the availability of assistive technology devices such as braille machines, hearing aids, and communication boards was reported at a lower level of agreement (49.4%), indicating that the technological infrastructure required to support inclusive learning is still constrained in many institutions.

Teachers' responses presented in Table 4 confirm similar trends. The average level of agreement among teachers regarding the availability and appropriateness of IDC was also moderate. 53.8% of teachers agreed that interactive digital content was available, while 54% reported that the available digital content was appropriate for learners with special needs and disabilities, representing only a minimal deviation of 2.1% from the responses provided by HoIs. This close alignment between the perceptions of school administrators and teachers suggests a relatively consistent understanding of the moderate integration of digital learning resources in special schools and units. However, teachers reported even lower levels of availability of assistive technology devices, with only 45.4% confirming that such devices were functional and available in their schools. Additionally, only 45.8% of teachers indicated that schools had sufficient specialized resources to cater for different disability categories, highlighting significant gaps in the availability of differentiated learning technologies.

Findings from field observations further illuminate these patterns by revealing lower levels of actual access to digital resources. As shown in Table 5, only 48.0% of the sampled schools were observed to have access to appropriate interactive digital content, while 52.0% lacked such resources. This discrepancy between reported perceptions and observed realities suggests that although schools acknowledge the presence of digital learning tools, their availability may be partial, unevenly distributed, or not consistently integrated into daily teaching practices. In many cases, digital resources may exist in specific departments or classrooms rather than being systematically embedded within curriculum delivery across the institution.

The observations also raised concerns regarding the adequacy of assistive technology devices. Although 55.6% of schools were observed to possess some assistive devices such as tablets, laptops, digital braille displays, and communication boards, 44.4% lacked adequate supplies of such technologies. While this figure suggests a slightly higher physical presence of assistive devices compared to survey responses, it still indicates that a substantial proportion of schools do not possess the necessary technological infrastructure to fully support learners requiring specialized assistance.

Some of the ICT infrastructure that were available in the schools are presented in Figure 5.



Figure 5: *Evidence of digital devices fitted with assistive technologies available in schools*

Qualitative responses from Heads of Institutions, teachers, Education Officers, and learners provide deeper insights into the challenges underlying these quantitative patterns. Several respondents attributed the limited availability of digital infrastructure and assistive technologies to financial constraints and inadequate institutional support. Responses from Head of Institutions and teachers emphasized that inadequate funding significantly affects the provision and maintenance of assistive technologies. This is supported by the following response;

Head of Institution: Lack of mobility devices for the learners..... inadequate funding for the special learners (HOI-QN-UNO-PR-SP-MD-MAK)

Head of Institution: Provision of adequate funding for the special learners (HOI-QN-UNO-PR-SP-MD-MAK).

Teacher: Lack of assistive devices for some of the learners whose parents cannot afford (T-QN-LOK-PB-SP-PI-TUR).

Teacher: Lack of adequate assistive devices and materials, financial difficulties, especially trying to acquire the assistive devices (T-QN-THI-PB-SP-IDD-LAI).

Teacher: Inadequate assistive devices... (T-QN-MAN-PB-SP-VI-MAN).

Similarly, Education Officers highlighted the need for improved ICT infrastructure and digital learning resources in schools. The following response supports this finding;

Education Officers: Let there be Internet connectivity to promote digital learning, computer labs fully equipped with digital resources and printed copies of curriculum designs (EO- QN-CSO-SNE-BUS)

Education Officer: Facilitate the schools with the required gadgets/ facilities to enhance learning, enhance school meals programme and school transport for learners with special needs (EO- QN-CSO-SNE-TAR).

Education Officer: for VI provide white stick, stylers and braille machines, for HI provide hearing aids and a special room for testing the learners (EO- QN-CSO-SNE-WAJ).

Education Officer: ... Government to provide internet and power bank ups to schools (EO- QN-CSO-SNE-MAC).

These statements reinforce the quantitative findings by demonstrating that financial limitations and infrastructural challenges hinder the acquisition and effective utilization of digital learning technologies in special schools and units.

Teachers also reported shortages of basic assistive devices required to support learner participation in classroom and digital learning activities. For example, one teacher noted the absence of simple assistive devices needed to support learners with physical disabilities:

Teacher: Lack of walkers and penholders (T-QN-SAS-PB-SP-MD-BOM)

Learners further confirmed the inadequacy of vision-related assistive technologies such as braille machines, orbit readers, and large-print materials. These devices are essential for enabling learners with visual impairments to access curriculum content and participate effectively in classroom activities. The finding is supported by following responses;

Learner: If we do not have spectacles, you may not read well, inadequate braille and white canes. We need help to be able to participate in games (L-FGD-EMI-PB-SP-VI-BAR)

Learner: More braille machines, more orbit readers, more braille papers, more white canes and large print textbooks (L-FGD-MOI-PB-SP-VI-BAR)

These responses demonstrate that shortages of assistive technologies not only affect academic participation but also restrict learners' broader engagement in school activities.

In addition, the study identified gaps in teacher capacity related to the use of assistive and digital learning devices. Responses indicated the need for teachers to be better trained in operating digital machines to support learning activities. Further, learners with visual impairment reported shortages of braille machines and emphasized the need for structured guidance on their use to enhance reading and independent learning. These responses suggest that effective utilization of available technological resources requires strengthened teacher retooling and practical skills development aligned to learner needs. These findings are supported by the following responses;

Education Officer: Teachers training on special needs programmed. Adapt environment to be SNE friendly. Provide enough resources (EO-QN-CSO-SNE-GAR).

Education Officer: Limited training and resources, assessment and support services are limited, lack adequate infrastructure (EO-QN-QAS-KAK).

Education Officer: There should be specialised training by regularly in-service teachers training on special needs education (EO-QN-QAS-KAK).

Learner: Teach us about the use of digital machines like Chromebooks (L-FGD-ODA-PB-SP-MD-SIA).

In addition to the need for assistive technologies, learners also expressed a strong desire for increased integration of digital technologies within their learning environments. Several learners emphasized the importance of acquiring digital skills and accessing modern technological tools such as projectors and computers. The following responses supports these findings;

Learner: Be allowed to use technology, to use projectors (L-FGD-OMO-PB-SP-VI-NYA)

Learner: Train us on how to use computers (L-FGD-GAR-PB-SP-HI-GAR)

Learner: Teach us about the use of digital machines like Chromebooks (L-FGD-ODA-PB-SP-MD-SIA).

Learner: Give us more braille machines and teacher us how to use them, to help us read what we have written (L-FGD-MOI-PB-SP-VI-BAR)

These responses indicate that learners themselves recognize the potential role of digital technologies in enhancing inclusive learning and preparing them for participation in modern society. However, the effective integration of interactive digital content in teaching and learning remains constrained by broader infrastructural challenges. Several schools reported inadequate internet connectivity, poorly equipped computer laboratories, and limited availability of digital devices. Education Officers emphasized that improving ICT infrastructure and teacher retooling would significantly enhance the use of digital technologies in curriculum implementation.

Overall, the findings demonstrate that although the integration of interactive digital content in special needs education has begun, its implementation remains uneven and insufficiently supported by the necessary teachers' competency, technological infrastructure, assistive devices, and digital learning resources.

4.4 Capacity of Teachers to Effectively Deliver Curriculum for Learners with Special Needs and Disabilities

Effective delivery of the Competency Based Curriculum (CBC) for LSND depends largely on the capacity of teachers to implement inclusive, learner-centred approaches that address diverse learning needs. Teacher capacity in this context includes skills in differentiated instruction, development and

implementation of Individualised Education Programmes (IEPs), adaptation of assessment tools and proficiency in disability-specific communication methods such as Kenyan Sign Language (KSL), braille, and alternative communication systems. It also involves collaboration with colleagues, engagement with parents, and the ability to create supportive learning environments that promote equitable participation and achievement.

Assessing teachers' capacity is therefore essential for identifying strengths, gaps and areas requiring professional development and systemic support to enhance inclusive curriculum implementation and improve learning outcomes for LSND. Data on the capacity of teachers was sought from Heads of Institutions (HoIs), teachers, learners, Education Officers and parents. It was also gathered through observation. The information sought focused on the respondents' opinions of teacher's capacity to effectively implement the SNE curriculum, challenges that hinder effective implementation of CBC in special schools and units and the required support by teachers and learners.

4.4.1 Teacher capacity to effectively implement the SNE curriculum

Information on teacher capacity to effectively implement the SNE curriculum was sought from teachers themselves, HoIs, Education Officers and parents. They gave varied responses.

i) Teachers' responses on their capacity to implement the SNE curriculum

Teachers were asked to indicate the extent to which they agreed with various statements on their capacity in delivering curriculum to LSND. The statements were on key dimensions of teacher capacity, including pedagogy, curriculum delivery, assessment adaptation, professional documentation, collaboration, communication skills and policy awareness within the SNE context. The extent of agreement was captured on a Likert scale ranging from 'strongly disagree = 1' to 'strongly agree = 5'. From the responses, mean percentage scores were computed for the purpose of depicting the general pattern of responding. Their findings are presented in Figure 6.

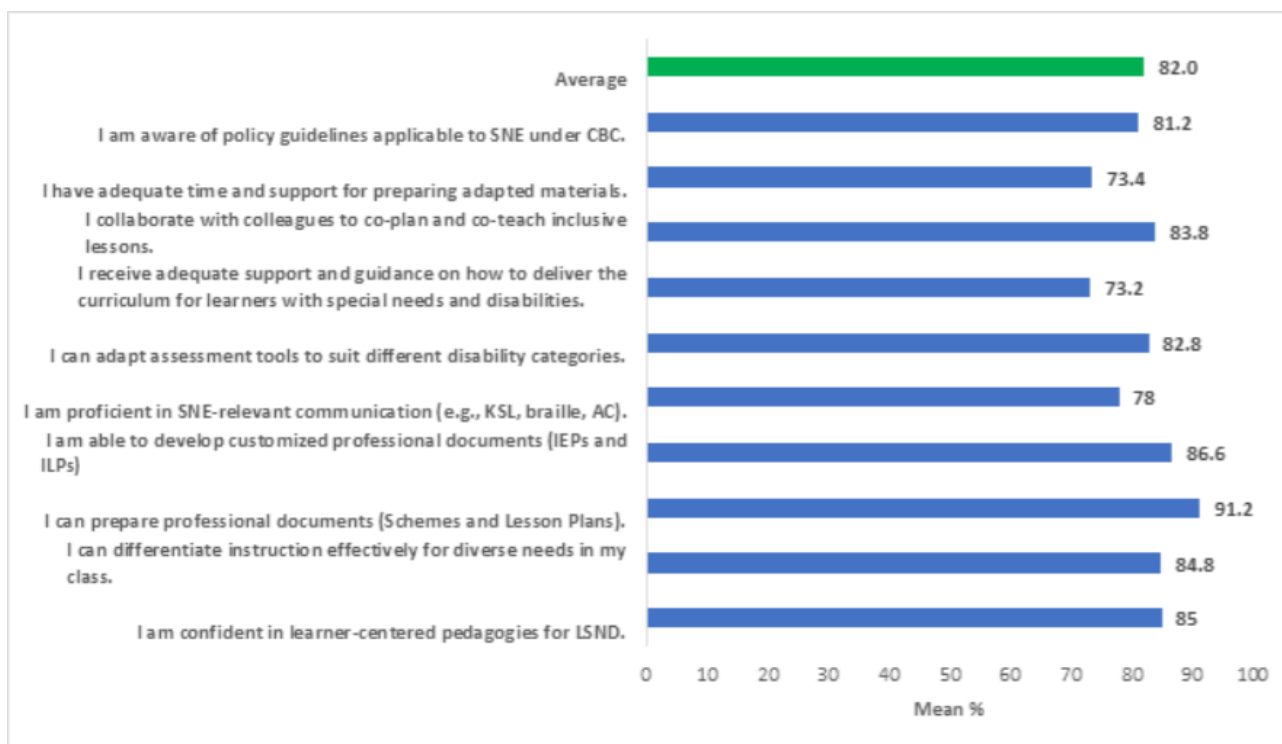


Figure 6: Teachers responses on their capacity in delivering curriculum to LSND

According to the findings in Figure 6, preparation of professional documentation (Schemes of work and Lesson Plans) was the highest-rated competency with a score of 91.2%. Teachers expressed strong confidence in preparing formal professional documents, an indicator of compliance with curriculum planning requirements, and understanding structured lesson preparation under CBC. This was followed by the ability to develop customized professional documents (IEPs and ILPs) which were rated at 86.6%. This is critical for LSND and suggests awareness of individualised programming principles. Teachers were also confident in implementing learner-centred approaches, a core CBC requirement. This had a score of 85.0%.

Three of the statements on teachers' capacity to implement the curriculum scored less than 80.0%. The statement on support and guidance had the lowest score of 73.2%. Teachers reported insufficient support and structured guidance in curriculum delivery. This may include limited mentoring, weak supervisory coaching, inadequate Continuous Professional Development (CPD) follow-up, or insufficient technical assistance. Teachers also indicated constraints in preparation time and access to support structures for developing adapted materials (73.4%). Proficiency in SNE-relevant communication had a score of 78.0%. This includes skills such as Kenyan Sign Language (KSL), braille, and Augmentative and Alternative Communication (AAC). Although moderately high, this remains a technical area requiring continuous professional development, particularly for teachers in hearing and visual impairments schools. Overall, the teachers rated their capacity at 82.0%.

ii) Heads of institutions' and education officers' responses on teacher capacity

Heads of Institutions (HoIs) and Education Officers (EOs) were also asked to indicate the extent to which they agreed with various statements on teacher capacity in delivering curriculum to Learners with Special Needs and Disabilities (LSND). The findings are presented in Table 6.

Table 6: HoIs and Education Officers responses on teacher capacity in delivering curriculum to LSND

Statements	Mean percent	
	HoIs	EOs
a) Teachers are confident in learner-centred pedagogies for LSND.	83.2	77.0
b) Teachers can differentiate instruction effectively for diverse needs in class.	83.0	75.0
c) Teachers can prepare professional documents (Schemes of work and Lesson Plans).	90.0	83.6
d) Teachers are able to develop customised professional document - Individualised Education Programmes (IEPs)	86.0	76.8
e) Teachers are proficient in SNE-relevant communication (e.g., KSL, braille, Augmentative and Alternative Communication (AAC).	79.8	76.1
f) Teachers adapt assessment tools and methods to suit different disability categories.	80.8	76.1
g) Teachers have received adequate support and guidance on how to deliver the curriculum for learners with special needs and disabilities.	77.8	73.9
h) Teachers collaborate with colleagues to co-plan and co-teach lessons.	82.4	70.5
i) Teachers are aware of policy guidelines applicable to SNE under CBE.	83.4	73.2
j) Teachers are able to effectively integrate core competences, values and PCIs in their lessons.	83.4	75.0
Average	83.0	75.7

The findings from HoIs indicate that teachers are competent in preparing professional documents such as schemes of work and lesson plans. This was the highest-rated competency with a mean score of 90.0%. This was followed by the ability to develop Individualised Education Programmes (IEPs) which scored 86.0%, reflecting strong technical capacity in planning individualised instruction.

Awareness of SNE policy guidelines under CBE, and integration of core competences, values and PCIs had an equal score of 83.4%. The least scored competencies were support and guidance for curriculum delivery, and Proficiency in SNE-relevant communication (e.g., Kenyan Sign Language

(KSL), Braille, and Augmentative and Alternative Communication (AAC). These scored 77.8% and 79.8% respectively.

Like the HoIs, the highest rated competency by Education Officers was the capacity to prepare professional documents (Schemes of work and Lesson Plans) with a mean score of 83.6%. This was followed by the teacher's confidence in learner-centred pedagogies for LSND (77.0%) and the teachers' ability to develop customised professional document - Individualised Education Programmes (IEPs). Teachers' ability to collaborate with colleagues to co-plan and co-teach lessons, and teachers' awareness of policy guidelines applicable to SNE under CBE were the least scored capabilities at 70.5% and 73.2% respectively.

Overall, Heads of Institutions rated teacher capacity higher (Average = 83.0%) than Education Officers (Average = 75.7%), showing a perception gap of 7.3%. Across all 10 statements, HoIs scores were consistently higher than education officers' scores.

iii) Capacity of teachers as observed by the researchers

Researchers conducted lesson observation to assess the teachers' capacity in implementing CBC for learners with special needs and disabilities. Findings were analysed as shown in Table 7.

Table 7: Capacity of teachers as observed by the researchers

Statement	Mean percent
i) The lesson plan demonstrates appropriate adaptations and accommodations for various disability categories.	72.4
ii) The teacher develops and uses appropriate Individualised Education Programmes (IEPs) that support learners with disabilities.	72.0
iii) The teacher organises and delivers lessons using differentiated approaches tailored to learners' abilities and needs.	81.8
iv) The lesson plan is updated as per the SoW.	69.4
v) The teacher uses varied assessment tools to track the progress of learners with diverse special needs and disabilities (e.g., portfolios, checklists, written tests, projects, observation schedules).	72.8

The findings from the researchers' observation on teachers' capacity to implement the Competency-Based Curriculum (CBC) for learners with special needs and disabilities indicate generally strong performance across most indicators, with percentages ranging from 69.4% to 81.8%. The highest-rated indicator (81.8%) shows that teachers are effectively organising and delivering lessons using differentiated approaches tailored to learners' diverse abilities and learning needs. This suggests a

strong understanding and application of inclusive pedagogical strategies, which is critical in supporting learners with special needs and disabilities.

Observer: The teacher had different approaches tailored to the different learners' needs and abilities. The learners were engaged in games, songs and activities that helped them participate in the class actively. Learners had projects and portfolios as evidence of their learning (**OBS-LIK-PB-SP-MD-KAJ**).

Observer: The teacher used pictures. Used her phone for demonstrations. Engaged learners in modelling. Engaged them in singing songs related to the topic. Learners were engaged in discussions. There's gallery for the learners' work (**OBS-MON-PB-SP-IDD-EMB**).

Observer: The lesson plan is updated, and the use of IEP is evident. Presence of talking walls and learning resources such as the teacher used the local language to further explain concepts (**OBS-KAR-PB-SP-IDD-SIA**).

Similarly, substantial proportion of teachers demonstrated competence in developing and using Individualised Education Programmes (IEPs) (72.0%) and incorporating appropriate adaptations and accommodations in lesson planning (72.4%). These findings indicate a solid foundation in individualised instruction and inclusive planning practices.

Observer: The lesson plan was accommodative to various disability categories. There were IEPs that support learners with VI and PI. The approaches were tailored to learners differentiated needs... (**OBS-OLK-PB-SP-VI-KAJ**).

Observer: The teacher uses IEP's to support learners with special needs (**OBS-MUS-PB-SP-IDD-KIT**).

Observer: The lesson plan demonstrated adaptations and accommodations for learners with HI. The use of digital devices with adapted content (**OBS-LIS-PB-SP-HI-TAR**).

Observer: The teacher uses IEP to support the learners with different disabilities within the classroom (**OBS-GAR-PB-SP-IDD-GAR**).

Observer: Teachers have developed IEP for each student hence does not use lesson plans. Handles 3 levels in one class (**OBS-GIT-PB-SP-IDD-KIR**).

The use of varied assessment tools to monitor learner progress also scored relatively high (72.8%), reflecting teachers' efforts to track performance through multiple assessment methods aligned with diverse learning needs.

Observer: The teacher applied varied approaches to integrate the learner with the special needs. They use portfolios, demonstrations and observations to track progress of learners (**OBS-UNO-PB-SP-PI-MAK**).

Observer: ...there are various assessment tools to track progress of learners with diverse disabilities e.g. written tests, projects and observation schedules (**OBS-KIB-PB-SP-VI-KSM**).

Observer: The teacher incorporated portfolios, checklists and oral questions (**OBS-OLK-PB-SP-VI-KAJ**).

The lowest-rated area (69.4%) relates to updating lesson plans in accordance with the Scheme of Work (SoW). The findings indicated that most teachers failed to prepare IEPs for their learners while some

used the curriculum design to facilitate lessons. This suggests a slight gap in preparation and use of professional documents among teachers as observed by the researchers.

Observer: There were no IEPs with the teacher on the file for the class. There was no scheme of work. The teacher indicated that they use the curriculum designs (**OBS-ILB-PB-SP-IDD-KAJ**).

Observer: The teacher indicated that due to the nature of the learners in the class, the SOW is not prepared and the teacher uses only the curriculum design (**OBS-MAR-PB-SP-IDD-MAC**).

Observer: ...there is IEP of 2 learners- (File available). Lesson plan is not up to date and teacher does not regularly develop lesson plan. No portfolios, projects and observation for special learners, previously developed LP lacks disability inclusion, Noted there is a learner who is able to calculate a mathematical task accurately just observing but not able to write (**OBS-BOM-PB-SP-PI-BOM**).

Observer: The lesson plan is not in line with the SOW (**OBS-KIO-PB-SP-VI-KIS**).

Observer: None of the learners has a specific IEP, however, the teacher differentiates instruction within the lesson to address different abilities (**OBS-KUJ-PB-SP-HI-MIG**).

Observer: There is a SOW, however there are no lesson plans/plan. There is no record of learners being supported by use of IEPs (**OBS-LAM-PB-SP-HI-HOM**).

Overall, the data reflects that teachers possess considerable capacity to implement CBC for learners with special needs and disabilities, particularly in the areas of differentiated instruction and assessment. Nonetheless, there is need for continued professional support to enhance use of appropriate pedagogy, preparation and use of professional documents and documentation practices to foster effective curriculum delivery for learners with special needs and disabilities.

iv) Parents responses on teacher capacity in supporting learning needs of LSND

The parents were asked to give their views on how effectively teachers supported their children's learning needs. This was meant to establish how parents perceived teacher effectiveness in curriculum delivery and key areas of impact in learner development. Parents' responses were put under six themes as: professional qualification and training of teachers; ability to develop communication skills of learners; ability to impart functional life skills among learners; ability to develop emotional and social skills of the learners; ability to develop academic and cognitive skills of the learners; and provision of holistic care and home-school collaboration.

v) Professional qualification and training of teachers

Parents acknowledged that teachers were qualified and trained professionals, experienced in working with learners with diverse learning needs, and committed beyond academic instruction. Teachers were perceived as holistic educators who addressed multiple dimensions of child development rather than focusing solely on classroom instruction. The parents therefore expressed satisfaction with the work of the teachers.

Parent: The teachers are effective in the sense that they are qualified trained teachers with experience to attend to many child's needs rather than the class work they are engaged in (P-INT-ZIW-PB-SP-MSA).

Parent: *Kwa maoni yangu, watoto wanapata support ya kutosha kutoka kwa walimu. Kufikia mahali hawa watoto wamefika ni kwa bidii ya walimu* (In my own opinion, the children get adequate support from the teachers. The children are where they are now because of the effort of the teachers) (P-INT-NGA-PB-SP-NAK).

Parent: Teachers take care of the learner's health and needs. The Learner is learning well and has improved in skill development (P-INT-NTI-PB-SP-MIG).

Parent: She can sign, clean and can feed herself. The teacher assisted her to learn all these (P-INT-KAF-KWA).

Parent: The girl is able to sing well. She is able to do home chores (washing, bathing) (P-INT-BG-PB-SP-KIS).

Ability to develop communication skills of the learners

Findings reveal that teachers are effectively implementing inclusive communication strategies that enhance learner participation. Parents reported noticeable improvements in their children's ability to express needs and interact with others, underscoring the positive impact of teacher-led interventions. A dominant theme across responses was improvement in communication, particularly through the use of sign language, speech improvement strategies for learners with hearing impairment and speech difficulties.

Parent: They have taught the children sign language. Identify and assess their special needs and advice (P-INT-NIN- PB-SP-SIA).

Parent: The learner is non-verbal and can't move. The school environment has helped her to try talking to be more alert and engaged with her surroundings and schools. Teacher support her by ensuring that she is engaged and active (P-INT-LIK-PB-SP-KAJ).

Parent: Teachers support my child to improve on speech. Child gained self-care skills (P-INT-MAS-PB-SP-MAC).

Parent: Teaching uses sign language (P-INT-ISI-PB-SP-ISI).

Parent: They have taught the children sign language... (P-INT-NIN-PB-SP-SIA).

vi) Ability to impart functional life skills among learners

Parents highlighted improvements in skills of daily living such as washing clothes, bathing, feeding independently, sweeping and cooking. Teachers are promoting adaptive skills for daily living which are essential for autonomy and long-term wellbeing. These functional skills indicate emphasis on independence and life preparation that teachers have developed in the learners.

Parent: They assist our children with basic life skills such as cleanliness, holding, and writing (P-INT-MAK- PB-SP-WEP).

Parent: *Maoni yangu kuhusu CBC mtoto wangu naona akiendelea vizuri juu naona anawezakuchukua kitu akunywe, anajua kufua nguo anaweza soma unasikia anakuitisha basin* (my view about CBC is that my child is progressing well since the child can feed self, knows how to wash clothes, read and can request for a basin) (P-INT-NGA-PB-SP-LAI).

Parent: Teachers have trained them how to wash their clothes, sweeping, cooking, how to communicate (P-INT-MWA-PB-SP-TAT).

vii) Ability to develop academic and cognitive skills of the learners

Parents observed improved motivation and active participation in learning. Academic instruction is effectively adapted to suit learners' abilities and needs. Evidence of academic progress included colouring and scribbling, writing skills, reading using signs, classroom discipline, use of digital devices, and improved concentration and engagement in school and at home. The parents said;

Parent: Yes, they help them to write and learn and guide them. The teachers help in using digital devices (P-INT-NGU-PB-SP-MUR).

Parent: There is a change in that the child is able to colour, scribble and sing. Help the child to understand himself and his situation (P-INT-KAR-PB-SP-SIA).

Parent: This improvement, teach, modelling, help in communication, provide physical support and provide activities to play (P-INT-KAP-PB-SP-UAG).

Parent: Know how to read well using signs, discipline and other things and changes (P-INT-CHE-PB-SP-ELM).

Parent: The teacher supports the learner effectively showing how motivated the learner is with schoolwork when he gets home (P-INT-SEC-PB-SP-TRN).

viii) Ability to develop emotional and social skills of the learners

Teachers are fostering inclusive and supportive classroom environments that enhance the psychosocial development of the learners. In some cases, learners with severe physical challenges showed improved adjustment and emotional stability. Parents reported improvements in their children's confidence, social interaction, positive relationships with teachers, and willingness to attend school.

Parent: My child has changed because teachers have helped her to learn how to settle in class (P-INT-SAH-KIL).

Parent: *Walimu wanawasaidia na kuwafunza kuongea.* (Teachers help children to learn how to communicate) that is communication (P-INT-MUK-KIA).

ix) Provision of holistic care and home-school collaboration

Teacher effectiveness extends beyond instruction to comprehensive learner support systems. Teachers were described by parents as caregivers, assessors of learner progress, providers of physical support, facilitators of home-based learning, and advocates of formal learning. This demonstrates strong collaboration between teachers and parents.

Parent: *Nimeona akisaidika tangu akuje* (I see a lot of improvement since my child started attending this school). Like my child let me say mine is physical he has CP. I could not leave him but now he has good relationship with them and accepts to be left. I see *inasaidia* (it is effective) (P-INT-GAT-PB-SP-NYAN).

Parent: The teacher has really helped my child. The child can now lift his arm for greeting and also tries to hold some objects (P-INT-WAI-PB-SP-KIT)

Parent: The teachers encouraged me to bring my child to school, they arranged home based learning for PI boy, the teacher transport him back home in the evening (P-INT-HAB -PB-SP-WAJ).

x) Assessment competence

Parents noted that teachers assessed the learners to identify the achievement of learning outcomes and offered evidence-based guidance to the learners and feedback to the parents.

Parent: Teachers act as caregivers and guide the learners, perform assessment of the child to see if there is impact (P-INT-TIM-PB-SP-TAT).

Parent: ...identify and assess their special needs and advice (P-INT-NIN-PB-SP-SIA).

4.4.2 Teacher-related challenges in implementation of CBC in special schools and units

The HoIs, teachers and Education Officers were asked to indicate teacher-related challenges that hinder effective implementation of CBC in special schools and units. On the other hand, the learners were asked to state the challenges they encounter in learning and how they can be assisted in learning better. The respondents indicated numerous teacher-related issues. These are presented under the following thematic areas: understaffing and high teacher-learner ratios; limited specialised teacher competencies; communication barriers; teacher workload, limited time and large class sizes; difficulty handling diverse, complex and multiple disabilities in one class; limited parental support; inadequate capacity to interpret the curriculum; limited instructional support systems, guidance and specialist back-up; failure to prepare professional documents; and limited remedial teaching, consultation time and responsive support.

i) Understaffing and high teacher-learner ratios

A recurring teacher-related constraint is the insufficient number of teachers which leaves teachers overstretched and unable to provide individualised support to learners. Many of the respondents reported high teacher-learner ratios, being the only SNE teacher for several levels, or working in schools with inadequate staffing for the complexity of learner needs. In such contexts, teachers struggle to offer one-to-one attention, follow individualised education approaches, or effectively manage learners with multiple and severe disabilities. Understaffing also pushes teachers to combine levels or categories, reducing instructional quality.

Teacher: Heterogeneity of the learners in the same class, inadequate staffing situation (T-QN-WAI-PB-SP-IDD-KIT).

Teacher: A teacher is needed. One SNE teacher for the 3 levels i.e foundation, Intermediate and Prevocational is not enough (T-QN-KAW-PB-SP-IDD-TUR).

Teacher: Due to inadequate teachers, we combine learners from different levels (T-QN-RAI-PB-SP-MD-KIR).

Teacher: Teacher to learner ratio. Some learners need one to one approach (T-QN-MWA-PB-SP-IDD-TAT).

Teacher: Out of 49 teachers in the school, only 3 are trained to handle such learners (T-QN-UNO-PB-SP-MD-MAK).

Many Heads of Institutions and Education Officers confirmed understaffing in specific learning areas, and strained ratios-making CBC delivery difficult. They indicated that this affected effective implementation of the SNE curriculum.

Head of Institution: The teachers are not adequate as we are 12 and teacher learner ratio is 1:4 (HOI-QN-MBO-PB-SP-CP-MSA).

Head of Institution: Junior schools suffer understaffing in specific learning areas (HOI-QN-NIN-PB-SP-HI-SIA).

Head of Institution: Severe shortage of teacher's learner ratio/understaffing (HOI-QN-MOY-PB-SP-IDD-MAR).

Head of Institution: Understaffing. Ratio of SNE learners to teachers do not match (HOI-QN-NYA-PB-SP-MD-HOM).

Education Officer: Under Staffing - Teachers who are qualified/trained to teach learners with special needs are very few (EO-QN-CSO-SNE-GAR).

Education Officer: Shortage of teaching and learning resources. Shortage of trained teachers (EO-QN-QAS-MAR).

Learners explicitly mentioned "few teachers" or "lack of enough teachers," linking this directly to limited support, poor follow-up, and gaps in instruction. Where staffing is inadequate, learners experience reduced instructional attention, inadequate supervision in learning activities, and limited opportunities for consultation and remediation. This issue was especially visible in schools serving learners who require intensive support such as those with deafblindness, multiple disabilities, and JS learners in SNE schools and units.

Learner: Lack of enough teachers for JSS (L-FGD-LIK-PB-SP-VI-MSA).

Learner: Not enough teachers in the school (L-FGD-MOK-PB-SP-CP-LAM).

The findings from Education Officers also indicated that the capacity of teachers in effectively delivering the curriculum is compounded by shortage of trained special needs teachers, under-staffing, inadequate professional development, and the deployment of teachers who have not been sufficiently trained for special needs education. This can be attributed to the huge workload for the trained teachers.

Education Officer: ...inadequate training and professional development (EO-QN- CDE-NYAN).

Education Officer: ...most of the teachers deployed recently in the special units in a number of special schools have not been retooled and are more inclined to regular school pedagogies (EO-QN-CSO-SNE-NYE).

Education Officer: Lack of basic facilities and huge workload (EO-QN-SCD-TUR).

ii) Limited specialised teacher competencies

A major teacher-capacity challenge is the limited preparedness of teachers to handle specialised learning needs, especially in areas requiring disability-specific pedagogies, vocational instruction, braille, Kenyan Sign Language (KSL), and differentiated instruction. Teachers in several schools reported lacking adequate knowledge, practical skills, or refresher training to effectively support LSND. This suggests that initial training is often insufficient and that continuous professional development, induction, and retooling are not happening consistently. The problem is particularly acute where teachers are expected to handle specialised pathways such as vocational skills, technical subjects, or disability-specific communication systems without adequate preparation.

Teacher: Lack of adequate skills to help learners at the vocational level (T-QN-WAI-PB-SP-IDD-KIT).

Teacher:... teachers lacking skills in learning areas like concrete, leatherwork and woodwork (T-QN-ALL-PB-SP-IDD-NYE).

Teacher: We lack continuous insets to update our skills (T-QN-HIG-PB-SP-IDD-NAN).

Teacher: Minimal workshops done to enable us deliver better (T-QN-GED-PB-SP-MD-KIL).

Teacher: Teachers (SNE) require retooling time after time like their colleague teachers in regular schools (T-QN-ISI-PB-SP-HI-ISI).

Teacher: I am not proficient enough with braille (T-QN-OLK-PB-SP-VI-KAJ).

The HoIs also highlighted the issue of teachers without required SNE-specific skills, especially KSL fluency, as well as limited competence for technical/skills learning areas. Some HoIs reported that teachers in SNE settings are not deployed as specialised SNE staff for the specific category of LSND.

Head of Institution: TSC post teachers without sign language fluency (HOI-QN-ISI-PB-SP-HI-MSA).

Head of Institution: Teachers are not trained on technical skills such as carpentry... (HOI-QN-BUG-PB-SP-IDD-ELM).

Head of Institution: There are no technical teachers employed to teach technical subjects (HOI-QN-LIK-PB-SP-MC-LAI).

Head of Institution: Training of teachers is not adequate especially technical subjects (HOI-QN-GAR-PB-SP-VI-GAR).

Head of Institution: SNE teachers in our school are not deployed as special teachers or SNE teachers (HOI-QN-NYA-PB-SP-MD-HOM).

Education Officers also identified limited vocational competencies among teachers, especially at Prevocational and Vocational levels within the stage-based pathway. Many teachers reportedly lack adequate technical training in the specific skill areas they are required to teach, reducing the effectiveness of curriculum delivery.

Education Officer: Teachers teaching in stage-based e.g prevocational and vocational levels having not trained in most of the skills to be taught to the learners... (EO-QN-CSO-SNE- KIL).

Education Officer: ...lack of skills to handle skilled learning areas for pre-vocational and vocational levels (EO- QN-CSO-SNE- TAT).

iii) Communication barriers

Communication was found to be a major issue especially for teachers handling learners with hearing impairment. Schools reported difficulty with KSL, inconsistent signs, lack of sign-language materials, ambiguous vocabulary, and inadequate skills in communicating with learners who come to school late or without language foundations. This affects instructional clarity, pace, assessment and learner participation. The problem is not only lack of materials, but also the teacher's challenge of translating curriculum into accessible language systems.

Teacher: Communication barriers, there is variation in signs (T-QN-LIS-PB-SP-HI-TAR).

Teacher: Communication barrier as other words have no signs (T-QN-MUR-PB-SP-HI-MUR).

Teacher: Inadequate information or knowledge of the KSL and sign language as the learner reports to school which eats a lot of time (T-QN-OMO-PB-SP-HI-NYAM).

Teacher: In the language of KSL some words have several signs but mean the same (T-QN-MWA-PB-SP-HI-TAT).

Teacher: New emerging vocabulary without equivalent signs and no training for such (T-QN-ANT-PB-SP-HI-BUN).

Teacher: Adapting textbooks to suit the learner and coming up with signs for ambiguous words (T-QN-ESA-PB-SP-HI-BAR).

Heads of Institution and Education Officers also pointed out the communication barriers, particularly the use of alternative communication methods and appropriate language of instruction and interaction. This affects learners who require specialised communication approaches.

Education Officer: ...alternative communication is a challenge (EO-QN-CSO-SNE-BUN).

Head of Institution: Communication barriers, lack of books for the Kenya Sign Language (HOI-QN-ELD-PB-SP-HI-UAG).

Head of Institution: Language use (correct/grammatical English) is confusing since the Deaf English is limited to communication and not grammatical efficiency. Exams should be aligned to correct sign language English (KSL) and avoid overloaded statements (HOI-QN-LAM-PB-SP-HI-HOM).

Some learners linked learning improvement to the need to train teachers in sign language and to employ sign language teachers. They also highlighted the gap where parents cannot communicate in KSL, suggesting teachers are needed not only for instruction but also for bridging communication through parent sensitisation and training.

Learner: Teachers to be trained on sign language. Teachers of sign language to be employed (L-FGD-HOL-PB-SP-HI-TAR).

Learner: Most parents are not able to communicate with the learners because they lack KSL skills. Teacher to sensitize them (L-FGD-LAM-PB-SP-HI-HOM).

Learner: Parents don't understand the sign language hence the parents need to learn the sign language... (L-FGD-GIA-PB-SP-HI-KIS)

iv) Teacher Workload, Limited Time and Large Class Sizes

The respondents frequently reported that teachers did not have enough time to prepare adapted materials, teach slow-paced learners, or provide individualised support. This challenge is linked to workload, slow learner pace, content overload, assessment demands, and teachers' competing roles in inclusive settings. In many schools, teachers handle both regular and SNE learners, or multiple levels in one classroom, making lesson preparation and effective delivery difficult. For LSND, where teaching often requires extra adaptation and repetition, time becomes a central constraint for teacher effectiveness.

Teacher: Inadequate time for preparing adapted materials (workload) (T-QN-GAR-PB-SP-MD-GAR).

Teacher: The available time set for content delivery is minimal as compared to regular learners (T-QN-WAJ-PB-SP-HI-WAJ).

Teacher: Lack of adequate time for preparation and teaching (T-QN-KUJ-PB-SP-HI-MIG).

Teacher: Lack of adequate time for its slow learners since there is no time stipulated in the normal timetable (T-QN-SAS-PB-SP-PI-BOM).

Teacher: Due to teaching both regular and SNE learners whereby there's no differentiated timetable, yet SNE learners need extra time (T-QN-NER-PB-SP-PI-ELM).

Teacher: Not enough time to prepare since teachers are supposed to feed children and do classroom cleanliness (T-QN-MBO-PB-SP-CP-MSA).

Teacher: High number of learners making me not to have time to attend the SNE learners (T-QN-SHI-PB-SP-PI-BAR).

Some of the HoIs and teachers pointed out the issue of large classes. They indicated that this led to challenges in fair assessment of competences - an essential CBC requirement. The time available was not sufficient to cater for the needs of individual learners.

Head of Institution: Teacher handling very large classes. Teachers not able to assess learners effectively or measure competences fairly (HOI-QN-ALL-PB-SP-IDD-NYE).

Education Officer: Limited time to meet the needs of these learners... (EO-QN-CSO-SNE-KIT).

v) Difficulty in supporting diverse, complex and multiple disabilities in one class

Teacher capacity is also strained by the complexity and heterogeneity of learners' needs. Many teachers are expected to teach learners with different disabilities, levels, ages, and support needs within the same classroom, often without adequate specialisation or support. This makes differentiation

difficult and reduces the teacher's ability to provide focused instruction. In inclusive and integrated settings especially, teachers described being overwhelmed by the need to serve varied categories simultaneously.

Teacher: Diverse learning needs in one class (T-QN-CHE-PB-SP-VI-TAR).

Teacher: Handling learners with different disabilities in one classroom (T-QN-NTI-PB-SP-VI-TAT).

Teacher: Having students with different disabilities hence it needs handling each at a time (T-QN-RAI-PB-SP-MD-KIR).

Teacher: Handling the 3 levels ie Foundation intermediate and pre- vocational single handedly (T-QN-GIT-PB-SP-MD-KIR).

Teacher: I'm a regular teacher and it's sometimes difficult to penetrate a child's needs when am still handling the usual class since they are mixed in the same set up (T-QN-LOD-PB-SP-MD-LAI).

Teacher: The diverse/uniqueness of every disability in learners, some with multiple disabilities pause a great challenge (T-QN-OLK-PB-SP-PI-NYAN).

vi) Parental support

A major concern raised is limited parental support. Education Officers reported that some parents fail to accept their children's conditions, resist placement in stage-based pathways, or fail to consistently support school programmes. In some cases, absenteeism and inadequate home support were linked to parental attitudes and lack of awareness.

Education Officer: Lack of support from families of the special needs children... (EO-QN-CSO-SNE-KWA).

Education Officer: ...minimal parental support, learners' diversity in terms of disabilities (EO-QN-CDE-KSM).

Education Officer: ...some parents are still on denial and would stick to their children to take age-based system even if recommended for stage-based system (EO-QN-CSO-SNE-MIG).

Education Officer: ...parents living in denial about their children's conditions and learning styles...irresponsible parents who cannot support the school, to maintain their children because of their attitude (EO-QN-CSO-SNE-THA).

Education Officer: ...absenteeism among some learners in some cases where the parents are not responsible (EO-QN-SO-SNE-BOM).

Head of Institution: Lack of support from some parents to bring and maintain their children in school leaving their task to guardians and well-wishers, lack of parental engagement on day to day basis due to communication barriers as a result of language barrier (HT-QN-CHE-HI-ELM).

vii) Capacity to interpret the Curriculum

Additionally, there is evidence of misinterpretation of curriculum designs, with some teachers struggling to correctly interpret and implement the curriculum for both age-based and stage-based pathways.

Education Officer: Inability to correctly interpret all areas of the curriculum designs... (EO-QN-QAS-ISI).

Education Officer: Interpretation of curriculum designs, ... (EO-QN-CSO-SNE-NAK).

This may have been occasioned by inadequate retooling or inconsistent lack of continuous professional development. Respondents explicitly mentioned the need for refresher courses and continuous retooling-especially for teachers deployed from regular schools.

Head of Institution: Teachers deployed from regular schools need constant retooling (HOI-QN-OGA-PB-SP-MD-HOM).

Head of Institution: ...deployed teachers failing to undergo retooling or workshops regularly on CBC implementation... (HOI-QN-KIB-PB-SP-IDD-KIR).

viii) Preparation of professional documents

Failure by teachers to prepare professional documents such as schemes of work, lesson plans and assessment records undermines structured and coherent curriculum delivery. Lack of updating the documents may ultimately affect learner engagement, consistency in assessment, and the overall achievement of learning outcomes.

Education Officer: Inadequate preparation of professional documents, inadequate curriculum support materials... (EO-QN-CSO-SNE-BOM).

Education Officer: Not preparing an IEP or updating the same... (EO-QN-CSO-SNE-NYE).

ix) Limited remedial teaching, consultation time and responsive support

Learners indicated that they experience difficulty when teachers do not provide adequate time to clarify concepts, when consultation opportunities are limited, or when teachers do not notice that learners have not understood. This indicates gaps in learner-centred pedagogy, remediation, and continuous feedback, which are central to CBC. Teacher absenteeism and weak professional accountability may have contributed to these findings. Although not widespread, some HoIs raised concern about teacher behaviours affecting continuity of learning. They pointed out that some did not attend their classes as required, thus affecting learning as supported by the respondents' voices.

Head of Institution: ... some teachers stay out of school for long and return when unable to follow instructions thus disrupts the learning rhythm (HOI-QN-TIM-PB-SP-MD-TAT).

Learner: Reading is difficult; teachers should help... (L-FGD-KIP-PB-SP-IDD-WEP).

In contexts such as visual impairment and deafblindness, learners also highlighted that teacher responsiveness (e.g., checking understanding and allowing consultation) is essential because their learning barriers are not always visible unless teachers actively probe and adapt.

Learner: Sometimes teachers fail to understand when we don't understand. Sometimes we do not have time for consultation (L-FGD-MIT-PB-SP-VI-TRN).

Learner: Other concepts are difficult to understand need remedial teaching (L-FGD- COL-PB-SP-CP-TRN).

x) Limited auxiliary support systems, guidance and specialist back-up

Teachers also face capacity constraints because they often work without auxiliary support such as teacher aides, therapists, occupational specialists, or sufficient guidance on curriculum delivery. This is especially serious where LSND require support such as speech and physio therapists, mobility support, behaviour support, or communication support that a classroom teacher alone cannot adequately provide. In such cases, the challenge is not merely teacher competence, but the absence of a support ecosystem that would enable teachers to teach effectively.

Teacher: Limited access to audiologist and therapists (T-QN-LIS-PB-SP-HI-TAR).

Teacher: Lack of support services ie occupational/ physiotherapy and speech therapy to help learners with speech and motor problems (T-QN-BOG-PB-SP-IDD-KIS).

Teacher: Lack of teacher aids in class to guide learners. Lack of enough support staff/teaching staff. Lack of adequate services providers (T-QN-MER-PB-SP- IDD-MER).

Teacher: There are no teacher aides in school for matters toileting are of concern (T-QN-NAL-PB-SP-PH-BUN).

Teacher: Lack of support and guidance on how to deliver the curriculum for learners with special needs and disabilities T-QN-KAR-PB-SP-IDD-SIA).

Teacher: Inadequate support and guidance on how to deliver curriculum, inadequate time and support for preparing adapted materials (T-QN-EBU-PB-SP-HI-VIH).

Some learners said that learning is hindered when teacher-led systems for learner support and safety are weak, such as when learners struggle with toileting support, navigating compounds, or facing discrimination and harassment. In these contexts, teachers are implicitly expected to ensure supportive routines, enforce peer support norms, and create safe learning environments. Learners explicitly request assistance through teachers and understand teachers' roles in preventing or addressing conflict.

Learner: Does not always gets helps especially when using toilets... many learners are not willing to help (L-FGD-KAN-PB-SP-VI-MAC).

Learner: Teachers to help us to solve our differences... (L-FGD-NGA-PB-SP-HI-NAK).

Learner: Some learners have bad behaviours and require guidance and counselling (L-FGD-CHE-PB-SP-HI-VIH).

4.4.3 Support needed by teachers and learners in curriculum implementation

While the data suggests that efforts toward effective implementation of the curriculum for LSND are ongoing, significant structural, professional, and community-level support is required to strengthen curriculum implementation and improve learning outcomes for the learners. The HoIs and Education

Officers were asked to give recommendations for the improvement of curriculum implementation for learners with special needs and disabilities in the country. On the other hand, the teachers were asked to indicate the support that would most improve their practice. Learners were asked to indicate what they thought teachers can do to help them learn better. To bridge these gaps, respondents proposed several strategic interventions.

i) Staffing and Deployment of Teachers

A dominant concern raised by the respondents was the shortage of teachers in special schools and units, particularly those trained specifically in SNE. CBC requires differentiated instruction, individualised assessment, remedial support, and practical skill facilitation, all of which demand adequate staffing levels. However, respondents reported insufficient teacher numbers and poor alignment between teacher expertise and learner needs. Many emphasised that staffing is not only about increasing numbers, but ensuring deployment is based on specialisation, learning area gaps, and disability category requirements. Integrated schools and ASAL counties appeared particularly affected, suggesting inequitable teacher distribution. The respondents repeatedly called for more teachers indicating that current staffing structures are unable to sustain competency-based learning pathways, especially stage-based and vocational transitions.

Head of Institution: Posting of more teachers to cater for all the needs in these learners (HOI-QN-LIK-PB-SP-MD-KAJ).

Head of Institution: TSC to deploy more teachers to our school (HOI-QN-OGA-PB-SP-MD-HOM).

Head of Institution: Teachers with SNE training should be posted to the school (HOI-QN-UHU-PB-SP-IDD-ISI).

Head of Institution: More teachers be deployed based on the areas with gaps (HOI-QN-KAA-PB-SP-HI-MER).

Education Officer: ...Employment of more teachers by the Government. Funds to facilitate employment of support service providers (EO-QN-CSO-SNE-MSA).

Education Officer: Deploy more teachers and match specialisation area with the specialist school to post to (EO-QN-CSO-SNE-UAG).

Buttressing the concerns of the HoI and EO, teachers observed that inadequate staffing limits individualised attention, increases workload, and reduces effective inclusion. The teachers also highlighted the need for more SNE-trained teachers.

Teacher: Employing more teachers to reduce workload (T-QN-GAR-PB-SP-HI-GAR).

Teacher: Improve on staffing situation... (T-QN-WAI-PB-SP-IDD-KIT).

Teacher: Employment of more specialised teachers (T-QN-NYA-PB-SP-PI-HOM).

Teacher: To be added more teachers (T-QN-MIC-PB-SP-IDD-EMB).

Teacher: Adequately placing the teachers to reduce the teacher- student ratio (T-QN-RAI-PB-SP-MD-KIR).

ii) Need for specialised teachers in vocational learning areas

CBC places strong emphasis on practical competencies, vocational pathways and life skills. For LSND, this becomes even more critical for independence and transition to work or community life. However, many respondents reported that current teachers lack technical specialisation in vocational subjects such as carpentry, tailoring, pre-technical skills, and other skill-based learning areas. The respondents argued that without specialist vocational instructors or TVET - aligned teachers, LSND are deprived of meaningful skill acquisition opportunities.

Head of Institution: We need specialists in vocational levels to train various skills... e.g carpentry, tailoring as most teachers are not conversant (HOI-QN-MBO-PB-SP-CP-MSA).

Head of Institution: Deployment of technical teachers especially for the vocational level (HOI-QN-NYA-PB-SP-IDD-NYAM).

Head of Institution: A technical teacher to be employed... and a second TVET teacher (HOI-QN-LIK-PB-SP-MD-LAI).

iii) Deploying teachers in vocational skill learning areas for stage-based pathway

Training and deploying teachers in technical skill areas at pre-vocational and vocational levels is essential in ensuring that learners acquire practical and relevant competencies as guided by the curriculum designs. Teachers can receive training that will enhance their ability to help learners develop core competencies, PCIs, safety standards, values, and tool mastery.

Education Officer: ...training teachers in technical skills offered at pre-vocational and vocational level (EO-QN-CSO-SNE-KIR).

Education Officer: TSC to deploy technical teachers in the pre-vocational and vocational level. MoE to provide the resources/equipment (EO- QN-CSO-SNE-KIL).

Education Officer: ... more capacity building for all teachers especially in KSL, IEPs, VbE, Core competencies and PCIs (EO-QN-CSO-SNE-ISI).

Learners strongly associate better learning with practical and vocational exposure. They want teachers to emphasize hands-on activities such as sewing, cooking, farming, beadwork, envelope making, mat weaving, and tool use. This reflects the importance of CBC's skills-based and stage-based pathways for LSND.

Learner: Teachers to teach practical skills for example Sewing, cooking, knitting (L-FGD-MUP-PB-SP-HI-BUN).

Learner: The teachers teach us how to hold tools and use them (L-FGD-EQU-PB-SP-MD-SIA).

Learner: *atusaidie kujua kushona, atufunze kutumia* devices (To help us learn how to sew and how to use digital devices (L-FGD-GAT-PB-SP-MD-NYAN).

Learner: Teach me how to make a mat; teach me how to make bangles (L-FGD-NYA-PB-SP-PD-HOM).

Learner: *Mwalimu anisaidie kujua kuongea Kingereza, kushona vitu mingi kama serviette holder (The teacher to help me know how to speak English and how to make items such as serviette holders) (L-FGD-ALL-PB-SP-MD-NYE).*

iv) Specialised teacher competencies: KSL, braille, inclusive pedagogy and ICT

The teachers highlighted the need for specialised teacher competencies, especially KSL for HI settings, braille skills for VI settings, inclusive pedagogy and ICT to deliver the lessons effectively. They expected these to be factors of focus during retooling and capacity building.

Teacher: ... having seminars for teachers teaching Kenyan Sign Language on proper mode of teaching this learning area (T-QN-KAP-PB-SP-HI-NAN).

Teacher: I wish to be well equipped with braille skills and orientation and mobility (T-QN-OLK-PB-SP-VI-KAJ).

Teacher: Training on inclusive pedagogy and technology use (T-QN-MAT-PB-SP-PI-UAG).

Teacher: Integration of ICT in teaching (T-QN-KAW-PB-SP-IDD-TUR).

v) Continuous professional development (CPD), retooling and in-service training

Another significant issue raised by the respondents was the need for sustained and structured teacher professional development. Respondents noted that CBC is dynamic and evolving, requiring teachers to continuously update pedagogical approaches, assessment strategies, and adaptation techniques for different disability categories. They said that retooling was particularly necessary for teachers deployed from regular schools into SNE settings. The respondents called for regular workshops, insets, refresher courses, and capacity building programs to ensure fidelity of CBC implementation.

Head of Institution: ... continuously training of teachers on new developments on the curriculum (HOI-QN-LIK-PB-SP-VI-MSA).

Head of Institution: Teachers who teach in special schools require more training on the guideline for proper implementation of CBC (HOI-QN-MAS-PB-SP-HI-KSM).

Head of Institution: SNE teachers undergo workshops regularly (HOI-QN-KIB-PB-SP-IDD-KIR).

Head of Institution: Teachers should be taken through refresher training (HOI-QN-HOM-PB-SP-MD-HOM).

Education Officer: ...Capacity building for the EARC officers by KICD for them to offer more support to teachers... (EO-QN-CSO-SNE-MAC).

Teachers consistently asked for frequent refresher training to keep up with CBC/SNE demands, inclusive pedagogy, stage-based pathways, and specialised skills like KSL, braille, and ICT integration.

Teacher: Regular training in order to build the capacity of teachers to effectively implement the curriculum... provision of specialised teacher training on the SNE curricular (T-QN-GRI-PB-SP-MD-WAJ).

Teacher: Provision of in-service training and workshops for educators (T-QN-KED- PB-SP-HI-KER).

Teacher: Regular retooling of all teachers (T-QN-KIP-PB-SP-IDD-BOM).

Teacher: To be given regular workshops on how to handle SNE learners. The workshops will help to improve my working (T-QN-ENA-PB-SP-IDD-NAR).

Teacher: Frequent training organised by the TSC with collaboration with Ministry of Education (T-QN-MOY-PB-SP-IDD-MOY).

Teacher: Seminars, workshops to equip the learners and teachers on more knowledge about ID team. Employ more SNE teachers to special schools (T-QN-SAH-PB-SP-MD-KIL).

Teacher: KICD to hold seminars and trainings for teachers to equip them better on implementation of the CBC (T-QN-MWA-PB-SP-IDD-TAT).

Teacher: Refresher courses, workshops and seminars for teachers handling learners with Special needs (T-QN-MBO-PB-SP-CP-MSA).

Educational officers noted that Continuous Professional Development (CPD) is essential in keeping teachers updated on curriculum reforms, transformative pedagogical approaches, and evolving learner needs. Ongoing training strengthens instructional competence, assessment practices, learner-friendly environment, and inclusive strategies in classroom practice. Sustained CPD therefore ensures consistent, effective curriculum delivery for improved learner outcomes.

Education Officer: The teachers still need professional support given that majority of them trained earlier and continued in regular schools without practising SNE. Some had forgotten the SNE skills during their deployment (EO- QN-CSO-SNE-HOM).

Education Officer: Capacity building/refresher courses for teachers and educational officers (EO- QN-CSO-SNE-ISI).

Education Officer: Retooling for newly deployed teachers in both special schools and units. Encourage SNE teachers to enroll in professional development retooling for newly deployed teachers in both special schools and units. Encourage SNE teachers to enroll in professional development (EO- QN-CSO-SNE-NYE).

Education Officer: Train more SNE teachers in our County. Open training centres for SNE teachers in the County... (EO- QN- CSO-SNE-TUR).

Education Officer: Strengthening continuous professional development for teachers on matters of inclusive education... (EO- QN-CSO-SNE-MSA).

Education Officer: ...more retooling of teachers on CBE to keep abreast with the new system of learning (EO- QN-CSO-SNE-BUS).

Education Officer: Teachers to train on special needs programmes. Adapt environment to be SNE friendly... (EO- QN-CSO-SNE-GAR).

Education Officer: Creating awareness on inclusion of learners/teacher of SNE...Having more personnel to assist in identifying, assessing and placement (EO-QN-CSO-SNE-KAJ).

Learners consistently emphasized the need for teachers to explain concepts clearly, repeat content, slow down instruction, and provide remedial support. Many learners require simplified explanations, step-by-step guidance, and consistent revision to enhance understanding. Individual attention is

particularly critical for learners who struggle with literacy, numeracy, or language acquisition. Repetition and clarity are not seen as optional but essential components of effective SNE pedagogy. Learners also value teachers who write clearly on boards, use large prints, and explain difficult words.

Learner: to repeat what he/she has taught and allow us to ask questions (L-FGD-MUS-PB-SP-MD-KIT).

Learner: *Mwalimu arudie masomo kila wakati* (The teacher should repeat what has been taught from time to time) (L-FGD-MUI-PB-SP-MD-NYA).

Learner: Slow down on how they teach (L-FGD-KIM-PB-SP-DB-TRN).

Learner: Make concepts easier for them, make time to teach them well (L-FGD-KAP-PB-SP-HI-NAN).

Learner: Teach us well. Teach relevant things. Use the blackboard to draw so that we can copy from the board (L-FGD-KAS-PB-SP-IDD-KIT).

Learner: When teachers answer the questions, students ask in class it can help a student understand better (L-FGD-TUM-PB-SP-HI-NYE).

In the non-formal dimension, learners associate better learning with sports, trips, benchmarking, and outdoor exposure. These activities enhance social skills, physical development, and confidence. Therefore, the teacher needs support to enhance learner participation in co-curricular activities, sports and clubs.

Learner: Engage in sports activity... swimming lessons (L-FGD-BOG-PB-SP-MD-KIS).

Learner: Provide musical instruments like drums... provide equipment for playing football, goal ball, and futsal (L-FGD-CHE-PB-SP-VI-ELM).

Learner: Site visits within the compound (L-FGD-HOL-PB-SP-MD-TAR).

Learner: Projects like cooking, trips, farming, benchmarking (L-FGD-MUK-PB-SP-HI-KIA).

vi) Professional support systems: mentorship, guidance and institutional support

Beyond training, teachers asked for sustained support through mentorship, guidance on curriculum delivery, and structured support programmes. Counselling services, and support personnel can increase the capacity of teachers to effectively deliver curriculum for learners with special education needs.

Teacher: Support and guidance on how to deliver the curriculum (T-QN-NYA-PB-SP-HI-NYAN).

Teacher: ... mentorship from experienced special needs educators, access to specialists like Psychologists (T-QN-KIS-PB-SP-IDD-BUS).

Teacher: Support from colleagues and learners will help to improve the practice (T-QN-NDA-PB-SP-PI-NAN).

Teacher: Teacher development supports some of the contemporary issues in the curriculum (T-QN-DEP-PB-SP-PI-KSM).

Education Officer: Provision of support services and assistive devices and drugs
Counselling services (EO-QN-CSO-SNE-BUN).

vii) Teacher involvement in curriculum design, content development and assessment

Beyond implementation, several respondents recommended that teachers be involved in curriculum design, content development, and assessment tool preparation. This reflects a perception that curriculum decisions are sometimes detached from classroom realities in SNE contexts. Teachers supporting LSND possess experiential knowledge about learner diversity, cognitive levels, and adaptation requirements. Involving them in curriculum design development and assessment would ensure contextual appropriateness and relevance.

Head of Institution: Teachers handling learners with special needs be fully involved in the preparation of the curriculum and policymaking (HOI-QN-KIN-PB-SP-HI-KWA).

Head of Institution: Let teachers who teach these learners be given opportunities to develop the content and assessment tools (HOI-QN-MUN-PB-SP-HI-MSA).

Head of Institution: Involve teachers in designing curriculum for prevocational and vocational (HOI-QN-NAK-PB-SP-IDD-NAK).

Head of Institution: Involve class teachers in developing SNE books (HOI-QN-MAN-PB-SP-HI-MAN).

viii) Teacher motivation, promotion, allowances and incentives

The findings show that teacher morale is closely linked to curriculum success. Respondents recommended enhanced allowances and improved remuneration to motivate teachers to handle complex and demanding SNE cases. SNE teaching often involves intensive supervision, emotional labour, behavioural management, and physical support. Without appropriate incentives, teacher retention and performance may decline.

Head of Institution: Increase the special allowance to motivate the teachers, especially in ASAL areas (HOI-QN-ILB-PB-SP-HI-KAJ).

Head of Institution: The TSC should motivate the special education teachers by increasing the risk allowances (HOI-QN-LUT-PB-SP-IDD-KSM).

Head of Institution: Motivate teachers by giving them better salaries (HOI-QN-NGA-PB-SP-MD-LAI).

Head of Institution: special allowance for special needs teachers (HOI-QN-PAU-PB-SP-MD-SAM).

Head of Institution: Enhanced remuneration to boost their morale (HOI-QN-KAA-PB-SP-HI-MER).

Teacher: Motivation of teachers to support learning in terms of teacher promotion and honouring of pledges, presidential pledge... (T-QN-APE-PB-SP-PI-BUS).

Teacher: Provision of teaching learning materials, motivation of both learners and teachers (T-QN-THU-PB-SP-IDD-MUR).

ix) Multidisciplinary professional support to enhance instruction

The implementation of CBC for LSND is not a teacher-only task. The respondents recommended the recruitment of teacher aides and multidisciplinary professionals such as speech therapists,

physiotherapists, occupational therapists, teacher aides/caregivers and counsellors. These professionals support teachers in delivering individualised instruction, behaviour management, therapeutic interventions, and assessment processes.

Head of Institution: employment of teacher aids (HOI-QN-MAS-PB-SP-IDD-NAR).

Head of Institution: Recruit more SNE teachers and teacher aides (HOI-QN-ALL-PB-SP-IDD-NYE).

Head of Institution: Some learners require a speech therapist assistant and also physiotherapist (HOI-QN-ENA-PB-SP-IDD-NAR).

Head of Institution: Government to provide funds for teacher aids (HOI-QN-KAM-PB-SP-VI-THA).

Education Officer: ... Have more/spare specialists for serving particular disability groups (EO- QN-CSO-SNE-UAG).

Teacher: ... provision of support services e.g physiotherapist and teacher aides (T-QN-WAI-PB-SP-IDD-KIT).

Teacher: Government to employ more caregivers and cleaners (T-QN-MBO-PB-SP-CP-MSA).

Some of the learners said that they would wish the teachers act as caregivers, providing counselling, assisting during illness, and creating learner-friendly environments. This reflects the holistic nature of SNE where emotional wellbeing directly affects academic success.

Learner: Should play the role of nurses and parents (L-FGD-MWA-PB-SP-HI-TAT).

Learner: Create a learner friendly environment... offer guidance and counselling services (L-FGD-WOM-PB-SP-HI-VIH).

Learner: Teachers to help us move to hospitals when sick (L-FGD-LUK-PB-SP-HI-EMB).

Learner: Love us and teach well (L-FGD-LAM-PB-SP-CP-LAM).

x) Teacher contact time and flexible instructional time

The respondents suggested that LSND require more instructional time, closer supervision, and extended teacher engagement to master competencies. This implies restructuring timetables and increasing teacher-learner contact hours.

Head of Institution: Allocate more time to teach the learners... (HOI-QN-KWA-PB-SP-HI-KWA).

Head of Institution: allocation of more time and conduct hours with the teacher (HOI-QN-LIK-PB-SP-MD-KAJ).

A significant number of learners require individualized support, especially those with intellectual disabilities, deaf blindness, or physical challenges. They appreciate teachers who accommodate them individually, provide remedial lessons, and give personalised coaching. Individualised instruction aligns strongly with CBC principles but appears unevenly implemented.

Learner: Individual attention. Remedial teaching (L-FGD-COL-PB-SP-VI-TRN).

Learner: Those who have hearing and sight problems to be brought near the teacher (L-FGD-GRI-PB-SP-MD-WAJ).

Learner: To teach us individually. Give us revision materials (L-FGD-MUN-PB-CP-MD-BUS).

xi) Workload reduction and more time to prepare or adapt materials

Teachers pointed out that time pressure (lesson load and adaptation demands) reduces quality of inclusive instruction. They asked for reduced workloads, more time per lesson, and school-level arrangements that make it possible to attend to learners individually.

Teacher: To be given less work or none in the regular classes (T-QN-MUP-PB-SP-IDD-BUN).

Teacher: Allocation of more time in each lesson to enable the teachers attend every learners individually (T-QN-MON-PB-SP-IDD-EMB).

Teacher: Time should be extended to the learners with special needs (T-QN-KAP-PB-SP-HI-NAN).

Teacher: Allocate enough time especially in communication skills and improve on human resource and manpower (T-QN-KIN-PB-SP-HI-KWA).

Teacher: ... the allocation of sufficient time to support effective instruction (T-QN-KIZ-PB-SP-HI-KER).

Teacher: Have adequate time and search for support for preparing adapted materials for the learners (T-QN-NER-PB-SP-PI-ELM).

Teacher: SNE teachers to be given few lessons so that they can attend to the SNE learners effectively (T-QN-SHI-PB-SP-PI-BAR).

xii) Sensitisation of parents

The respondents recommended activities to sensitise parents on the disabilities of their children. Sensitising parents about their children's disabilities is seen to be essential in promoting understanding, acceptance, and informed support at home to enhance collaboration with teachers.

Education Officer: Sensitisation of parents, increased funding for LSND, enhanced supervision of curriculum implementation (EO-QN-CSO-SNE-KIT).

Education Officer: ...Parents to be more engaged to support the learners (EO-QN-QAS-ELM).

Education Officer: ...sensitisation of parents so that they may accept their children's conditions (EO-QN-CSO-SNE-MUR).

4.5 Adequacy and Suitability of Infrastructure, Auxiliary Personnel and Support Services

The existence of a disability-friendly environment forms the basis for a support system for learners with special needs and disabilities. Central to such a system is an enabling physical surrounding, persons who can routinely intervene when help is required and various services that sustain the learner. The study sought to establish whether the requisite infrastructure, auxiliary staff, and other necessary services are accessible to learners within SNE institutions. The objective explores information on how the availability of these factors collectively facilitates the wellbeing of the learner. The information is

presented with a focus on the adequacy and suitability of school infrastructure, auxiliary personnel, and services at the learner's disposal.

4.5.1 Adequacy and Suitability of Infrastructure

Heads of institutions were expected to indicate their level of agreement with statements on adequacy and availability of infrastructure in their respective schools. Table 8 presents the findings.

Table 8: Perceptions of Heads of Institutions on Adequacy and Suitability of Infrastructure

Statement	Mean (%)
a) The school has adequate disability-friendly infrastructure (ramps, rails, and accessible toilets).	67.8
b) Classrooms are adapted to accommodate different disability needs.	68.6
c) Mobility aids (e.g., wheelchairs, standing frames, white canes) are adequate and functional.	60.0
d) Dormitories and dining areas are accessible to all learners.	73.0
e) Therapy rooms and learning spaces are adequate and functional.	51.4

According to the findings from HoIs, the highest mean ratings were 73.0% and 68.6%, attributable to accessibility of dormitories and dining areas to all learners, and adaption of classrooms to accommodate different disability needs. Similarly, responses from the HoIs registered mean percentages of 67.8% and 60.0%, in regard to the adequacy and functionality of mobility aids and therapy rooms. The least mean percentage was 51.4%, accounting for the HoIs agreement with the adequacy and functionality of therapy rooms.

The findings align with views from learners who affirmed that they could move around their classrooms without distractions. The parents opined that facilities are adequate, citing access to wheelchairs and spacious classrooms. They stated that both the classrooms and laboratories were easily accessible and clean. Further, parents noted that the schools also had disability-friendly chairs which made children comfortable.

Learner: Now we can be able to move to learn and to understand without any distraction when moving out and coming out inside the class (**L-FGD-JOY-PB-SP-PI-KIA**).

Parent: The area is well accessible for they use wheelchairs. The feeding area is spacious, well ventilated (**PA-INT-ZIW-PB-SP-HI-MSA**).

Findings from parents resonated with the high mean ratings from heads of institutions which showed that the schools also had ascertained adaption of classrooms to accommodate different disability needs. This was exemplified by the use of disability-friendly chairs and pavements, which made the

movement of children comfortable. The parents confirmed that therapy rooms were available and functional for learners who needed the facility.

Parent: I can say they are good because even if you look at the classes, you find the chairs they sit on are fine. For example, if it is a child, he is comfortable. Like where I am sitting now, I am comfortable, you see even when the child sits, they are not struggling (PA-INT-KER-PB-SP-HI-KIR).

Parent: There are pavements which are helping the learners with wheelchair move well, there is a therapy room. The child is done therapy twice a week. Sanitation activities are available and are okay for the learner (PA-INT-NYA-PB-SP-HI-HOM).

Varying information pointing at infrastructure that was not suited to learners' needs was also derived from an array of respondents. Some parents indicated that the absence of therapy rooms in some schools made it necessary for them to consider other choices where the facility was available.

Parent: There are no therapy rooms in the school in fact I am considering moving my child to Timbila (PA-INT-MWA-PB-SP-HI-TAT).

Parent: Classrooms are not enough, there are no therapy rooms (PA-INT-BUG-PB-SP-HI-ELM).

The challenge of accessibility was raised by the learners themselves. They observed that some of the ramps were not appropriately adapted and remained high, inhibiting easy access with wheelchairs as intended. Other areas that did not have adaptations were in the bathrooms where they experienced challenges, having to fetch water to flush toilets. There were no chairs necessary for learners to sit on as they take their bath. They added that the bathrooms were too small to accommodate wheelchairs.

Learner: Some ramps up making it difficult to climb. Toilets require fetching water with buckets to flush. Bathroom lacks enough chairs to sit on when bathing. Small bathrooms cannot accommodate wheelchairs. Dining hall tables low or high beyond the level of wheelchairs. Some desks are broken others high (L-FGD-MAS-PB-SP-HI-MAC).

Learner: Schools lack enough ramps for total. Dormitory, girls lack clear pathways due to buckets hence leading to injuries of the visually impaired. Compound not well done. Visually impaired learners should have their own toilets (L-FGD-KAN-PB-SP-VI-MAC).

Learners and parents decried the widespread disadvantages learners were exposed to as a result of the glaring facility gaps. These manifested in the way they were compelled to use the same amenities as those used by learners without special needs and disabilities. Specific mention was made in relation to the need for mobility aids. Education officers were in support of the observation made about mobility aids like the white stick for visually impaired learners.

Learner: We use the same facilities together with the other learners; have very few walking sticks (L-FGD-SHA-PB-SP-MD-MAN).

Parent: They are mixed with the other regular learners, and they have the facilities during feeding as well as sanitary facilities (PA-INT-KAR-PB-SP-IDD-SIA).

Parent: There are no adequate facilities in school. No mobility aids, no assistive devices (PA-INT-GED-PB-SP-HI-KIL).

Education Officer: There are challenges with adequacy of learning resources, provide white stick, for HI provide a special room for testing the learner (EO-QN-CSO-SNE- WAJ).

More information on inadequate infrastructure was obtained from parents and education officers. They acknowledged that while some facilities existed, they did not address diverse needs among learners. According to education officers, most special schools did not have enough basic requirements like classrooms and dormitories.

Parent: Facilities are available, like classrooms, dormitories and toilets, but are not sufficient based on the number of learners in the school. Inadequate provision of facilities by parents (PA-INT-ALU-PB-SS-HI-BUS).

Education Officer: Most of the Special schools and units do not have enough good classrooms and even the dormitories (EO-QN-CSO-SNE-MIG).

Education Officer: Inadequate infrastructure to meet diverse learners' needs (EO-QN-CSO-SNE-MSA).

As a way of alleviating challenges hindering effective implementation, the HoIs advocated for assistance to bridge the infrastructural gaps in schools. The findings suggested putting up more schools as well as improved funding to increase schools for hearing impairment since the numbers of learners in the deaf community were in the increase. They called for the need to increase and equip assessment centers for early identification of special needs cases.

Teacher: More schools should be put up to admit learners with different challenges, especially learners with physical disability (T-QN-KIM-PB-INT-HI-TRN).

Head of Institution: Kindly assist the schools improve on the infrastructure, classrooms, pathways, sanitary facilities (HOI-QN-NAS-PB-INT-PI-WEP).

Head of Institution: More facilities are supposed to be added since the deaf community learners are growing (HOI-QN-KER-PB-HI-KIR).

Apart from ensuring suitable learning environments with physical facilities for the needs of the learners, education officers prioritised assessment centres as prerequisite facilities for ascertaining the future wellbeing of learners with special needs. According to them, adequate well equipped assessment centres would sustain the inclusion of marginalised learners and enhance early identification of learners with special needs.

Head of Institution: Establish more assessment centers to be able to reach out marginalized persons with disabilities (HOI-QN-OLK-PB-SP-PI-NYAN).

Head of Institution: Re-establishment of EARC centers to assist in early identification of SNE, provision of audiological equipment in EARC centers, proper funding of special schools, addition of capitation per learner, proper provision of assistive devices like hearing aids (HOI-QN-KER-PB-SP-HI-WEP).

Other respondents emphasised the need for increasing special needs institutions and putting up boarding facilities to bridge the gap in infrastructure. Retaining learners in schools with boarding facilities was envisioned as a means of ensuring convenience for learners and their parents. It was

particularly considered favourable for the learners who travelled from areas far from certain institutions.

Head of Institution: Most schools for LSND should be boarding schools so as to come to capture learners who came from far areas (**HOI-QN-MAK-PB-SP-IDD-WEP**).

Head of Institution: Most schools to have a boarding facility to accommodate the learners in school (**HOI-QN-MWA-PB-SP-IDD-TAT**).

Education Officer: Building and registering special units and schools (**EO-QN-CSO-SNE-KAJ**).

Evidence from heads of institutions, learners, parents, and education officers indicates a mixed situation regarding the adequacy of infrastructure in special schools and units. While some institutions reported accessible classrooms, dormitories, and dining areas, qualitative responses identified persistent gaps in specialised facilities, mobility support, sanitation amenities, and therapy spaces.

4.5.2: Availability of Resources

The study further examined the availability of learning and instructional resources in schools offering programmes for learners with special educational needs and disabilities. Teachers and education officers provided information regarding the presence and adequacy of these resources within their institutions. Respondents indicated the status of key resources required for curriculum implementation in their schools. The responses obtained from the two groups of respondents are tabulated in Table 9.

Table 9: Teachers' and Education Officers' Responses on Resource Availability

Statement on resource availability	Teachers Mean (%)	Education Officers Mean (%)
a) Classrooms and school environments are conducive for learners with special needs.	66.2	60.7
b) Sanitation facilities are adapted and adequate.	51.8	41.7
c) There is reliable electricity and internet to support digital learning.	57	51.2
d) Maintenance and repair services for specialized equipment are available.	24.1	26.5
e) Transport to/from school is accessible and safe for LSND.	40.7	28.4
Overall	48.0	41.7

The findings show that the highest mean percentages registered by both teachers and education officers affirm that classrooms and school environments are conducive for learners with special needs. The teachers' and education officers registered 66.2% and 60.7%, respectively. The second highest mean

percentage recorded for the infrastructure was on the availability of reliable electricity and internet to support digital learning. According to the findings, teacher respondents recorded 57% as the mean percentage while the education officers had 51.2%. On the contrary, the least mean percentage was on the availability of maintenance and repair services for specialized equipment. This had a low mean percentage of 24.1% and 26.5% from teachers and education officers. The overall perception (48% teachers, 41.7% officers) suggests that resource provision is generally insufficient.

Learners presented different views in regard to their schools being conducive for learning. Some of the learners' sentiments were in agreement with findings from teachers and education officers that their dormitories and classes were clean and comfortable.

Learner: The dormitory is well, it's clean and comfortable... it's very nice with some warm showers. The class is good, clean and when teacher comes, it's very comfortable for him (L-FGD-TUM-PB-SP-HI-NYE).

Other findings however advanced contradictory views about the condition of the dormitories and classes. They intimated that due to constrained spaces for classrooms, it became necessary for schools to partition classrooms. The poor quality of the materials used in partitioning like plywood compromised the learning environment because of noise from adjacent classes.

Learner: Classrooms are not adequate. Some are separated using plywood (L-FGD-KOM-PB-SP-MD-MIG).

Learner: Classrooms are noisy because of poor partitioning (L-FGD-KOY-PB-SP-MD-KAK).

In regard to sanitation, learners and parents gave firsthand information about sanitation in institutions for learners with special needs. Parents in certain schools for visually impaired learners stated that there were proper sanitation facilities for their children. In addition to an overall appreciation of the school environment, they described the sanitation as being of high level.

Parent: Sanitation is of high level. Food is okay, beds are neat (PA-INT-KAA-PB-SP-HI-MER).

Parent: There is ... proper sanitation for visually impaired learners (PA-INT-CAT-PB-SP-VI-WAJ).

The dominant complaint from the findings was about the adequacy of sanitation facilities. Parents observed that owing to the growing school population, the toilets had to be shared by many learners at any given time. They complained that some of the toilets in their children's schools did not have water. Like the parents, learners also shared that amenities like laboratories did not have water, and there were no toilets in the dormitory.

Parent: Sanitation facilities, more needed with the growing school population (PA-INT-MAS-PB-SP-PI-MAC).

Parent: The sanitation facilities are not enough. They are shared by many learners (PA-INT-APE-PB-SP-IDD-BUS).

Parent: Washrooms available but water not available (PA-INT-NOO-PB-SP-IDD-KAJ).

Learner: Laboratories have no running water, the toilets are not in the dormitory, they wash in salty water, so those are the problems you see (L-FGD-LIS-PB-SP-HI-TRN).

The learners on their part pointed out that facilities were not adapted, thus disadvantaging learners with multiple disabilities. They intimated that they needed their own toilets as those available were far, making access difficult.

Learner: The facilities are okay but ...no adapted toilets especially for learners with multiple disabilities (L-FGD-LAM-PB-SP-HI-HOM).

Learner: ...we need our own toilets. The ones available are very far from us (L-FGD-MAK-PB-SP-MD-WEP).

Though the sustainability of infra-structure and other necessary facilities depends on repair and maintenance, the findings showed that this practice was not commonly adhered to in schools. It was evidenced from the findings that maintenance and repair services for specialized equipment had the lowest mean ratings from teachers and education officers. Parents further explained that the general functionality and adequacy of facilities like toilets, bathrooms and classrooms were not conducive because they were in a state of disrepair. Some retained water and others had been destroyed by rains. The respondents observed that they were yet to be reconstructed to make them functional.

Parent: The classrooms need better floors ..., floors of toilets not friendly because they retain water (PA-INT-OMO-PB-SP-IDD-NYAM).

Parent: ... the toilets are not adequate for all of them outside there since they were destroyed by the rains and have not been repaired (PA-INT-ALA-PB-SP-IDD-NYE).

Parent: *Kuanza na upande wa* (starting with the) bathrooms, they are there but some need to be repaired (PA-INT-NGA-PB-SP-HI-NAK).

Learner: Fields are not in good condition, walking ways are not good, some classes for primary need to be repaired, girls dormitory (L-FGD-MWI-PB-SP-HI-KIT).

Learner: When there is rain, the floods came... when the floods came... the floods go in the classroom and the water floods in the classroom, during class. I would like to have foundation in the classroom. To have foundation in the classroom to prevent water entering (L-FGD-BOM-PB-SP-HI-BOM).

As administrators who provide oversight at the zonal level, education officers expressed the reality of insufficient facilities like workshops in the schools to support learners in the vocational areas. Similar views were held by HOIs who were particularly emphatic on the establishment of more rooms for vocational practice, and production workshops. They stated that the rooms needed to be filled with the required equipment and tools to support learning.

Education Officer: Focus to be placed on construction and equipping of workshops (EO-QN-CSO-SNE-HOM).

Head of Institution: Construct and equip workshops, and vocational areas, have more institutions for transition purposes **(HOI-QN-SEC-PB-SP-MD-TRN)**.

In the era of ICT, access to reliable electricity and internet was perceived as integral components of the infrastructure for digital learning. Education officers observed the inadequacy as a hindrance to making notable progress in digital learning. They suggested that efforts should be made to increase power for internet connectivity.

Education Officer: ...lack of internet facilities, maintenance and repair services of specialised equipment not readily available **(EO-QN-CSO-SNE-MER)**.

Education Officer: Let there be internet connectivity to promote digital learning computer labs fully equipped with digital resources **(EO -QN-CSO-SNE-BUS)**.

Education Officer: ...check on how to increase internet power **(EO-QN-CSO-SNE-KIT)**.

Observations were conducted in special schools to assess the adequacy of infrastructure for learners with special needs and disabilities. Table 10 presents the observation findings. The observations examined the presence of adaptive features, classroom modifications, and safety measures within the school environment.

Table 10: Observation Findings on Infrastructure

Statements on adequacy of infrastructure	Mean (%)
a) Evidence of consideration for learners with special needs (e.g. ramps, signs, guard rails etc).	70.0
b) Classrooms are adapted to accommodate different disability needs.	71.6
c) The school has appropriate safety and emergency preparedness measures in place to protect and support learners with disabilities.	59.8

The findings from the observation show high mean ratings in relation to adaptation of classrooms for different disability needs and evidence for consideration for learners with special needs. The observation registered 71.6% and 70%, respectively on the two aspects of adaptation and consideration of learners with special needs. A lower mean rating, 59.8%, was registered for safety and emergency preparedness measures.

Though the study indicates a relatively high level of consideration of learners with special needs, response from parents seem to counter the high mean ratings.

Parent: ... the desk and chair is not suitable for my child, he does not have wheelchair to move around **(PA-INT-HAB-PB-SP-MD-WAJ)**.

Learners' and parents' views corroborated observation findings that schools had not exercised adequate safeguard measures to ascertain that learners were in an environment where efforts had been made to mitigate dangers to learners. The absence of bulbs in toilets and classrooms imply that lighting in these areas pose danger to learners whenever they are using the amenities. They also stated that floors were not friendly to use because they had cracks, making the likelihood of slipping and falling very high. The safety issues included the risk of contracting diseases as the parents were concerned that there was no proper sanitation in the school.

Learner: There is need to have bulbs in toilets and classrooms for proper lighting (L-FGD-EMI-PB-SP-VI-BAR).

Learner: The classroom floors have some cracks so not friendly to use, the black boards have cracks, the classrooms are not enough (L-FGD-KAB-PB-SP-DB-BAR).

Parents: The school does not have adequate facilities to keep my son safely since there is no proper sanitation in the school (PA-INT-HAB-PB-SP-MD-WAJ).

In terms of security and safety within the school, learners acknowledged that their teachers were not housed in schools, making it difficult for an effective response to emergency. The learners expressed fear about being in a school that exposed them to unforeseen dangers. They said they needed a perimeter wall or a fence in their school.

Learner: Teachers to have schoolhouses for easy access (L-FGD-ILB-PB-SP-HI-KAJ).

Learner: We need a parameter wall or a fence (FGD-GAR-PB-SP- HI-GAR)

Generally, the findings tend to show that whereas some schools seem to be well-equipped in terms of facilities, there are still many schools which do not have facilities.

Parents: At the moment the school has many learners and we need more classrooms, and all the facilities needs to be increased, feeding areas are available but needs to be improved repaired (PA-INT-JOY-PB-PI-KIA).

The observation findings indicate that while several schools demonstrate consideration for accessibility and classroom adaptation, notable gaps remain in safety measures and the adequacy of facilities. Evidence from learners and parents further points to concerns related to lighting, sanitation, classroom conditions, and general safety within the school environment.

4.5.3 Availability and Adequacy of Auxiliary Personnel

Auxiliary personnel form a critical component of support systems in special schools. Beyond classroom teachers, learners with special needs and disabilities often require additional human support such as teacher aides, caregivers, therapists, interpreters, and other multidisciplinary professionals to facilitate individualized learning, mobility, communication, health care and psychosocial support. In contexts

where such personnel are insufficient, untrained, or unavailable, the burden shifts to classroom teachers, potentially limiting the quality of support provided to learners with diverse needs.

Education officers and Teachers were asked to indicate the availability of auxiliary staff in SNE schools. Their responses are presented in Table 11.

Table 11: Education officers and teachers' responses on availability of auxiliary personnel

Respondents	Yes %	No %
Education Officers	40.0	60.0
Teachers	23.7	76.3

The findings indicate that 40% of education officers reported that auxiliary staff were available, while 60% indicated that such personnel were not available. Among teachers, only 23.7% confirmed the availability of auxiliary staff, whereas a substantial majority (76.3%) reported that auxiliary personnel were not available in their schools. This contrast suggests a pronounced staffing gap at the school level, with teachers experiencing more acute shortages than perceived by education officers.

Additionally, heads of institutions were asked to indicate the extent to which they agreed with statements on the availability and adequacy of auxiliary personnel in special needs schools. Their responses are shown in Figure 7.

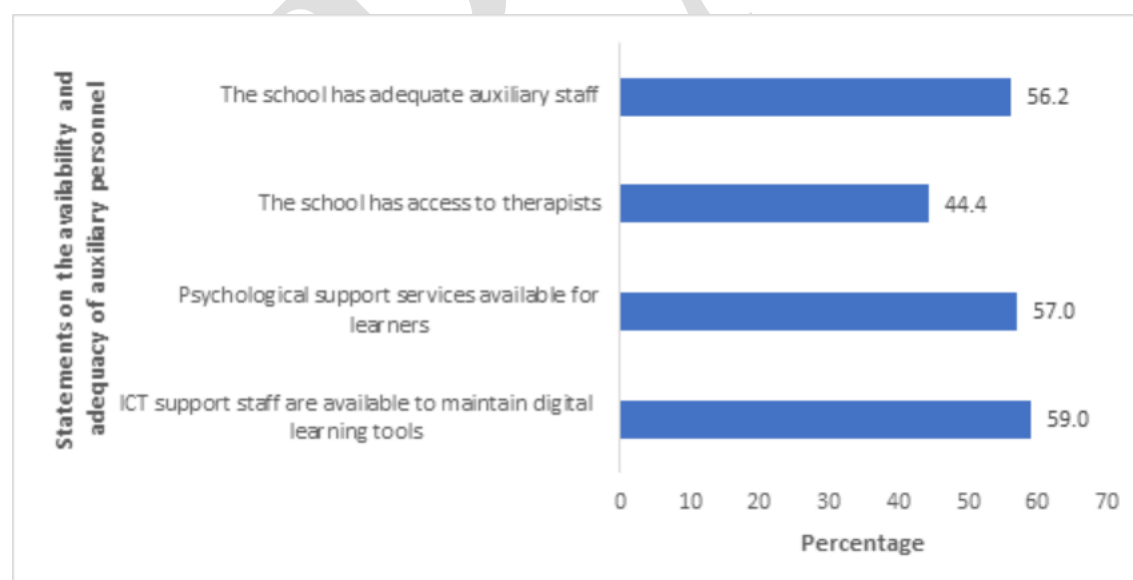


Figure 7: Head of Institutions responses on the availability and adequacy of auxiliary personnel

The findings reveal that heads of institutions had the highest level of agreement on the availability of ICT support staff to maintain digital learning tools (59.0%). This was followed by agreement on the

availability of psychological support services for learners (57.0%), and the adequacy of auxiliary staff in schools (56.2%). The lowest level of agreement was recorded on access to therapists (44.4%). These results indicate that, although there was moderate agreement regarding the availability of auxiliary and related support personnel, access to therapists was comparatively less affirmed.

Qualitative responses from stakeholders further provided insights into the adequacy of auxiliary personnel in schools. Several themes emerged from the responses, including the availability of therapeutic personnel, caregiving staff, communication support personnel, and informal support systems within schools.

4.5.3.1 Therapeutic and Clinical Support Personnel

With the level of agreement with access to therapists at 44.4%, HoIs reported a lack of auxiliary personnel, including occupational therapists and physiotherapists, indicating that support personnel were inadequate in their schools. This was corroborated by learners, who indicated that they were supported only by teachers, suggesting the absence of these personnel. Observational findings further confirmed this situation collectively pointing to limited access to therapeutic services within the schools.

Head of Institution: Lack of personnel e.g. occupational therapist, physiotherapists nutritionist (HOI-QN-SEN-PB-SP-MD-SAM).

Head of Institution: ... inadequate support personnel e.g. therapist (HOI-QN-NGA-PB-SP-HI-NAK).

Observer: There are no therapists to assists learners (OBS-NDA-PB-SP-PI-NAN).

Learner: No, No [we are helped] by teachers (L-FGD-SAS-PB-SP-PI-BOM).

Education Officer: Therapy room available but lacks staff (EO-QN-QAS-NYAN).

Teachers reported the need for increased availability of physiotherapists, occupational therapists, and speech therapists, particularly in schools serving learners with hearing impairment. They emphasized that such personnel are necessary to support learners' well-being and overall achievement, working alongside teachers and parents. Education officers similarly indicated that schools, particularly for those learners with mental impairment.

Teacher: There are more things that need to be done... physiotherapists to be available in these schools with hearing impairment challenges (T-QN-LIS-PB-SP-HI-TAR).

Teacher: ... The schools with such learners should be well equipped with ... personnel to assist LSND e.g. ... occupational therapist and physiotherapist (T-QN-BOM-PB-SP-PI-BOM).

Teacher: ... speech therapists and other specialists are needed to work along with parents and teachers for the well-being of our learners' positive achievements (T-QN-CHE-PB-SP-HI-VIH).

Education Officer: MH schools need more ... therapist (EO-QN-QAS-NAK).

Observer: There is need to have therapists (speech mobility) (OBS-LIK-PB-SP-MD-KAJ).

Findings on the availability of clinical services in special schools presented mixed experiences across respondents. A parent noted that medical support was available to some extent, indicating that when a child falls sick, a nurse attends to them within the school.

Parent: *Hapo kwa medical wacha niseme wanajaribu juu kama ni mtoto akigonjeka, anakuanga na yule nurse anawaangalia huku* (On medical support let me say they try because if a child gets sick, there is that nurse who looks after them here) (P-INT-KER-PB-SP-HI-KIR).

However, teachers reported the need for a school nurse to provide medical services, with some indicating that there was no school nurse at the time of the study. Observational data further confirmed the absence of nursing support in certain schools, noting that there was no nurse to attend to learners with Spina Bifida who develop wounds due to urine incontinence.

Parent: Would love to have nurse in the school compound since we don't have one at the moment (P-INT-KAA-PB-SP-HI-MER).

Teacher: There is need of a school nurse to provide medical services to the learners (T-QN-GED-PB-SP-MD-KIL).

Teacher: Based on congenital diseases the institution should employ the available school nurse ... No school nurse at the moment (T-QN-BOM-PB-SP-PI-BOM).

Observer: No nurse to attend to learners with Spina Bifida who normally develop wounds with urine incontinence (OBS-NDA-PB-SP-PI-NAN).

The responses from heads of institutions and other stakeholders indicate moderate availability of auxiliary personnel in schools, although significant gaps remain in specialised support services required by learners with special needs and disabilities. While some institutions reported the presence of ICT support staff, psychological services, and limited caregiving support, qualitative evidence from teachers, learners, observers, and education officers highlighted the absence or inadequacy of therapists, nurses, and other specialised personnel necessary for therapeutic, clinical, and rehabilitative support.

4.5.3.2 Caregiving and School Support Personnel

Learners were asked to indicate how they are assisted by caregivers, house parents and matrons in their schools. They reported that caregivers play a significant role in supporting their daily needs, helping with washing and cleaning, providing bedding, and supporting learners with severe disabilities such as those who are deafblind. This finding was also supported by observational data, which confirmed the presence of caregivers assisting learners with multiple disabilities within the school environment.

Learner: House mother also assists us by taking us to the hospital. They also assist the young ones in keeping them tidy because they need to be assisted (L-FGD-LIS-PB-SP-VI-TAR).

Learner: Caregivers but through the authority of the headteacher... for example, *kuna yule ako deaf blind ... anashikwa mkono, anapelekwa hospitali* (there is one who is deaf blind, he holds his hand and takes him to hospital) (L-FGD-MWI-PB-SP-HI-KIT).

Learner: They clean where we sleep. They help us wash and clean. They cook for us. They give us blankets when it is cold (**L-FGD-NAL-PB-SP-IDD-BUN**).

Observer: Presence of caregivers to assist the learners with multiple disabilities (**OBS-EQU-PB-SP-IDD-SIA**).

Although caregivers were acknowledged as helpful in supporting learners' daily and health-related needs, stakeholders consistently reported that their numbers were insufficient to adequately meet the demands within special schools and units. Heads of institutions reported a lack of adequate caregivers in their schools. Education officers similarly indicated the need for additional auxiliary staff to enable schools to function effectively. Teachers also expressed the need for more caregivers, noting that learners with intellectual disabilities and underlying health conditions such as epilepsy require additional classroom support, including assistance with toileting and feeding.

Head of Institution: No enough professionals i.e. ... caregivers (**HOI-QN-NYA-PB-SP-IDD-NYAM**).

Head of Institution: Lack of adequate caregivers (**HOI-QN-MUK-PB-SP-MD-KIA**).

Education Officer: There is need for auxiliary staff... to make the schools function better (**EO-QN-QAS-VIH**).

Teacher: We require enough caregivers and occupational therapist to support us in classrooms as most of our learners are hyper and have underlying issue like epilepsy(convulsion) (**T-QN-GRE-PB-SP-IDD-NAN**).

Teacher: The Intellectual Challenged class needs a caregiver to assist in toileting and feeding (**T-QN-UHU-PB-SP-IDD-ISI**).

This finding was reinforced by parents who indicated that teachers assist learners with essential daily care activities such as feeding, walking, and using sanitation facilities. Some parents further noted that teachers personally feed learners, particularly those with multiple disabilities. Learners also reported that teachers and peers help them with mobility, including assisting them to get to class and taking them to hospital when necessary. These responses suggest that, in the absence of adequate caregivers, teachers and peers are stepping in to perform caregiving roles within schools, further highlighting the insufficiency of dedicated caregiver support in special schools.

Parent: Teachers have assisted the child to learn how to feed, walk and use sanitation facilities (**P-INT-MAR-PB-SP-PI-KSM**).

Parent: On feeding, teachers have to feed them. (**P-INT-GAT-PB-SP-MD-NYAN**).

Learner: Those with multiple disabilities are helped by ... peers and teachers (**L-FGD-LAM-PB-SP-HI-HOM**).

Learner: Teachers help us to get to the class; they pick us and take us to hospital (**L-FGD-MWA-PB-SP-HI-TAT**).

In emphasising the importance of caregivers in the lives of learners with special needs and disabilities, stakeholders highlighted the need to strengthen their capacity and improve their working conditions. Heads of institutions called for frequent capacity building of caregivers and noted that learners would

benefit as a result. Observational findings further indicated that in some cases, caregivers handling learners with disabilities were not formally trained, as they were recruited from the community to provide assistance. These findings underscore the need for structured training, professional development, and improved support systems for caregivers in special schools and units.

Head of Institution: Frequent capacity building of ... support staff (**HOI-QN-MUK-PB-SP-MD-KIA**).

Head of Institution: If there are ... adequate support staff, the learners would benefit (**HOI-QN-OLK-PB-SP-MD-NYAN**).

Head of Institution: More auxiliary staff to be availed together with their remuneration enhanced to boost their morale (**HOI-QN-KAA-PB-SP-HI-MER**).

Observer: learners with disabilities are not handled by trained personnel since the caregivers are picked from society to assist them (**OBS-BOM-PB-SP-PI-BOM**).

Beyond performing their normal duties of providing personal care and welfare support, learners reported that caregivers also assist them in their learning. They indicated that caregivers help learners who have difficulty reading and provide support during evening study sessions and with homework. Learners further noted that caregivers offer assistance when teachers are absent, thereby contributing to continuity in learning. This was reinforced by teachers, who recommended involving auxiliary staff to support teaching. These findings indicate that auxiliary personnel extend their roles beyond caregiving to contribute to instructional support within special schools and units.

Learner: They help learners who do not know how to read...they sacrifice their time to teach us (**L-FGD-NGU-PB-SP-MD-NYE**).

Learner: When we go to the store to take the orbits, the person in the store teaches us to use the orbit a little bit... (**L-FGD-THI-PB-SP-VI-KIA**).

Learner: Caretakers help during evening study. They help when teachers are absent. They help with homework (**L-FGD-MUN-PB-SP-HI-BUS**).

Teacher: Involve auxiliary staff to support teaching (**T-QN-KAR-PB-SP-IDD-SIA**).

4.5.3.3 Communication Support Personnel

Communication support personnel, particularly sign language interpreters and braille transcribers, were also highlighted as essential for facilitating access to learning for learners with hearing and visual impairments.

Findings indicated that interpreters supported learners in school-related settings such as church services and weekly meetings, helping them understand what was being read and discussed. However, concerns regarding the lack of adequate interpreters were echoed across stakeholders. Observational data as well as teachers noted that schools needed more interpreters.

Learner: Interpreters help you when you need support in church. They help us understand what they are reading in meetings every week (**L-FGD-MUN-PB-SP-HI-BUS**).

Learner: Teachers for sign language are very limited (**L-LIS-MUN-PB-SP-IDD-TAR**).

Observer: The school need more ... interpreters (**OBS-BOM-PB-SP-PI-BOM**).

Teacher: Provision of auxiliary staff such as sign language interpreters (**T-QN-KIZ-PB-SP-HI-KER**).

Teacher: The school requires a sign language interpreter (**T-QN-CHE-PB-SP-HI-ELM**).

Access to learning materials in braille is essential for learners with visual impairment. Braille transcribers support this process by learning materials into braille format. Through their work, learners with visual impairment are able to access the same content as their peers in an appropriate and accessible medium. Teachers reported the need for braille transcribers. They indicated that schools require braille transcribers for the production of braille materials to facilitate learning with some teachers noting their complete absence.

Teacher: There is need for a braille transcriber in the school for the production of braille equipment (**T-QN-CHE-PB-SP-VI-TAN**).

Teacher: We need vision support to help learners cope up ... especially Braille transcriber (**T-QN-KOM-PB-SP-VI-MIG**).

Teacher: We need braille transcriber (**T-QN-FRA-PB-SP-VI-WES**).

4.5.3.4 Informal Support Systems

Beyond formal auxiliary personnel, the findings indicate that other individuals also play a supportive role in the lives of learners with special needs and disabilities. These include community members and peers, with peers particularly providing substantial day-to-day assistance that supplements the work of caregivers within schools.

Learners reported that church members assist them in understanding sermons during Christian Union sessions, demonstrating community involvement in supporting learners' spiritual and social participation. In addition, peers were frequently mentioned as key sources of support. Senior learners were reported to help junior learners with bathing and washing clothes, while classmates assist others who require mobility support around the school.

Learner: The church members help the learners understand what the preachers say in the school during CU sessions (**L-FGD-NYA-PB-SP-VI-HOM**).

Learner: Senior learners help junior learners in bathing and washing clothes (**L-FGD-BON-PB-SP-VI-MIG**).

Learner: Peers such as classmate help others who need support in mobility around the school (**L-FGD-NAS-PB-SP-MD-WEP**).

Learner: *kwa wale hawaonangi vizuri nawasaidia, nawaonyesha kule tunaenda, nawapeleka darasa alafu nawapeleka choo* (For those with low vision, I guide them on where to go, I take them to class and also to the toilet) (**L-FGD-ALA-PB-SP-MD-NYE**).

4.5.4 Status of Support Services Required for Effective Curriculum Implementation

Support services constitute an integral component of educational provision in special schools. These services encompass a range of professional and institutional supports designed to address the diverse academic, health, psychosocial, and developmental needs of learners with special needs and disabilities. They may include therapeutic services, counselling, social work, and assistive technology support, among other interventions. In the context of special needs education, such services complement instructional efforts and contribute to the creation of an enabling and inclusive learning environment.

4.5.4.1 Stakeholders' Feedback on the Availability of Support Services in their Schools

Different stakeholders were asked to indicate the availability of support services in schools. This was intended to determine the extent to which institutions provide key services necessary for effective curriculum implementation.

i) Heads of Institutions Responses on the Availability of Support Services

Heads of institutions were asked to indicate the extent in which they agreed with statements on the availability and adequacy of learner support services in their school. Their responses are presented in Figure 8.

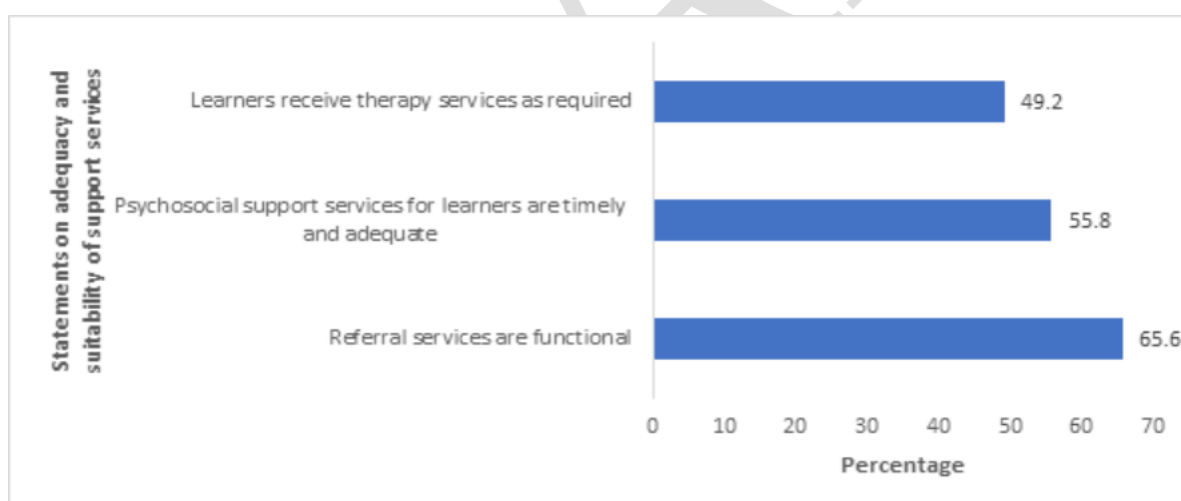


Figure 8: *Heads of Institutions responses on the support services currently available in their schools*

The findings show that heads of institutions had the highest level of agreement with the functionality of referral services (65.6%), followed by the timeliness and adequacy of psychosocial support services (55.8%). The lowest level of agreement was recorded on learners receiving therapy services as required (49.2%). These findings suggest that while referral and psychosocial support services were perceived as relatively more functional, therapy services were viewed as comparatively less adequate in meeting learners' needs.

ii) Education Officers and Teachers Responses on the Overall Availability of Support Services in Schools

Education officers and teachers were asked to indicate the availability of support services in their schools. Their responses are outlined in Table 12.

Table 12: Education officers and teachers' responses on the overall availability of support services

Respondents	Yes %	No %
Education Officers	29.8	70.2
Teachers	18.3	81.5

The findings show that 29.8% of education officers reported that support services were available, while 70.2% indicated that they were not available. Among teachers, 18.3% confirmed the availability of support services, whereas a substantial majority (81.5%) reported that such services were not available. These results confirm limited availability of support services in schools for learners for special needs and disabilities.

iii) Teachers' Responses on the Availability of Selected Supports Services Available in their Schools

Teachers were provided with a list of selected support services and asked to indicate which of these were currently available in their schools. This was intended to establish the extent of institutional provision of key support services necessary for effective curriculum implementation. Their responses are presented in Figure 9.

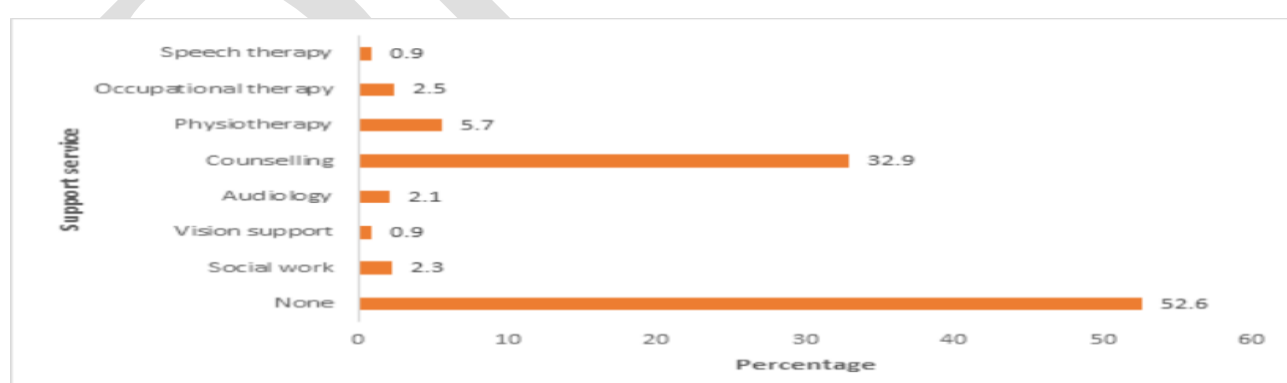


Figure 9: Teachers responses on selected support services currently available in their schools

The findings show that the majority of teachers (52.6%) reported that none of the listed support services were available. Counselling was the most commonly reported available service at 32.9%, while physiotherapy was reported by only 5.7% of respondents. Occupational therapy (2.5%), social work

(2.3%), audiology (2.1%), and both speech therapy and vision support (0.9% each) were reported at very low levels, underscoring a significant gap in the provision of essential learner support services within schools.

4.5.4.2 Stakeholders Comments on the Status of Support Services Required for Effective Implementation of the Curriculum

Respondents were also asked to comment on the status of support services for effective curriculum implementation in their schools.

i) Availability of Support Services in Schools

Consistent with the quantitative results in Table 12 which showed that a large proportion of teachers (81.5%) and education officers (70.2%) reported that support services were not available in schools, several respondents indicated that support services were completely absent in their institutions. Teachers explicitly stated that their schools did not have any of the specialised services required to support learners with diverse needs. In some cases, the absence of these services was reported to significantly hinder effective curriculum implementation, particularly for learners with multiple and severe disabilities.

Teacher: There being no support services on curriculum implementation is a real challenge since we have learners with multiple disabilities thus impacting so much on learning and overall well-being of such learners (T-QN-CHEP-PB-SP-VI-ELM).

Teacher: Currently no support service available in our school which is a big gap as far as curriculum delivery is concern (T-QN-ENA-PB-SP-IDD-NAR).

Teacher: No support services are available in our school hence no proper implementation of CBC (T-QN-NIN-PB-SP-HI-SIA).

Teacher: We need the support services but currently they are not available in our school (T-QN-MER-PB-SP-IDD-MER).

ii) Adequacy of Existing Support Services

Where support services were reported to exist, teachers frequently described them as inadequate and insufficient relative to the number of learners requiring support. This observation corresponds with the findings from Figure 9, where fewer than half of the heads of institutions (49.2%) agreed that learners receive therapy services as required, indicating gaps in the adequacy of available services. Parents similarly reported limited school-based support, often supplementing services themselves.

Teacher: The support system available is inadequate compared to the population. More support would assist greatly (T-QN-MUS-PB-SP-IDD-NYE).

Teacher: Support service available should be regular and consistent (T-QN-APE-PB-SP-PI-BUS).

Teacher: The support services available are offered by the teachers who heads different departments (T-QN-NYA-PB-SP-HI-HOM).

Parent: Not much of such support but we get it from one of the teachers and the parent who takes care of the kids that is me as the caregiver of the kids (PA-INT-LUK-PB-SP-MD-SAM).

iii) Reliance on External Institutions for Support Services

A number of respondents indicated that schools rely heavily on external institutions such as NGOs, well-wishers, and public hospitals to provide key support services. Teachers noted minimal government involvement, while parents reported accessing medical and therapeutic services outside the school setting.

Teacher: The school depend more on NGOs for support. The government has done a little. We fully rely on well-wishers (T-QN-ILL-PB-SP-VI-UAG).

Teacher: The school depend more on well-wisher than government (T-QN-ILL-PB-SP-VI-UAG).

Parent: The child gets support not from school but from the general hospital (PA-INT-MAR-PB-SP-MD-SAM).

Parent: The school lacks medical support hence I have to take my child to a hospital in town (PA-INT-WAI-PB-SP-MD-KIT).

iv) Status of Support Services

Beyond the overall availability of support services, stakeholders commented on the status of specific support services required to facilitate effective curriculum implementation for learners with special needs and disabilities. These responses are organised into key thematic areas.

Speech therapy emerged as the most frequently cited support service required by teachers. Respondents emphasised its role in improving learners' communication skills, building self-confidence, supporting social interaction, and addressing developmental delays. Teachers further linked speech therapy to effective curriculum implementation, noting that its availability would enhance learning outcomes.

Teacher: Speech therapy to help improve learners' communication and overall quality of life thus builds self-confidence, support social interaction and help those with developmental delays (T-QN-MAR-PB-SP-IDD-BUS).

Teacher: Speech therapist services will be of great support for effective curriculum implementation (T-QN-FRI-PB-SP-HI-VIH).

Teacher: If you can train teachers on speech therapy sessions ... which are mostly needed to implement curriculum in school (T-QN-KHA-PB-SP-IDD-BUN).

However, a parent noted speech therapy is not provided within their school and was normally accessed externally.

Parent: Speech therapy not provided in school. Used to take child for therapy outside school (PA-INT-MAS-PB-SP-PI-MAC).

Physiotherapy was also strongly identified as a needed support service, particularly for learners with cerebral palsy, mobility challenges, and other physical impairments. Teachers emphasised the importance of regular sessions to improve mobility and physical wellbeing. However, responses indicate

that services are limited, with some schools having only one specialist handling multiple roles or none at all. Parents similarly reported irregular provision of therapy.

Teacher: Inadequate support services where we have only one occupational therapist who dabbles as the physiotherapist too (T-QN-NYA-PB-SP-PI-HOM).

Teacher: Physiotherapy - Some learners are facing other disabilities like physical hence needs of having physiotherapist in our school (T-QN-CHE-PB-SP-MD-TAR).

Teacher: If possible ... a physiotherapist should be made available, perhaps twice a week (T-QN-KIP-PB-SP-MD-KER).

Parent: *kwa sasa hatuna therapist but mwaka jana tulikua na yeye mara moja kwa wiki* (For now, we don't have a therapist, but last year, we had one coming once a week (PA-INT-PAT-PB-SP-PI-BAR).

Some teachers noted that physiotherapy services were overwhelmed due to the increasing number of learners with some teachers suggesting that basic physiotherapy sessions be given to teachers to supplement the services and bridge the gap.

Teacher: The physiotherapist is overwhelmed by the increasing number of learners to attend to (T-QN-DAI-PB-SP-DB-KAK).

Teacher: Physiotherapy sessions could be availed. Also, some of us SNE teachers could be taken through induction on physiotherapy could be most effective (T-QN-NER-PB-SP-PI-ELM).

Teachers also expressed a clear need for occupational therapy services to support learners' fine motor development, self-care skills, and activities of daily living. They indicated that learners with multiple disabilities, intellectual challenges, and visual impairments require structured therapeutic intervention to enhance independence, improve motor coordination, and participate more effectively in classroom activities.

Teacher: We require enough occupational therapist to support us in classrooms as most of our learners are hyper and have underlying issue like epilepsy (convulsion) (T-QN-GRE-PB-SP-MD-NAN).

Teacher: Having an occupational therapist ... will really help some of our learners who are VI and have problems with their hands and fingers such that they cannot touch (T-QN-OLK-PB-SP-MD-KAJ).

Teacher: We need support services e.g. occupational therapy... for exercise for better health especially for learner with speech and mobility issues (T-QN-MAR-PB-SP-MD-MAC).

Teacher: The school requires occupational therapists ... for effective curriculum implementation (T-QN-SEN-PB-SP-MD-LAI).

Sensory support services such as audiology and vision support were also reported to be insufficient relative to learner needs. Quantitative findings indicated that audiology services were reported by 2.1% of teachers, while vision support services were reported by only 0.9%.

Teachers also highlighted a strong need for audiology services, including hearing assessment and fitting of hearing aids, noting that these services are either unavailable or inadequately provided in many schools.

Teacher: Audiologist are needed for the purpose of assessment for new learner for better placement (T-QN-WAJ-PB-SP-HI-WAJ).

Teacher: Support services are not practised in our school, and we would do better if they consider giving us services such as ... audiology (T-QN-LAM-PB-SP-HI-HOM).

Similarly, significant gaps were reported in vision support services, particularly in schools serving learners with visual impairment and deaf blindness. Teachers emphasised the need for Braille transcribers, vision support officers, and low vision devices to enable learners to access instructional materials effectively.

Teacher: We need vision support services to help learners cope up with the situation especially Braille transcriber (T-QN-KOM-PB-SP-VI-MIG).

Teacher: The school desperately need vision support services (T-QN-JOS-PB-SP-VI-KIS).

Teacher: Because of many learners who are visually impaired, there is need for vision support service (T-QN-OLK-PB-SP-VI-KAJ).

Guidance and counselling services were reported to be relatively more present compared to other support services, with 32.9% of teachers indicating that counselling services existed in their schools. However, qualitative responses suggest that these services are often delivered informally by teachers rather than trained counsellors or social workers.

Teacher: The school engages learners in counselling sessions as a way of motivating them (T-QN-TOM-PB-SP-CP-MSA).

Parent: *Walimsaidia wangu kujikubali* (They helped mine to accept himself) (PA-INT-EMI-PB-SP-HI-BAR).

Parent: *Shule inasiadia hawa watoto hasa kwa upande wa guidance and counselling,kuna siku within a week wanachukua watoto wote wanasomeshwa kwa guidance and counselling* (The school provides support in guidance and counselling. There are days within the that the learners are taken through guidance and counselling) (PA-INT-EMI-PB-SP-HI-BAR).

Teacher: Guidance and counselling programmes have enabled not only learners but also parents to change their attitude and mindset towards CBE (T-QN-GAR-PB-SP-HI-GAR).

While some schools reported engaging learners in counselling sessions, both the parents and teachers noted that these services were often provided informally by teachers heading guidance and counselling departments rather than by trained counsellors or social workers.

Teacher: The support services available are offered by the teachers who heads different departments guidance and counselling departments (T-QN-NYA-PB-SP-HI-HOM).

Parent: Guidance and counselling from teachers not from professionals (PA-INT-MAS-PB-SP-PI-MAC).

Clinical support is available in some schools, mainly in the form of first aid, visiting nurses, or referrals to hospitals. However, parents indicated that services are often basic and major cases are handled externally, with the financial cost being covered by the schools

Parent: *Tuseme watoto kama epilepsy, walimu hawakimbii kupigia simu akianguka, wako na daktari ambaye anakuja tu hapa* (For learners with epilepsy, teachers no longer rush to call for help, they have a doctor who attends to them) (PA-INT-NJO-PB-SP-MD-NAK).

Parent: On medical support let me say they try because if a child gets sick, there is that nurse who looks after them here.... and they try to give them medicine while they are here. If it fails then they take them to the hospital. So there I can say it is okay (PA-INT-KER-PB-SP-VI-KIR).

Parent: We have Red Cross, they once in a while perform first aid to the children (PA-INT-TIM-PB-SP-MD-TAT).

Parent: Sometimes the school goes a long way to provide resources to help learners like paying the hospital bills (PA-INT-SEC-PB-SP-MD-TRN).

Support for learners with hearing impairment was also mentioned. While some schools provide sign language interpretation or instruction, others lack qualified personnel, resulting in inconsistent communication support.

Parent: Learners are trained in sign language (PA-INT-GAR-PB-SP-HI-GAR).

Parent: Some services are offered by the school like, sign language interpretation (PA-INT-LOD-PB-SP-HI-TUR).

Parent: We receive support... but not sign language. We do not have sign language teachers for the learners needing this (PA-INT-JOS-PB-SP-IDD-NYE).

Evidence from stakeholders indicates varied availability and adequacy of specialised support services for learners with special needs and disabilities. While some schools reported guidance and counselling and limited clinical support, most therapeutic and sensory services such as speech therapy, physiotherapy, occupational therapy, audiology, and vision support were insufficient or inconsistently provided. Respondents also reported reliance on external providers or informal school arrangements, indicating gaps between learner needs and institutional support structures.

4.6 Strategies in Place for Identifying, Nurturing, and Supporting Talents of Learners with Special Needs and Disabilities

The Basic Education Curriculum Framework (BECF) emphasises the development of every learner's potential, including Learners with Special Needs and Disabilities (LSND), through a competency-based approach. It underscores early identification of talents, provision of individualised support, inclusive learning environments, and appropriate assessment pathways aimed at promoting independence, skill development, and meaningful participation in learning. Through this approach, the framework seeks to ensure that learners with disabilities are accorded equitable opportunities to discover, develop, and demonstrate their talents within a supportive and flexible education system.

The fourth objective of the study sought to establish the extent to which strategies are in place to identify, nurture, and support the talents of learners with special needs and disabilities. The findings are presented into three thematic areas, namely: systems and opportunities schools provide, strategies in place and parental involvement in identification and nurturing of learners' talents. Data was collected from Heads of Institutions (HoIs), teachers, education officers, learners, and parents to examine the strategies employed by schools in supporting talent development among LSND. In addition, direct observations were conducted to verify the existence and application of these strategies in school settings. The findings are presented as follows.

4.6.1 Systems and opportunities schools provide for identifying, nurturing and supporting learners' talents

The HoIs were required to rate their level of agreement with the statements on systems and opportunities schools provide for identifying, nurturing and supporting talents of learners with special needs. Table 13 presents the findings.

Table 13: HoIs' responses on school systems and opportunities for talent identification and support

Statement	Mean%
a) The school has clear systems for identifying learners' talents.	80.6
b) There are adequate opportunities for learners to engage in talent development activities	78.2
c) Learners with exceptional talents receive additional support and attention	74.4
d) The school maintains linkages with external programmes or institutions for talent development	72.0
e) The school involves parents in supporting the development of learners' talents.	76.8
f) Talent development progress is consistently documented	70.2
Average	76.1

The average level of agreement among HoIs regarding the existence of systems and opportunities for identifying, nurturing and supporting learners' talents was 76.1%, suggesting that most schools have established mechanisms for talent development. The highest-rated aspects were the presence of clear systems for identifying learners' talents and the integration of talent-nurturing activities into classroom instruction, each recording 80.6% agreement. Although HoIs expressed agreement across all assessed areas, documentation of learners' talent development progress received the lowest rating at 70.2%, indicating a relative weakness in systematic monitoring and record-keeping.

Teachers were required to rate the extent to which they agree with the aspects of structures for identification and nurturing talents among learners. The findings are presented in Table 14.

Table 14: Teachers' Responses on Structures for Identification and Nurturing of Talents

Statement	Mean %
a) Our school has systems to identify talents among LSND	73.2
b) Our school provides opportunities for different pathways	77.4
c) Our school has adapted equipment/resources for talent development.	57.2
d) Teachers in our school receive guidance on nurturing talents among learners	67.2
e) Our learners have opportunities to showcase talents	76.6
f) The community partners with the school in supporting talent development	62.0
Average	68.9

The overall level of agreement among teachers regarding the structures in place for identifying and nurturing learners' talents was 68.9%, indicating a moderate level of agreement. The highest-rated aspect was the provision of opportunities for different talent development pathways, which recorded a 77.4% agreement. In contrast, the availability of adapted equipment and resources for talent development received the lowest rating at 57.2%, suggesting that many teachers perceive this as a key gap in the existing school structures for identifying and nurturing learners' talents.

Observations were made on systems and opportunities in place for identifying, nurturing, and supporting the talents of learners with special needs and disabilities. Table 15 presents the findings.

Table 15: Observation on systems and opportunities for identification, nurturing and supporting talents

Statement	Mean (%)
i) Existence of structured talent identification programs (Academics, arts, music, sports, vocational skills etc)	77.6
ii) Learners are actively engaged in sports, arts, music, technology clubs, and vocational activities adapted to different disabilities (observe activity timetables and attendance registers)	80.4
iii) Documentation of learners' talent portfolios showcasing skills, talents and achievements	73.4
iv) Presence and use of adapted equipment (e.g. modified sports gear, musical instruments)	60.6
v) Presence of platforms (exhibitions, performances, sports days, competitions, or school/community events) where learners with disabilities display their talents	71.4

The results show that most schools have some form of talent identification programs, at 77.6%. Many observers reported that learners actively participate in sports, music festivals, drama, athletics, and special needs competitions (80.4%). Some learners have performed at regional, national, and international levels. Some schools display trophies and certificates as evidence of achievement. Presence and use of adapted equipment was the least rated at 60.6%.

4.6.2 Strategies for identification and nurturing of talents

Findings from the HoIs, teachers, education officers, learners and observations indicated that schools use different strategies for identifying and nurturing talents, as well as opportunities through different pathways to support talent development. The strategies triangulate with findings from Heads of Institutions, teachers, and field observations, as evidence from these respondents converges in indicating the existence of systems for identifying learners' talents. The findings are presented thematically as follows.

i) Curricular and co-curricular Activities as Primary Platforms for Talent Identification

Findings from the study indicate that curricular and co-curricular activities were key strategies employed by schools to identify and nurture learners' talents. Evidence from education officers, teachers, and field observations consistently showed that schools provide learners with opportunities to explore their abilities through various co-curricular platforms. Education officers reported that learners are exposed to a variety of skills at the pre-vocational level where teachers identify and nurture emerging talents. Participation in activities such as sports and games, music and cultural festivals, poetry, drama, and competitions like the Kenya Science and Engineering Fair provides learners with opportunities to demonstrate their abilities.

Similarly, teachers indicated that co-curricular activities such as athletics, ball games, and other sporting competitions organized through the Ministry of Education enable learners to participate at regional and national levels, thereby facilitating talent identification and development. Teachers further highlighted that schools use clubs such as drama, music, writing, debating, and readers' clubs to expose learners to diverse talents and interests. In addition, teachers provide different playing materials and introduce learners to various games, which allows them to discover and develop their talents.

Field observations also supported these findings, indicating that schools have established structures for talent identification programmes such as clubs and vocational activities. The convergence of evidence from education officers, teachers, and observations therefore triangulates that curriculum and

co-curricular activities serve as primary platforms for identifying and nurturing learners' talents in schools. The following are excerpts drawn from different respondents' comments.

Education officer: Learners are exposed to a variety of skills at pre-vocation level, and the teachers identify the talent and nurture them. Involved some of the learners in sports and games and identifying talent (**EO-QN-CSO-KIL**).

Education officer: Co-curriculum activities, Kenya Science and Engineering Fair Competitions (**EO-QN-CDE-KIS**).

Education Officer: Games and Sports for SNE learners. Music festival/cultural festival/poetry/drama (**EO-QN-CSO-MAC**).

Education Officer: During sporting and games activities, learners are given an opportunity to explore their talents (**EO-QN-CSO-MAK**).

Teacher: Through participating in co-curricular activities like athletics and ball games, competing in regional and national levels through Ministry of Education (**T-QN-CHE-PB-SP-VI-TAR**).

Teacher: During co-curricular activities, learners are provided with different playing materials and are exposed to different games e.g. gall ball and hence identify different talents (**T-QN-CHE-PB-SP-VI-TAR**).

Teacher: Our school uses clubs such as drama clubs, music clubs, writing and debating clubs and readers clubs (**T-QN-JAR-PB-SP-ID-GAR**).

Observer: The school has structures for talent identification programs, e.g. clubs and vocational activities (**OBS-HOL-PB-SP-IDD-TAR**).

Similarly, some parents indicated that learners are given a chance to participate in curriculum and co-curricular activities. Through these platforms, they are able to observe and identify learners' talents. The following are some opinions from parents.

Parent: Learners are given the chance to participate in co-curricular activities up to regional **P-INT-CAT-PB-SP-WAJ**).

Parent: As a house mother, I am able to see the talents in the learners through sports they are engaged in swimming, sports, music and drama. They participate up to nationals' competition (**P-INT-SAJ-PB-SP-KIA**).

Sports and games are the most common ways learners develop their talents. Learners mentioned football, athletics, volleyball, handball, hockey, skipping, and running. Schools organise sports days, friendly matches, and inter-school competitions. Some learner respondents had this to say.

Learner: Participation in games and sports activities as well as music and drama to identify and nurture learner talents (**L-FGD-SAH-PB-SP-HI-KIL**).

Learner: Given opportunities during music and games. Allows a day for talents. Participating in activities outside school (**L-FGD-KAN-PB-SP-VI-MAC**).

Learner: The school organises sports activities, where we participate in various activities, teachers give us more practice activities to improve our abilities, we participate in drama festivals, and some of us identified their dancing talents through drama (**L-FGD-STJ-PR-SP-MD-KIS**).

Learner: We utilize games time to engage in co-curriculum activities, e.g. ball games and athletics. When the teacher is teaching and giving tasks in groups, we/she identifies talents (**L-FGD-STM-PB-SP-IDD-TUR**).

Teachers train, coach and mentor learners in different sporting activities to help them improve their skills. Some learners' voices concerning this issue are captured as follows.

Learner: The teachers train us in drama, coaching in ball games, football, volleyball, handball (**L-FGD-SEN-PB-SP-MD-SAM**).

Learner: The teacher gives us opportunities to participate in sports activities, teacher mentors and coaches us in different sporting activities (**L-FGD-HAB-PB-SP-MD-WAJ**).

The findings further indicated that some schools organize talent shows and entertainment sessions as platforms for showcasing learners' talents. Some respondents had this to say.

Education officer: Organize talent shows at school. Participation during national/county events. Formation of clubs/games for SNE. Inclusion in school leadership (**EO-QN-CSO-MAR**).

Observer: The school normally has a day for learners to showcase their talents to community(photos) equipment e.g. drums, balls adapted. (**OBS-STK-PB-SP-HI-KER**).

Observer: ...learners talked about being actively engaged in sports and games (**OBS-MAC-PB-SP-HI-MAC**).

Learner: Schools provide entertainment every weekend, and we showcase our talents. Availability of teachers throughout. School takes us out for exposure, e.g. Meru for national music competition (**L-FGD-CHE-PB-SP-VI-ELM**).

Learners: We are exposed to situations that enable identification and development of talents. For example, talent shows practical activities, for example Knitting, farming, etc (**L-FGD-KHA-PB-SP-HI-BUN**).

Learner: By giving students time to sing. By showcasing drawings to visitors this in return attracts sponsors (**L-FGD-KAM-PB-SP-PI-BAR**).

Learner: Those with sports talents are facilitated to develop by participating in sporting events around the school, teachers motivate learners through games music club to nurture their talents, some parents encourage them to participate in activities in school (**L-FGD-DAI-PB-SP-MD-KAK**).

Participation in inter-class, inter-school, regional, and national competitions was noted as an important opportunity for exposure and recognition of talents. The following are views from teachers and observers pertaining to this issue.

Teacher: ... Organizing the stream competitions (**T-QN-GAR-PB-SP-HI-GAR**).

Teacher: Engaging Learners in Inter-class and Inter-Schools competition in Co-curricular activities (**T-QN-GAR-PB-SP-HI-GAR**).

Observer: ... They do participate up to National levels... (**OBS-LIS-PB-SP-HI-TAR**).

Observer: Learners participated in music festivals up to national levels, drama up to regionals, and some learners have also participated in athletics (**OBS-KAM-PB-SP-IDD-EMB**).

Observer: ... school plays done up to the international levels e.g. learners have had a chance to showcase in Rwanda and Uganda last year (**OBS-KIB-PB-SP-VI-KIS**).

ii) Display of learner's portfolios

Some schools keep certificates, trophies, and portfolios as evidence of learners' skills, talents, and achievements. In a few schools, learners' work is displayed in classrooms.

Observer: Evidence of trophies achieved in extracurricular activities such as music and sports. (OBS-EQU-PB-SP-IDD-SIA).

iii) Provision of Diverse Resources

Few teachers indicated that they expose learners to varied playing materials which help in identifying different talents.

Teacher: We give learners a variety of materials to manipulate, then from there we use a checklist to identify their likes (T-QN-GRE-PB-SP-MD-NAN).

The provision of balls, sports kits, and training fields supports participation in sports. Learners reported that during competitions, some schools provide transport, meals, and uniforms. The support provided promote talent development. They also reported that schools provide materials such as musical instruments, knitting supplies, drama costumes, braille paper, and ICT tools. These resources help learners practise and improve their talents. The following are some excerpts from learners' comments.

Learner: ... Provision for games and sports items (L-FGD-APE-PB-SP-DP-BUN).

Learner: The school assists in providing materials for different talents. Formation of clubs and societies (L-FGD-KIB-PB-SP-VI-KIL).

Learner: Transport availability to ferry learners to sports venue. School ensure learners are in games kit when participating, given meals during competitions; soda & loaves of bread, beddings; mattress; blankets (L-FGD-BOG-PB-SP-MD-KIS).

Learner: Access facilities outside. Teachers advise us on our best talents. We are taught using ICT gadgets. We are always supported during practice to go for sports, music and dance. We participate in sports and drama (L-FGD-STA-PB-SP-CP-KAK).

iv) Curriculum Pathways and Skill-Based Learning Opportunities

The second strategy employed for talent identification was the use of curriculum pathways and skill-based learning opportunities. Findings from education officers and teachers indicated that learners are exposed to pre-vocational and vocational skills through the curriculum, which enables teachers to identify and nurture learners' talents during practical activities. These curriculum-based pathways provide opportunities for learners to develop competencies in areas such as tailoring, hairdressing, weaving, carpentry, plumbing, animal husbandry, agriculture, ICT, dressmaking, and entrepreneurship. Through these hands-on learning experiences, teachers are able to observe learners' interests, abilities, and strengths, particularly during practical sessions.

Teachers indicated that skill-based learning activities such as shaving, plaiting, painting, building and weaving provide opportunities for learners to demonstrate their abilities and interests. Participation in these practical and pre-vocational activities therefore enables teachers to observe and identify emerging talents among learners. Some respondents had this to say.

Education officer: Learners are engaged in hands-on activities which enable teachers to easily identify talents among learners (EO-QN-CSO-MER).

Education officer: Entrepreneurship. Dressmaking. Hairdressing. Animal husbandry and poetry. Weaving and ornaments (EO-QN-CSO-BUN).

Teacher: ...Skills development (shaving, plaiting, painting) (T-QN-MWI-PB-SP-HI-MAK).

Teacher: ... Participating in prevocational skills e.g. building and weaving (T-QN-OGA-PB-SP-MD-HOM).

Learners also develop their talents through practical and vocational activities. These include beadwork and jewellery making, knitting, sewing, mat making, carpentry, decoration, poultry farming, agriculture, catering, cooking, typing, and ICT skills. The following quotes were drawn from some learners' comments.

Learner: *Kuombesha kila siku nataka kuwa pastor, kufunzwa kulima, kupanda mahindi mboga na carrots na viazi* (I pray every day, I want to be a pastor to be trained in farming, growing maize, vegetables, carrots and potatoes) (L-FGD-NGA-PB-SP-MD-LAI).

Learner: *Tunaonyeshwa kukimbia na kukimbia tukienda PE. Tunaonyeshwa kushona sweater, kufua nguo, kuvaa viatu and how to generally groom ourselves* (We are shown how to run while in P.E. We are taught how to sew a sweater, wash clothes, wear shoes and how to generally groom ourselves) (L-FGD-BON-PB-SP-IDD-MIG).

Learner: *Kuimba kwa assembly, kushona bangles, kiondoo, mats, kushona vitambaa na bags, kukuwa scouts, football, kuimba na kukimbia kwa uwanja* (Singing during assembly; making bangles, necklaces, and mats; sewing clothes and bags; being scouts; playing football; singing and running in the field) (L-FGD-GAT-PB-SP-MD-NYAN).

Learner: Able to wash our own clothes. Able to fetch water. Making mats, sewing table clothes. Making envelopes (L-FGD-STM-PB-SP-HI-KSM).

v) *Learner-Centred Pedagogies and Assessment Tasks*

The third strategy employed in identifying learners' talents was the use of learner-centred pedagogies and assessment tasks. Findings from the study indicated that teachers adopt instructional approaches that actively engage learners in the learning process, enabling them to demonstrate their abilities, interests, and strengths. Through learner-centred methods such as group work, project-based learning, class presentations, and practical assignments, teachers are able to observe learners' performance and identify emerging talents.

Additionally, the use of varied assessment tasks provides opportunities for learners to express their competencies in different ways. Continuous assessment activities, practical tasks, and project work

allow teachers to monitor learners' progress and identify areas in which they excel. These assessment approaches are aligned with competency-based education principles, which emphasise the development and demonstration of skills and competencies rather than reliance solely on written examinations.

Education officer: Individualised Education Programs (IEPs), differentiated instruction, co-curricular activities (**EO-QN-CSO-TAT**).

Several teachers emphasised systematic observation and assessment as key strategies. Learners are given individual or group tasks, projects, experiments, and practical activities, after which teachers identify areas of interest and strength. Some teachers had this to say.

Teacher: The strategy used is observation, learners are given tasks to perform but when we realise that they have interest in various areas then we assist them in developing the talent (**T-QN-HOM-PB-SP-MD-HOM**).

Teacher: Experimentation-learners perform experiments as the teacher observes the outcome. Projects learners given projects and follow ups (**T-QN-BOM-PB-SP-PI-BOM**).

Teacher: Assessment method used. Learners are given the task individually and also in groups. Later, the learner is assessed if he able to tackle the task, then is talent identified and support given to the learner (**T-QN-KAP-PB-SP-HI-NAN**).

vi) Assignment of roles and responsibilities to learners

Beyond co-curricular activities, teachers reported assigning learners' specific duties and responsibilities to identify leadership qualities alongside other talents.

Teacher: ...They are also assigned different duties to help in identifying leadership qualities (**T-QN-OGA-PB-SP-MD-HOM**).

4.6.3 Factors Hindering Identification and Nurturing of Learners' Talents

While the strategies reported aligned with the existing systems and opportunities in schools for identifying and nurturing talents, some respondents expressed dissenting opinions regarding the systems, opportunities and strategies in supporting talent development. Some of these views are presented as follows.

i) Absence of clear strategies in some schools

While findings indicated that schools have systems and strategies in place to identify and nurture talents, findings from some respondents revealed that schools lack deliberate strategies or structured systems for identifying and nurturing learners' talents. And where there are systems and strategies in place, they are not practised or implemented. The following are some excerpts from different respondents.

Teacher: No strategy is being used to identify and nurture the learners (**T-QN-LIS-PB-SP-HI-TAR**).

Education officer: There exists opportunities for talent identification, but this has not been tapped into practical application of the acquired skills....would promote these by equipping schools with music resources, ICT devices and labs, co-curricular activities that are more focused on talent, identification, animal husbandry and the other vocational skills that are practical within the school (**EO-QN-CSO-BUS**).

Education officer: Not much has been done in the area, especially participation in co-curricular activities (**EO-QN-QAS-MAR**).

Observer: Talent identification and nurturing does not have any structure in the school (**OBS-KIB-PB-SP-VI-KIL**).

Observer: ... no laid down structures for talent identification (**OBS-KAM-PB-SP-PI-BAR**).

Observer: Platforms exist but are not specific for SNE but rather general school programs where learners with special needs are also included. No adapted equipment or instruments for talent nurturing. Schools use general school clubs and integrate with special needs. There was lack of documentation of learners with special needs engagement apart from certificates of school participation in national events such as music festivals (**OBS-LOD-PB-SP-MD-SAM**).

Observer: The school does not have a structured talent identification program (**OBS-STJ-PB-SP-PI-NAN**).

Observer: ... there are no platforms for learners to display their talents (**OBS-BON-PB-SP-IDD-MIG**).

Learners further indicated that the school provides little to no support for nurturing talents. In some cases, support is extended only to learners with specific categories of special needs, leaving other learners excluded.

Learner: No support (**L-FGD-KIM-PB-SP-DB-TRN**).

Learner: Only low vision can be engaged in ball games and interact with other learners from the nearby schools (**L-FGD-MAN-PB-SP-VI-MAN**).

ii) Lack of adequate adapted equipment

The presence of adapted equipment from the observations was rated at 60.60% indicating a moderate but insufficient availability of adapted materials necessary to support talent development. This finding was further supported by respondents, who reported that schools lack proper resources and equipment, thus giving learners minimal opportunities to effectively identify and nurture their talents. Some respondents had this to say.

Teacher: Lack of resources thus hinders proper identification (**T-QN-THU-PB-SP-ID-MUR**).

Head of Institution: inadequate resources suitable for all categories of special needs (**HOI-QN-WOM-PB-SP-MD-VIH**).

Observer: The school has insufficient facilities to enhance talent building (**OBS-STB-PB-SP-VI-TUR**).

Observer: Adapted sporting equipment are not available; they rely on a nearby HI school (**OBS-NDA-PB-SP-IDD-KIS**).

Observer: The VI learners play alongside the regular learners using unmodified play equipment (**OBS-LOG-PB-SP-PI-MAR**).

Observer: There was a lack of modified or adapted equipment for the learners with special needs. (OBS-UNO-PB-SP-HI-MAK).

Observer: Adapted sporting equipment are not available; they rely on a nearby school (OBS-NDA-PB-SP-IDD-KIS).

Observer: There are no adaptive equipment for the learners. That is available is braille machines (Perkinson) and a few abacuses that are not adequate for the learners with VI ... (OBS-OLK-PB-SP-VI-KAJ).

iii) Limited teacher capacity

Teachers reported challenges due to insufficient training to handle learners with special needs or to implement talent-nurturing activities effectively.

Teacher: I find it hard because I am not trained to handle learners with special needs and disabilities (T-QN-NGU-PB-SP-VI-MAK).

Head of institution: shortage of specialized teachers... (HOI-QN-KAB-PB-SP-HI-BAR).

iv) Challenges specific to learners' special needs

Some learners are unable to participate in physical activities because some have severe multiple disabilities. This is supported by a comment made by a HoI.

Head of Institution: The problem of Multiple disability in some children... (HOI-QN-CHE-PB-SP-VI-VIH).

v) Weak documentation of learner's portfolios

Observations showed that documentation of learners' portfolios showcasing skills, talents, and achievements was rated at 73.40%, indicating a moderately high level of practice in schools. However, many observers noted that portfolios were often outdated or entirely absent. In several schools, learners' work was kept in offices rather than displayed, while others relied solely on certificates as evidence of participation. Overall, documentation of learners' talents was assessed as moderate to poor, which limited effective progress monitoring and the showcasing of achievements. The following are some quotes from observers:

Observer: ...learners lack individual evidence to showcase their talents ...no portfolios (OBS-BOM-PB-SP-PI-BOM).

Observer: Items made by learners are stored in the office of head of institutions. No learners' work displayed in class (OBS-KAK-PB-SP-MD-MAK).

Observer: The documents of the learners' talents have not been done but promised to do it. However, there is a portfolio for their work (OBS-ELD-PB-SP-HI-UAG).

4.6.4 Parental Involvement in Talent Identification and Development in Learners

The study sought for information from parents on how they collaborate with schools in identifying and nurturing learners' talents. The findings are presented as follows.

i) Shared responsibility in talent identification

Many parents reported that teachers play a key role in identifying learners' talents. Schools inform parents about learners' abilities and progress through meetings, phone calls, and school visits. Parents also identify talents through observation at home. Teachers guide parents on talents observed in school, while parents share children's interests seen at home. This shows that talent identification is a shared responsibility. This is what some parents had to say.

Parent: The school has been actively involved in nurturing the talents of the kids. Parents have also been actively involved. They come together to offer help the kids need, and they are able to provide (P-INT-LUK-PB-SP-SAM).

Parent: We have parents meeting; the school calls me direct to inform me of what is needed (P-INT-GED-PB-SP-KIL).

Parent: Meet with the teachers, share with the teachers, provide materials needed, and provide videos related to the talent (P-INT-BUG-PB-SP-ELM).

Parent: Monitoring the progress of the child and following up on academic progress (P-INT-STP-PB-SP-HI-MIG).

Parent: Work closely with teachers. Pay visits to school ... (P-INT-NOO-PB-SP-KAJ).

ii) Support for talent development at home

Parents actively support talent development at home. Some provide funding for training and create opportunities for practice. Parental involvement plays a vital role in nurturing and developing children's talents. The following are some excerpts from parents.

Parent: I provide the child with opportunities to develop their talent for athletics. For example, my eldest son helps with athletic coaching (P-INT-STF-PB-SP-BUS).

Parent: My child is good at electric repairs, mobile repair and drawing, so I support and encourage him (P-INT-NIN-PB-SP-SIA).

Parent: *Mtoto wangu amekuwa the only special child alienda national anakimbia, what I did last December, nilimpeleka training* (My child has been the only learner with special needs to go to the national level in running. What I did last December was take him for training) (P-INT-EMI-PB-SP-VI-BAR).

iii) Promotion of practical and vocational skills

Parents also encourage practical and vocational skills. These skills include cooking, sewing, beadwork, hair plaiting, masonry, electronics and mobile phone repair. Parents provide the materials needed and assist learners in performing activities at home to help them develop and refine their skills. Some parents had this to say.

Parent: She likes activities such as playing ball and plaiting hair. I provide materials for her to use when doing these activities (P-INT-KAF-PB-SP-KWA).

Parent: ... enhance what the child has been taught by teachers, provide what is required in the school like soap, shopping (P-INT-SAH-PB-SP-KIL).

Parent: Cooking, cleaning, reading, and writing. I assist her by showing how she should do these activities (P-INT-MWA-PB-SP-TAT).

Parent: Cooking, cleaning, reading and writing. I assist her by showing how she should do these activities (P-INT-MWA-PB-SP-TAT).

iv) Motivation and emotional support

In addition, parents motivate children through love, encouragement and positive reinforcement. They monitor homework and reinforce school learning at home.

Parent: As a parent, I encourage my child to go on and engage in any sort of talent that the teacher helped identify while in school. (P-INT-SEC-PB-SP-TRN).

Parent: The child has gone to national events through participating in athletics. The learner is amputated. I motivate and encourage the learner (P-INT-MAR-PB-SP-SAM).

However, they indicated that participation is limited by lack of facilities and opportunities. In some schools, special games or activities for learners with disabilities are not available.

Parent: My son loves football however there are no means in the school to help participate in this game (P-INT-HAB-PB-SP-WAJ).

Parent: No special games for the SNE group (P-INT-MAN-PB-SP-MAN).

Some parents reported that they are unsure about their children's talents, especially among younger learners and those with severe disabilities. Several parents reported minimal or no collaboration with schools. Some said they had never discussed their child's talents with teachers. Distance from school and communication barriers limit involvement. Communication challenges are common where parents do not understand sign language.

Parent: Now I don't know his talent; he is still young, nine years old. He tells me things they did in school like running and doing beadwork. I have not been to school to collaborate with them (P-INT-MUI-PB-SP-NYAN).

Parent ... no collaboration to identify and nurture the child's talent due to the condition (P-INT-KAR-PB-SP-HI-SIA).

Parent: *Kwa upande wa wazazi si sana kwa sababu wako mbali...* (On the parents' side, not much is done because they live far away) (P-INT-STP-PB-SP-BAR).

Parent: *Upande ya wazazi kuna challenge, not all parents wanaelewa sign language, so communication ni shida sana ...* (On the parents' side, there is a challenge: not all parents understand sign language, so communication is very difficult) (P-INT-NGA-PB-SP-HI-NAK).

4.7 Parental Empowerment and Engagement in Supporting the Education of Learners with Special Needs and Disabilities.

Parental empowerment and engagement refer to the process of equipping parents with the knowledge, skills and attitudes needed to actively participate in the education of their education. This involvement includes supporting learning at home, providing necessary learning materials and basic needs,

monitoring learners' progress and participating in school-based activities such as meetings, assessments and educational decision-making processes.

Parental empowerment and engagement is particularly critical in the education of learners with special needs and disabilities, where learning often requires continuous collaboration between the school and the home environment. In such contexts, effective learning depends not only on support provided at school by teachers and specialists, but also on reinforcement at home through parental guidance, communication and provision of resources.

The study sought responses from Heads of Institutions, teachers, learners and parents to assess the level of Parental Empowerment and Engagement in supporting the education of learners with special needs and disabilities. The information explored in the objective is presented with a focus on engagement strategies, level of support and linkages, barriers and recommendations to improve parental empowerment and engagement for parents of learners with special needs and disabilities.

HoIs rated key statements on levels of parental empowerment and engagement in supporting education of learners with special needs and disabilities as shown in Table 16.

Table 16: Heads of Institutions' Ratings on levels of Parental Empowerment and Engagement in Supporting LSND

Statement	Mean (%)
a) Parents actively participate in developing and reviewing learners' progress	67.2
b) The school provides forums that empower parents to support learning at home.	75.0
c) Communication with parents is regular, accessible and disability-sensitive	78.4
d) Parents understand CBC expectations for their children	64.4
e) Collaboration between home and school supports learner progression and transition.	70.6
f) Barriers affecting parental engagement are identified and addressed by the school.	74.2

The heads of institutions' ratings showed moderate to high agreement that communication with parents was regular, accessible and disability-sensitive (78.4%) and that schools provided forums that empowered parents to support learning at home (75.0%). They also generally agreed that barriers affecting parental engagement were identified and addressed by the school with a rating of 74.2%. Additionally, the findings affirmed that collaboration between home and school supported learner progress and transition, with a rating of 70.6%. However, comparatively lower ratings were reported on whether parents actively participated in developing and reviewing learners' progress (67.2%) and

whether parents understood CBC expectations for their children (64.4%), suggesting areas where empowerment and shared follow-up may have been less consistent.

These ratings provided a useful backdrop for the qualitative findings, which further illustrated how schools engaged parents through structured forums and related strategies.

4.7.1 Parent-School Engagement Forums as a Structured Strategy

Parental engagement is central to supporting the education of learners with special needs and disabilities and engagement forums provide a platform through which schools can mobilise parents, provide guidance and sustain shared responsibility for learner progress. In the sampled schools, parental empowerment and engagement was largely channelled through school-organised forums, which provided the main formal space where parents interacted with school leaders and teachers around the education of their children.

Observations were made on structured rating statements on evidence of parental empowerment and engagement and their rating are presented in Table 17.

Table 17: Observation Ratings on Evidence of Parental Empowerment and Engagement

Statement	Mean (%)
a) There is evidence of parental attendance in school meetings, IEP meetings and training sessions (observe records of minutes, attendance etc)	71.8
b) There is evidence of school programmes for parental empowerment (workshops, training on home-based support)	64.2
c) There is evidence of parent-school communication mechanisms (communication books, digital platforms, home visits)	74.0

The observation ratings showed that there is evidence of parent-school engagement in schools. Observers reported high agreement that schools had parent-school communication mechanisms, including communication books, digital platforms and home visits (74.0%), with also a high level of agreement with evidence of parental attendance in school meetings, IEP meetings and training sessions, based on records such as minutes and attendance rated at 71.8%. However, comparatively lower ratings were reported on the existence of school programmes specifically designed for parental empowerment such as workshops and training on home-based support (64.2%), suggesting that while attendance and communication were more commonly evident, structured empowerment programmes were less consistently observed across schools.

Consistent with the quantitative findings, the qualitative data confirms that parents do attend school engagement forums and detail how schools engage them in practice. The findings showed that schools

relied mostly on regular parents meetings and related school events to discuss learner welfare, track learning progress and guide parents on how to support their children.

Head of Institution: We hold regular parent meetings to discuss the welfare of the learners with the parents (HOI-QN-MWA-PB-SP-IDD-TAT).

Head of Institution: The school constantly engage parents in the education of their learners through parent teacher meeting and academic days (HOI-QN-KIN-PB-SP-HI-KWA).

In supporting parental empowerment, schools organise regular parent engagement forums as platforms through which parents interact and their capacity enhanced to be able to undertake their roles effectively. The findings showed that schools relied largely on routine parent meetings as the main avenues for empowering parents and strengthening their involvement in the education process.

Head of Institution: We usually have class meeting, AGMs where the parents share ideas and challenges (HOI-QN-ILB-PB-SP-HI-KAJ).

Education Officers: Regular parent's meetings to empower them on education of their children (EO-QN-QAS-ISI).

Observer: Programs for parental involvement in place through parent meetings (OBS-MUN-PB-SP-HI-BUS).

However, there was also some variation in the frequency and consistency of these forums, with observation evidence showing that in some schools, meetings were limited, suggesting that empowerment through forums was not equally sustained across different special schools. This divergence was captured in the following observation note:

Observer: Meetings are held only once a year which is not sufficient (OBS-LIK-PB-SP-IDD-NYA). These engagement forums provided schools with a recognised pathway for working with parents, but their value depended on how consistently meetings were held and how far they enabled parents to act beyond attendance. Where forums were regular and followed through, they strengthened shared responsibility for learner welfare and progress; where meetings were non-frequent, follow-up and continuity of support became harder to sustain.

4.7.2 Disability Awareness and Sensitisation Initiatives to enhance Learner Acceptance and Positive Attitudes

Parental acceptance and positive attitudes towards disability are essential for enrolment, retention, and consistent home follow-up. Sensitisation forums provide an opportunity to challenge stigma and strengthen parents' willingness to support learning of learners with special needs and disabilities.

Qualitative responses from heads of institutions indicate that schools play a key role in creating awareness among parents about special needs education and the capabilities of learners with

disabilities. Some of these awareness efforts focus on promoting access to education for learners with disabilities, encouraging parents to enrol and support their children's schooling despite existing challenges.

Head of Institution: The school sensitizes parents during parents barazas that are held regularly about the importance of bringing their children with disabilities to school (HOI-QN-MUS-PB-SP-IDD-KIT).

Education Officer: Parents are sensitised during parents meeting on the importance of educating the children with special needs despite their challenges (EO-QN-CSO-MER).

Sensitisation efforts go beyond promoting access to education by also addressing stigma and negative perceptions associated with disability. Through these forums, schools provide information that helps parents better understand disability and the educational needs of their children.

Head of Institution: Advice the parents about their children's capability and disability is not inability (HOI-QN-OLK-SP-MD-KAJ).

Head of Institution: Regular parental meetings and sensitization of parents on SNE during parents meeting has helped parents change their attitude (HOI-QN-EQU-PB-IDD-SIA).

In some settings, sensitisation efforts extend beyond school compounds into the community through broader outreach initiatives. Education officers reported approaches such as roadshows, community forums and the use of local media to raise awareness about disability and the importance of educating learners with special needs. These initiatives aim to address community beliefs and stigma associated with disability, which often influence whether families enrol children with disabilities in school and support their learning.

Education Officer: Roadshows to sensitise parents. Use of local media to engage parents. (EO-QN-SCD-HOM).

Education Officer: Sensitisation forum. Advocating to take children with disability to school (EO-QN-QAS-MAR)

However, the findings also showed that sensitisation needs remained persistent, because some parents continued to struggle with acceptance and disability awareness, which weakened follow-up and participation despite ongoing school efforts. This divergence was reflected in the following verbatim quotations:

Head of Institution: Most parents are still in denial and thus doesn't follow their learners progress (HOI-QN-EBU-PB-SP-IDD-VIH).

Education Officer: Parents living in denial" (EO-QN-CSO-THA).

Head of Institution: Parents awareness remains a major challenge... (HOI-QN-HOL-PB-SP-IDD-TAR).

Sensitisation efforts supported acceptance and helped reduce stigma, creating a stronger foundation for enrolment, retention and home support. However, the persistence of denial and low disability awareness in some contexts meant that awareness creation required repeated, sustained engagement rather than one-off messages delivered during meetings.

4.7.3 Ongoing Communication and Follow-up Using Phones, WhatsApp and Digital Platforms

Ongoing communication between schools and families plays an important role in sustaining parental engagement and ensuring continuity of support. This is particularly important where parents may not frequently visit schools due to distance, work commitments, or other constraints. The use of phones, messaging applications and digital platforms provides practical channels through which schools can maintain contact with parents, share information and follow up on learner progress.

Teachers were asked to rate the extent to which they agreed with statements on parental empowerment and engagement in their schools. Their responses are presented in Table 18.

Table 18: Teachers' Ratings on Parental Empowerment and Engagement

Statement on Parental Empowerment and Engagement	Mean (%)
a) Parents of LSND are regularly informed about their children's progress.	81.2
b) Parents of LSND are offered training sessions on home support.	53.2
c) Community and parent associations actively support LSND education.	60.8
d) Our parents actively collaborate with the school in supporting learning	66.2

The findings show that teachers reported the highest level of agreement that parents of LSND are regularly informed about their children's progress (81.2%). This was followed by parents actively collaborating with the school in supporting learning (66.2%). Community and parent associations actively supporting LSND education followed at 60.8%, while the lowest level of agreement was reported for parents of LSND being offered training sessions on home support (53.2%).

The quantitative findings were further supported by qualitative responses from heads of institutions on how schools maintain communication with parents in practice. They indicated that schools use direct communication channels such as phone calls and messages to keep parents informed and engaged.

Head of Institution: The school engages the parents through parent's meetings and by communicating with them through phone calls and messages (**HOI-QN-MAK-PB-SP-IDD-WEP**).

Head of Institution: The school through the office of the secretary, class teachers and HOI engage parents...through direct calls and group WhatsApp (**HOI-QN-ODA-PB-SP-VI-SIA**).

In addition, heads of institutions noted that schools utilise digital communication platforms, particularly WhatsApp groups and other messaging applications, to facilitate continuous interaction with parents and provide updates on school activities and learner progress. These platforms allow schools to maintain regular contact with parents, share information about ongoing activities and enhance communication between teachers and parents.

Head of Institution: Through the WhatsApp forum, parents have been sensitized effectively. Continuous communication and contact have been enhanced (**HOI-QN-MIT-PB-SP-VI-TRN**).

Head of Institution: Every class teacher has formed a whatsapp group for parents where they are informed of activities they undertake online (**HOI-QN-MIC-PB-SP-IDD-TUR**).

Observer: There are existing whatsapp group for parents where they are updated on their children's wellbeing and progress (**OBS-CHE-PB-SP-VI-ELM**).

Head of Institution: "Termly parent teacher meetings for all grade parents updating parents on learners progress digitally through zeraki app. Annual general meetings social media WhatsApp, SMS are used (**HOI-QN-OLE-PB-SP-VI-NAR**).

However, the findings also suggested uneven access and uptake of digital platforms, with some schools reporting absence of such channels and recommending their creation to strengthen communication and parental involvement. This divergence was captured in the following verbatim observation note:

Observer: The school does not have digital platforms for parental involvement. I suggested to the teachers to form a WhatsApp group for parents for each class. (**OBS-WAJ-PB-SP-HI-WAJ**).

Continuous communication channels strengthened parent-school contact between meetings and enabled more timely follow-up on learner needs and progress. At the same time, uneven access to digital platforms and varying parent connectivity meant that communication benefits were not equally realised across schools, leaving some settings dependent on limited or irregular contact.

4.7.4 Provision of Basic Needs and Learning Materials

Material support remains a practical way through which parents contribute to education of their children. For learners with special needs and disabilities, material support often determines whether learners have the basic requirements and learning inputs needed to participate actively in learning process. From the evidence, the findings showed that parental empowerment and engagement was commonly described in day-to-day, practical terms, especially through parents' provision of school fees or levies, uniforms, personal items and learning materials required for classroom activities and assessments.

Teachers frequently reported parents' contributions in terms of meeting school requirements and providing basic necessities needed for learners to participate in school activities. These forms of support include paying school levies, providing uniforms and ensuring learners have the required

personal items for school. Such responses suggest that parental engagement is often expressed through financial and material support that enables learners to attend school and participate in routine learning activities.

Teacher: Parents always provide all materials needed in school (T-QN-GAR-PB-SP-HI-GAR).

Teacher: Paying the school levies in time, Provision of enough personal items and school uniforms (T-QN-OGA-PB-SP-IDD-HOM).

Teacher: Parents are often engaged in providing fees and other necessities for learners in school (T-QN-MAC-PB-SP-HI-MAC).

The findings from teachers were corroborated by learners, who similarly described parental support through the provision of learning resources and assistive devices that facilitate their learning. Learners highlighted that parents often support their education by providing items necessary for schoolwork and research, including assistive equipment and digital resources used for learning activities at home. The following quotations from learners illustrate these forms of support:

Learner: Devices for research... paying tuition, paying school fees... (L-FGD-LIK-PB-SP-VI-MSA).

Learner: ...buy the supporting equipment... such as White sticks. (L-FGD-CHEP-PB-SP-VI-ELM).

Learner: Buying TV and installing the internet (L-FGD-KED-PB-SP-HI-KER).

However, the findings also showed that material provision was not always consistent since some parents experienced financial constraints linked to raising fees, required basic needs, transport as well as other items demanded for learning activities and projects. This divergence was reflected in the following verbatim quotations:

Parent: It's a challenge to pay fees and to provide their basic needs and learning materials (PA-INT-KAF-PB-SP-HI-KWA)

Parent: The items required are many and it's hard to acquire them (PA-INT-SAH-PB-SP-MD-KIL).

Parent: CBC has come with many things and they ask for many things. Financial constraints, lack of equipment like wheelchair (PA-INT-GAT-PB-SP-MD-NYAN).

Material provision remained an indisputable and practical expression of parental engagement, supporting learners' participation in daily school routines and learning tasks. Yet this form of support closely depended on household economic capacity, implying that financial strain experienced could quickly disrupt access to learning inputs and weaken continuity in schooling.

4.7.5 Home-based Learning Support and Monitoring of Learner Progress

Home-based learning support strengthens continuity between school and home, enabling parents to reinforce concepts, routines and behaviour expectations beyond the classroom. This is especially crucial for learners with special needs and disabilities who may require closer follow-up. In practice, the findings from teachers and learners showed that some parents were engaged in monitoring learner

progress and supporting learning at home. Specific roles included helping with homework, assisting in reading, supervising study time and following up on assignments. They also took part in supporting the children's discipline. Learners stated that their parents supported revision routines and checked progress. To show how home-based academic support and monitoring were reported, the following verbatim quotations were provided:

Learner: Teach us homework... give us time to read after work...(L-FGD-MUN-PB-SP-HI-BUS).

Learner: Supervising as we read at home... provide lighting...(L-FGD-CHE-PB-SP-HI-ELM).

On their part, teachers reported that the support they offered for learners at home entailed engaging parents through follow-up calls and discussions. These engagements focused on homework and completion of assignments.

Teacher: We make phone calls and discuss learners, monitoring homework and assignments given (T-QN-NYA-PB-SP-MD-HOM).

Teacher: The school involves parents in monitoring the progress of the learners (T-QN-LIK-PB-SP-VI-MSA).

Teacher: Parents are engaged on learner's progress and behavioural modification. Parents are engaged on issues of discipline among learners (T-QN-MIC-PB-SP-IDD-TUR).

However, the findings also showed that home-based academic support was not equally effective for all learners. Those with hearing impairment required KSL, yet many parents lacked the required communication skills in sign language. In such, parents' willingness to support did not translate into effective homework assistance because language barriers limited interaction at home and parents themselves reported communication difficulty as a key challenge. This divergence was captured as follows:

Teacher: This is not sufficient. Most of our parents are not familiar with Kenya Sign Language which is the media for communication to our learners. This is a set back to the education of our learners since they cannot assist them with assignments and revision at home (T-QN-MWI-PB-SP-HI-KIT).

Teacher: Most parents have no communication with their HI learners. In much as they wish to support, they are incapacitated because of language barriers (T-QN-ZIW-PB-SP-HI-MSA).

Parent: My limited knowledge in sign language, engaging the child becomes a challenge and also helping him with his assignment guidance. Generally, communication is a challenge in most areas (PA-INT-ZIW-PB-SP-HI-MSA).

Parent: The schoolwork is a lot and the child gets tired. I cannot interpret sign language, it hard to communicate with my child (PA-INT-MWA-PB-SP-VI-TAT).

Learner: At home *kuna wenye hawasaidiwi kwa sababu hawajui sign language* (some are not helped at home because they do not know sign language) ... (L-FGD-SIP-PB-SP-HI-LAI).

Home-based learning support strengthened continuity between school and home where parents could monitor assignments, routines and behaviour. For learners with hearing impairment, communication barriers reduced how effectively parents could assist with homework and revision, placing a stronger need on practical communication support for parents to sustain meaningful home follow-up. It is evident that parental engagement extended beyond attending meetings and providing materials as earlier mentioned. In some settings, it entailed active partnership with the school to support learning through home routines and supervision.

4.7.6 Strengthening Parent Capacity

Strengthening parents' practical capacity is an important aspect of parental empowerment, particularly in the education of learners with special needs and disabilities where effective support often extends beyond the classroom into the home environment. Empowerment becomes more meaningful when parents acquire practical skills that enable them to communicate effectively with their children, support learning activities at home and respond to disability-related needs in everyday life.

Building on this, the findings showed that parental empowerment was strengthened through training aimed at improving communication and practical support skills for parents. Heads of institutions reported training parents of learners with hearing impairment in Kenya Sign Language (KSL) to improve communication with their children. They also noted that schools have programmes to train parents in communication skills during meetings and scheduled sessions, while education officers reported that some parents had undergone sign language training through education offices.

Head of Institution: The school does sensitisation on disability during parents meeting, also we have a program of teaching the parents communication skills e.g. KSL (HO-QN-MWA-PB-SP-HI-TAT).

Head of Institution: The schools give parents lessons on Kenya Sign Language and ADL once in a term (HOI-QN-SIP-PB-SP-HI-LAI).

Education Officer: Some parents have been undergoing sign language training in the office (EO-QN-CSO-KIT).

Beyond KSL, some education officers also reported training parents on how to handle children with disabilities and conducting parent workshops on supporting learners at home. This pattern suggests that parental empowerment goes beyond general sensitisation and meeting attendance and, in some cases, involves equipping parents with practical competencies that can strengthen home-based support and increase parental confidence.

Education Officer: Training the parents on how to handle the CWDS (EO-QN-CSO-SNE-TAR).

Education Officer: Parents workshops training on supporting SNE learners at home (EO-QN-CSO-KWA)

Parent: Received empowerment training (sign language) (PA-INT-KER-PB-SP-VI-WEP).

Learner: Help with signs of different words (L-FGD-ZIW-PB-SP-HI-MSA).

However, the findings also showed uneven access to these skills, with some parents indicating that they still lacked communication skills despite efforts to engage them. Heads of institutions noted that although parents were empowered through meetings, many still lacked Kenya Sign Language (KSL) skills. Similarly, some parents reported that they had not received formal training in sign language, while others indicated that only a few parents benefited from voluntary training initiatives.

Head of Institution: Parents are empowered during parents' meetings, but the only challenge is that they lack communication skills (Kenyan Sign Language) (HOI-QN-MAK-PB-SP-HI-MAK)

Parent: *Hapana sijasomea any sign language, lakini wakati nilikunja huku nimesoma kuhusu sign language* (No, I have not studied any sign language, but when I came here, I learned about sign language) (PA-INT-MUR-PB-SP-HI-MUR).

Parent: *Kuna Mwalimu amejitolea kufunza wazazi sign language, pia shule huita tu wazazi kwa meeting lakini hiyo haiwezi saidia, wale wameenda training ya yule Mwalimu husaidia* (There is a teacher who has volunteered to teach parents sign language. The school also only invites parents for meetings, but that does not really help. Those who have attended the teacher's training are the ones who benefit) (PA-INT-NGA-PB-SP-HI-NAK).

Skills-building initiatives support deepened empowerment by equipping parents with practical tools for everyday interaction and learning support. However, inconsistent access and uneven participation limited impact in some settings, making expansion and regularisation of parent training important for reducing communication gaps.

4.7.7 Variations in Parental Involvement

Parental involvement tends to vary across school communities and understanding the range of participation is important because learners with special needs and disabilities often require consistent follow-up and shared effort between home and school.

Across the sampled schools, the findings showed that parental involvement in supporting learners with special needs and disabilities was not uniform but rather ranged from active and adequate involvement to partial and inconsistent support and in some cases minimal or no visible involvement.

From the observation notes on sampled schools, active parental engagement was evident from the meetings and follow-ups on learner progress.

Observer: There is adequate parental involvement in supporting the education of SNE learners in the school (OBS-MUP-PB-SP-IDD-BUN).

Observer: There is constant parental engagement and involvement on the progress of the learners during parents meeting (OBS-KAR-PB-SP-IDD-SIA).

Findings from teachers and observation similarly described contexts where meetings were held but turnout remained poor. This suggests that having engagement forums did not always translate into sustained participation. To illustrate this continuum and how it appeared across settings, the following was reported:

Observer: Some parents cooperate in supporting the education of their children while others don't (OBS-JAR-PB-SP-MD-GAR).

Teacher: Parents are involved through regular meetings but the turn up is very poor (T-QN-UNOA-PB-SP-MD-MAK).

Teacher: Parents are engaged and empowered through parents meeting although there was poor turnout (T-QN-UHU-PB-SP-IDD-ISI).

In some instances, parents disengaged after enrolling the learners. They did not follow up learner progress. A certain category of parents acknowledged that they received notices for meetings but did not make any effort to attend, leaving responsibility to teachers. In some schools, findings from the observations revealed that there were no initiatives or programmes targeted at empowering parents, limiting any chances for parents to get gainfully engaged in supporting affairs related to their children. The findings are reflected in the following statements:

Observer: No evidence of parental attendance in school meetings and training sessions (OBS-PAU-PB-SP-MD-SAM).

Parent: Teachers have called for meetings but I did not attend (PA-INT-RAI-PB-SP-MD-KIR).

Teacher: Most parents do not follow up after bringing their children to school as they leave it to the teachers. (T-QN-MAT-PB-SP-PI-UAG).

Observer: No programmes for parents' empowerment (OBS-MAR-PB-SP-MD-MAC).

However, the findings also showed that the weakest participation was sometimes linked to specific parental and societal attributes. As a result of the social stigma, parents struggled with deeper challenges of denial. Others demonstrated lack of commitment and non-cooperation as they abandoned their children in school, often disappearing without taking any responsibility over them.

Head of Institution: Most parents are still in denial and thus doesn't follow their learners progress (HOI-QN-EBU-PB-SP-IDD-VIH).

Teacher: Most parents take school as a place they dump their special needs children and disappear (T-QN-OMO-PB-SP-IDD-NYAM).

Head of Institution: The parents for the hearing impaired do not cooperate at all with the school (HOI-QN-FRA-PB-SP-HI-BUS).

The wide variation in parental involvement showed that engagement was not automatically achieved through the presence of meetings alone. Where participation was low, denial, weak commitment and limited follow-up reduced shared responsibility for learner progress, calling for targeted strategies to reach disengaged families and strengthen accountability for home-school support.

4.7.8 Structural Barriers and Targeted Support Linkages

Family circumstances and local conditions often determine how consistently parents can participate in school processes and support linkages become important where households face poverty, distance, disability-related costs and complex care burdens.

Respondents indicated that distance to school, transport challenges and the geographical location of schools, particularly boarding institutions, limited parents' ability to attend meetings and remain actively engaged. In some cases, schools reported that parents lived far from the school, making it difficult to organise regular meetings or sustain consistent parental participation.

Head of Institution: The parents come from far distances hence not easy to actively involve them (HOI-QN-KWA-PB-SP-HI-KWA).

Observer: Not practical to have regular meetings because most parents come from far (OBS-ISI-PB-SP-HI-ISI).

Observer: The unit is purely boarding, learners come from far areas (OBS-KED-PB-SP-HI-KER).

Teacher: Very minimal because some are living far away from school and have transport challenges (T-QN-KAR-PB-SP-IDD-THA).

In addition to distance-related challenges, parents also reported financial constraints and the high cost of supporting learners with disabilities, which affected their ability to sustain engagement in school processes. These financial pressures included the cost of transport, school fees, learning materials and assistive devices such as wheelchairs. Parents indicated that meeting these requirements often strained already limited household resources, sometimes forcing families to borrow money to meet school demands.

Parent: Financial challenges in transporting the learners to school. I have no wheelchair for the learner to use at home or do activities. The child does not receive any help from the government (PA-INT-MAR-PB-SP-MD-MAC).

Parent: *Ni mingi, mtoto anakuja anasema tumeambiwa tutengeneze hii na wewe huelewi. Unaambiwa utengeneze gumboots unaambiwa anataka basin na hauna, unaenda mahali unakopa. Unaitishwa vitu na hauja jitayarisha* (There are many challenges. The child comes home and says we have been told to make this and you do not understand. You are told to make gumboots; you are told they need a basin and you do not have one. You end up going somewhere to borrow. You are asked for things when you were not prepared) (PA-INT-NGA-PB-SP-MD-LAI).

However, within these constraints, some schools responded by creating targeted support linkages that extended parental empowerment beyond routine meetings, particularly through home visits and direct engagement with families. These approaches enabled schools to provide guidance to parents in their home environments and offer psychological support, especially where families were facing complex challenges related to disability and caregiving.

Head of Institution: Home visits and give guidance and psychological support to their parents (**HOI-QN-MOY-PB-SP-IDD-MAR**).

Observer: The parents are empowered during home visits (**OBS-HOL-PB-SP-HI-TAR**).

In addition to direct engagement with families, some schools also reported linking parents to external support services and assistance programmes to help address socioeconomic challenges. These support linkages included guidance on obtaining disability certification, connecting parents with funding opportunities, and engaging external institutions to provide assistance such as food aid.

Head of Institution: Guides them for placement services after here to higher learning. Encouraging them to register learners with NCPWD (**HOI-QN-MUN-PB-SP-HI-BUS**).

Head of Institution: The school calls meetings and advises parents to acquire PLWD certificates which they can use to apply for funding especially in school fees (**HOI-QN-KHA-PB-SP-IDD-BUN**).

Head of Institution: We have engaged the CDF office to support parents in providing food aid (**HOI-QN-TIM-PB-SP-MD-TAT**).

Structural conditions such as poverty, distance, low literacy, transport costs and disability-related resource demands constrained consistent parental participation and reduced sustained involvement in school processes. In settings where schools added targeted support linkages such as home visits, referrals, disability certification guidance and external assistance, families facing high vulnerability were better cushioned, pointing to the value of coordinated support beyond routine meetings.

4.8 Effectiveness of Placement, Progression and Transition for Learners with Special Needs and Disabilities

Learner placement, progression and transition are critical aspects in ensuring the success of CBC for Learners with Special Needs and Disabilities (LSND). These processes deliberately seek to attend to individual needs and abilities of learners and provide suitable educational experiences, resources and sustained support systems to guarantee equitable opportunities for these learners to attain their potential. Placement is the initial decision about the most appropriate learning setting for a learner with special needs and disabilities. It is informed by functional educational assessment. Progression is the structured, individualised advancement of a learner through stages of learning, skills development and personal growth. Transition is the purposeful planning and coordinated actions that help learners move smoothly between educational levels and into various pathways. Making inquiry into these aspects provides valuable insights into whether the CBC is meeting its goal of fostering holistic development and preparing LSND for meaningful participation in society.

The respondents were asked to indicate their levels of agreement with statements on learner placement, progression and transition; give views on structures for placement, progression and transition for LSND. Learners also gave their views on progression.

4.8.1 Levels of Agreement with Statements on Learner Placement, Progression and Transition

The study sought views of Heads of Institutions on matters of placement, progression and transition. They were asked to rate the extent to which they agreed with various statements on learner placement, transition, and progression. Their levels of agreement with each statement were expressed as percentages and are summarised in Table 19

Table 19: HoIs responses on levels of agreement with statements on learner placement, progression and transition

Statement	Mean Percent
a) Learners are placed in appropriate pathways based on functional assessments	81.6
b) The placement process aligns with relevant policy guidelines	82.4
c) Parents are involved in learner placement decisions	83.4
d) Transition plans (class-to-class, school-to-school) are documented for all learners	83.6
e) Learners are adequately supported during transition processes	83.2
f) There is effective collaboration between the school and receiving/feeder institutions	78.4
g) Learners progress appropriately through age-based or stage-based pathways	82.4
h) Assessment data informs decisions on learner progression	82.4
i) Progression and transition challenges are tracked and addressed	78.6
Average Mean Percent	81.8

According to Table 19, HoIs were generally in agreement with all the statements that were presented to them. The average level was 81.8%. The highest levels of agreement were that ‘Transition plans (class-to-class, school-to-school) are documented for all learners’ (83.6%); that ‘Parents are involved in learner placement decisions’ (83.4%) and that ‘The placement process aligns with relevant policy guidelines’ (82.4%). Rated at slightly lower levels were the statements that ‘Progression and transition challenges are tracked and addressed’ (78.6%) and that ‘There is effective collaboration between the school and receiving/feeder institutions’ (78.4%). Generally, the findings from HoIs give a positive impression of their views regarding learner placement, progression and transition.

Teachers were also asked to give their ratings for statements on placement, progression and transition. From their ratings, which were between 1 and 5, means were computed and converted to percentages for standard reporting. The findings from teachers are summarised in Figure 10.

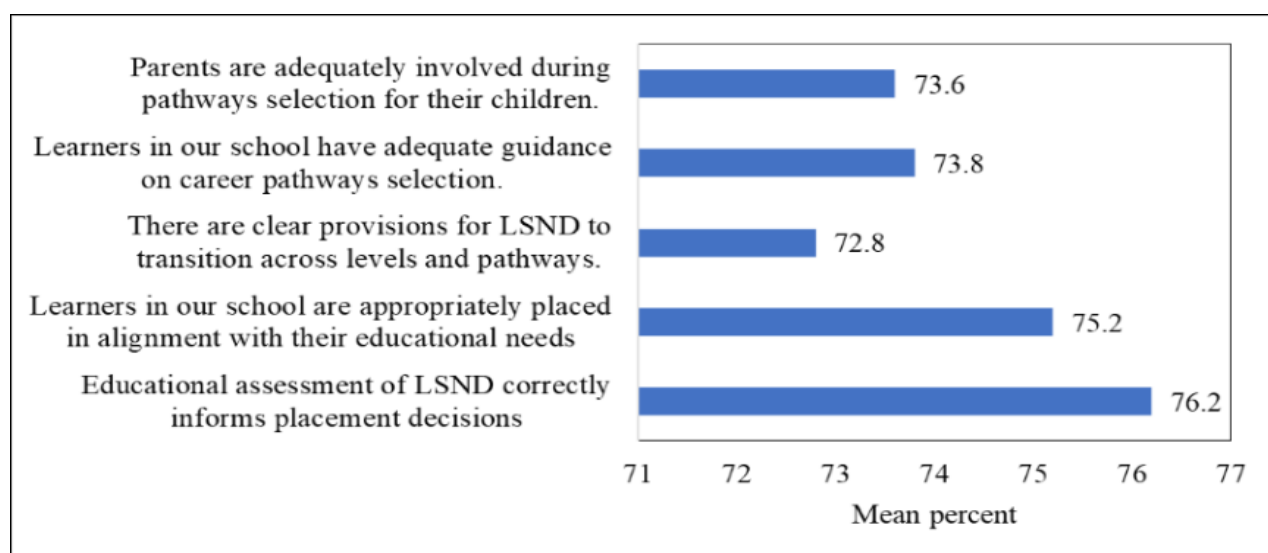


Figure 10: Teachers' responses on levels of agreement with statements on learner placement, progression and transition

From the findings presented in Figure 10, the ratings from teachers were noticeably lower than those from HoIs. The average rating from teachers was 74.3% compared with that for HoIs which was 81.8%. The best scored statements by the teachers were 'Educational assessment of LSND correctly informs placement decisions' and 'Learners in our school are appropriately placed in alignment with their educational needs' at 76.2% and 75.2% respectively. The lowest scored statement was 'There are clear provisions for LSND to transition across levels and pathways' at 72.8%. These findings imply that according to teachers, the structures in place for placement, progression and transition for LSND are not up to the expected standard.

4.8.2: Views of Respondents on Structures for Placement, Progression and Transition for LSND

To better appreciate the views of the respondents on placement, progression and transition, the teachers, learners, education officers and parents were asked to give their opinions on the subject. Their responses were summarised into six broad themes under the headings: effectiveness of assessment and placement; awareness and guidance on assessment and placement; parental involvement in placement of their children; resources, facilities and capacity of personnel; challenges with placement and assessment; and monitoring and policy guidelines.

i) Effectiveness of Assessment and Placement

The study findings indicated that placement of learners with special needs was often described as effective, though not consistent across all contexts. According to education officers, many learners are appropriately placed but there are challenges such as personnel, equipment, distance, denial and lack of readiness. These challenges among parents reduce overall effectiveness of the structures for placement of LSND. It was observed that in some cases, learners with special needs and disabilities are placed in schools without functional educational assessment. Some of the voices from respondents were:

Education Officer: Learner placement is effective at all levels (EO-QN-CSO-SNE-ISI).

Education Officer: In ideal situations, learners are appropriately placed after assessment. However, limitation of personnel and equipment has compromised the effectiveness of learner placement (EO-QN-CDE-HOM).

Education Officer: Not very effective as most learners are placed without functional education assessment (EO-QN-CSO-SNE-SIA).

Education Officer: Not quite effective since we lack equipped assessment centers at the sub county (EO-QN-CSO-SNE-BUS).

Officer: Learner placement ought to be guided by the degree and nature of disability. A good number is well placed, **Education** although those who have not been identified are yet to be correctly placed. One serious challenge is assessment centers that are not equipped (EO-QN-CSO-SNE-BUS).

Education Officer: Once a learner with SNE is identified and placed appropriately, a learner is able to get the right intervention as per his/her ability and special need or disability (EO-QN-CSO-KIT).

Contributing to the subject on effectiveness of assessment and placement, a HoI observed that educational placement is sometimes done wrongly, and this may delay a learner's progression. According to another HoI, there is a need for review of progression structure in order to define it more clearly.

Head of Institution: ... wrong placement that delay learners reporting dates (HOI-QN-KIB-SP-HI-KSM).

Head of Institution: Review curricular progression of special needs learners and define it properly (HOI-QN-KAM-PB-SP-IDD-THA).

ii) Awareness and Guidance on Assessment and Placement

The teachers' responses on awareness and guidance concerning the assessment and placement of learners with special needs and disabilities highlight a consensus that guidance is essential for successful transition. The findings, however, reveal significant gaps in knowledge among both parents and teachers. Some of the areas where parents and teachers had gaps include careers and pathways selection as well as on CBC. While teachers acknowledge their central role in guiding learners and

involving parents, their sentiments point to a need for more structured support and information. Some of the teachers' comments were captured as follows:

Teacher: The learners should be given adequate guidance... Parents should also be sensitised on the career and pathway selection to aid their children in the right/best pathway (T-QN-MAK-PB-SP- MD-MAK).

Teacher: Parents and learners were involved in transitions and placements (T-QN-GAR-PB-SP-MD-GAR).

Teacher: Create awareness to all parents and community concerning the transition and progression of LSND across levels and pathways (T-QN-KAS-PB-SP- IDD-KIT).

Teacher: The reason is because the teacher also lack more knowledge on pathways and career guidance. We need more retooling ... (T-QN-ENA-PB-SP-IDD-NAR).

Teacher: Learners are correctly placed and have adequate guidance on career pathways even though some parents still require more clarification with the new curriculum (T-QN-KOY-PB-SP- VI-KAK).

In addition, education officers indicated that teachers struggle with parents who are in denial about their children's conditions, negative community attitudes and a lack of family involvement, all of which hinder effective learner placement, transition and progression. To address these challenges, the education officers recommended the need for continuous sensitisation, community engagement and demystifying special needs and disabilities to combat stigma and ensure informed decision-making.

Education officer: ... parents living in denial about their children's conditions and learning styles. Irresponsible parents who cannot support the school to maintain their children because of their attitude (EO-QN-CSO-SNE-THA).

Education Officer: ...lack of support from families of the special needs children ... (EO-QN-ODE-KWA).

Education Officer: Sensitisation of the community to have learners in schools. Proper training of teachers to support the learners (EO-QN-QAS-KAJ).

Education Officer: Production of a varied learning material in braille, the GOK to supply learning resources to schools; Awareness creation demystifies disabilities (EO-QN-OCD-NAR).

iii) Parental Involvement in Placement of their Children

Parents play a vital role in appropriate placement of learners with special needs and disabilities in educational institutions. Findings from the study revealed that many parents are not aware of the process or are reluctant to accept their children's conditions. They reported that there is still some stigma that society attaches to people with special needs and disabilities. This lack of awareness leads to hidden children, misplaced learners or resistance to institutional. Some of the respondents' voices were:

Education Officer: Some parents are not aware on how their children can be placed in institutions of SNE (EO-QN-QAS-ISI).

Education Officer: Usually done, but some parents hide the children (EO-QN-CPC-VIH).

Education Officer: Most parents fail to take their children to schools according to their needs/disability (EO-QN-CSO-SNE-BAR).

Head of Institution: Parents have not yet agreed with SNE learners as any other learners (stigma) (HOI-QN-OMU-PB-SP-IDD-NYA).

Adding their weight to the issue of parental involvement, some Heads of Institution observed that there was a lack of cooperation from parents as well as lack of resources. It was reported that parents expected schools to provide all the required resources and were reluctant to participate in sharing costs with schools.

Head of Institution: Lack of cooperation from parent, delayed distribution of funds, some staff are not conversant with CBC (HOI-QN-ONU-SP-HI-KSM).

Head of Institution: Lack of adequate specialised learning resources, lack of parental involvement, lack of adequate personnel e.g. speech therapy, teacher assessment, lack of adequate materials, negative attitudes from the society, lack of adequate training teacher (HOI-QN-LUT-SP-IDD-KSM).

Head of Institution: The participation of parents to cost share in provision resources. All is left to the school, especially practical items (HOI-QN-ODA-SP-VI-SIA).

Parents were described as not having an obligation towards their children. Some HoIs also observed that the public generally had a negative attitude towards people with disabilities.

Head of Institution: Lack of parental obligation for their children as come from very vulnerable backgrounds (HOI-QN-APE-PB-SP-PI-BUS).

Head of Institution: Lack of cooperation from parents... Negative attitude towards learners with special needs. Poor role models of society (HOI-QN-BON-PB-SP-IDD-MIG).

During the study, interviews were conducted with parents of learners with special needs and disabilities. One of the issues addressed was learner progression and transition under CBC. From the interviews, parents called for close collaboration between parents and schools. They observed that when there is good communication between parents and schools, the curriculum delivery is improved.

Parent: Parents to work together with teachers for a special program to be provided for parents. Communication is key and a better understanding of what the child needs will improve service delivery. Training for parents is highly recommended (PA-INT-TOM-PB-SP-CP-MSA).

Parent: Parents should be involved more with the learner's progress and be made aware of any improvement made by the learner (PA-INT-KAR-SP-SIA).

Parent: To have parents-school interactions through meetings organised by the school (PA-INT-KAK-SP-IDD-MAK).

There was a suggestion from parents that there should be training or sensitisation of parents of LSND on how to cope with their children with special needs and disabilities. Some mentioned that they were

not even able to communicate with their children as they were not conversant with sign language. Some of the parents' voices were captured as follows:

Parent: As a parent, I wish to learn how to communicate using sign language so that I can help my child to do homework or activities (PA-INT-MWA-SP-HI-TAT).

Parent: Training for parents to help cope with their children with disabilities. Some activities for SNE learners with a cost hence the need for funding to gain pre-vocational skills...(PA-INT-MAS-PB-SP-PI-MAC).

Parent: Let government be able to train parents on sign language to be able to help learners effectively (PA-INT-KOM-SP-MD-MIG).

Head of Institutions: Parental involvement has been a challenge and would request parents be sensitized and awareness done through workshops and seminars on matters CBC... (HOI-QN-MAKPB-SP-HI-MAK).

In one school, a parent suggested that the child should continue staying in boarding school even during the school holidays. Perhaps this is an indication that the parent does not know how to cope with the child. In another school, a parent suggested that the school should change to a boarding one so as to 'ease the pressure on us'.

Parent: The caregivers to be employed by the government. The government to support the kids more. The kids to stay even during the holidays since they make the parents unable to go work (PA-INT-RAI-PB-SP-KIR).

Parent: The school should be changed into a boarding school to ease the pressure on us (PA-INT-MAK-PB-SP-WEP).

Some of the interviewed parents reported that they were not sufficiently informed about progression and transition for their children with disabilities. They expressed eagerness to be made aware about the options available for their children, especially beyond Grade 9. Such sensitisation would be geared towards providing answers to questions such as; What can the child do? Which school can the child join? What does the future hold for the child?

Parent: Provide awareness on next level after Grade 9. What can the child do? Which school can the child join? What does the future hold for the child? (PA-INT-MAS-PB-PI-MAC).

The findings reveal that teachers recognize parents as vital stakeholders in the progression and transition of LSND. However, their perspectives highlighted a gap between the desired level of parental engagement and the current reality. Teachers noted that parents need sensitisation, guidance, and a fundamental shift in their understanding of the school's role and their child's potential.

Teacher: It has not been a smooth way of transition and progression due to lack of parents' awareness (T-QN-KAS-PB-SP-IDD-KIT).

Teacher: Most parents treat the school as a rescue centre rather than a transitional ground to other levels (T-QN-MWI-PB-SP-HI-KIT).

Teacher: Parents, teachers and learners need to be educated more on transition and progression of LSND (T-QN-MUR-PB-SP-HI-MUR).

Teacher: Much guidance is needed on the transition process as parent should be equipped for the transition (T-QN-NYA-PB-SP-HI-HOM).

Teacher: Parents should be adequately involved during pathways selection for their children (T-QN-KIP-PB-SP-IDD-KER).

Teacher: Parents should adequately be involved in pathway selection to ensure that learners select the best career pathways (T-QN-MIT-PB-SP-VI-TRN).

Teacher: Due to economic constraints and discrimination, most parents don't take their children to where they have been placed (T-QN-MAT-PB-SP-PI-UAG).

Additionally, Education Officers commented on the challenges encountered by teachers of LSND related to parents' engagement with their children's educational journey. This included issues of parental responsibility, such as absenteeism, lack of support for school programmes, and reluctance to accept recommendations for non-traditional pathways like stage-based systems. To address these challenges, the Education Officers recommended the need for parent-teacher partnerships, sensitisation forums, and empowering parents through guidance and counseling to understand and support their children's placement and progression through appropriate pathways.

Education Officer: Late reporting of learners to school. Inadequate resources for use in curriculum delivery (EO-QN-QAS-KAK).

Education Officer: ... Some parents are still in denial and would stick to their children to take age-based system even if recommended for stage-based system ... (EO-QN-CSO-SNE-MIG).

Education Officer: Sensitisation of parents and teachers is continuous. Partnership for resource provision. Make SNE education completely free (EO-QN-QAS-KAK).

In addition, learners highlighted challenges stemming from limited parental support, including failure to meet basic needs, pay school fees, visit them while in school, or communicate effectively due to language barriers and stigma. This lack of support undermines effective placement, progression and transition, and cause irregular attendance, dropout, and poor navigation through educational levels and pathways. To address these concerns, learners recommended sensitising parents, teaching them sign language, and encouraging regular contact and visits.

Learner: My mother has a challenge to provide basic needs at home - my father should come back and help my family. Due to financial constraints, I was left at home during school opening, hence I would wish my mother to be assisted in bringing me to school. School fees - needs sponsorship (L-FGD-ILB-PB-SP-HI-KAJ).

Learner: Parents do not visit us in school. Parents are not paying fees. (L-FGD-ANT-PB-SP-HI-BUN).

Learner: Most Parents are not able to communicate with the learners because They lack KSL skills - others have abandoned the learners in school due to stigma (L-FGD-LAM-PB-SP-HI-HOM).

Learner: Parents don't understand the sign language hence the parents need to learn the sign language for effective understanding between the learner and parents ... Improve the discipline of learners through counseling by teachers (**L-FGD-GIA-PB-SP-HI-KIS**).

iv) Limitations in resources, facilities and capacity of personnel

The study findings revealed that there were inadequate facilities, personnel and infrastructure. These were said to be barriers to effective placement and progression of learners. Many institutions lack specialized equipment or trained staff, making it difficult to meet learners' diverse needs. In some cases, the absence of resources affected not just an individual school but was so widespread that it affected a whole county. The capacity of officers tasked to undertake educational assessment was also cited as an issue.

Education Officer: Many institutions do not have facilities and personnel to handle these learners (**EO-QN-CSO-SNE-KAJ**).

Education Officer: County lacks modern machines for assessment therefore assessment and placement not effective (**EO-QN-CDE-NYE**).

Education Officer: Average placement, EARCS (currently CSO SNE) capacity and update manpower, resource and infrastructure (**EO-QN-CDE-KSM**).

Head of Institution: The government should put more efforts in providing instructional materials for learners with special needs especially course books for the intellectually challenged and also boarding facilities for these learners (**HOI-QN-MAK-PB-SP-IDD-WEP**).

On their part, parents observed that availability of learning resources as well as adaptive resources are of critical importance for learners with special learning needs. Most parents involved in the study felt that resources for these learners were not adequate and sometimes not even available. According to parents, the Government should provide all the required learning resources and assistive devices and also keep them in serviceable conditions. A parent observed that skill-based aspects of the curriculum should be emphasised for those learners who may not be very strong academically.

Parent: *Government asaidie na facilities zote. Ni vizuri kwa wale ambao hawaelewi darasaniwakuwe na walimu tofauti kufunza other skills. Hapa kuna tu matron, so waletewe hao walimu wasaidiane.* (The Government to assist with all resources. It is good for those who do not understand very well in the classroom to have different teachers to teach them other skills. Here there is only a matron so let them bring those other teachers to assist them (**PA-INT-EMI-PB-SP-VI-BAR**).

Parent: Grade 8- only one (create time and follow-up). Provision of learning materials in all grades. Make sure the machines are serviced since some are not working (braille) (**PA-INT-KAM-PB-SP-VI-ISI**).

Education Officers and teachers' perspectives on resources and facilities shed light on inadequate physical facilities, limited vocational training centers, and a lack of teaching and learning materials as key impediments to effective progression and transition. The Education Officers revealed that teachers report a lack of adapted teaching and learning materials, accessible assistive devices, textbooks,

curriculum designs, and adequate infrastructure like classrooms and workshops. Teachers, on the other hand, highlighted the gap between policy intentions and the tangible resources available in schools, noting that without government intervention to provide these essentials, progression to appropriate pathways remains a challenge. To address these challenges, the Education Officers recommended provision of adequate teaching and learning materials, accessible assistive devices, adapted infrastructure, well-equipped workshops, and improved funding mechanisms to ensure schools have the physical and human resources necessary for quality SNE delivery. Some comments towards this were captured as follows:

Teacher: The transition was not smooth as there are no infrastructure for workshops through laboratories, no skilled personnel for skilled areas, no adaptive curriculum designs, no course books, no digital device no reliable networks **(T-QN-SEC-PB-SP-IDD-TRN)**.

Teacher: Need to support on improvisation at educational needs - playing materials, learning and teaching materials **(T-QN-GAR-PB-SP-MD-GAR)**.

Teacher: The school has inadequate facilities hence posing a challenge for transition and progression **(T-QN-HAB-PB-SP-MD-WAJ)**.

Teacher: Our school (unit) doesn't have learning materials and equipment for pre-vocational level have after intermediate level... **(T-QN-JOS-PB-SP-IDD-UAG)**.

Teacher: There are challenges since some levels lack materials, e.g., pre-vocation and vocational levels lack well equipped workshops **(T-QN-MAK-PB-SP-IDD-WEP)**.

Education Officer: Inadequate learning resources and other resources that support learning. Higher learner teacher ratios. Insufficient support services; therapists, psychologists, teacher aids. Inadequate infrastructure to meet diverse learner needs. Lack of regular refresher courses on curriculum design interpretation **(EO-QN-CSO-SNE-MSA)**.

Education Officer: Lack of adapted materials in some learning areas. Lack of adequate knowledge and skill in some areas. Lack of parental support for effective curriculum implementation **(EO-QN-QAS-ELM)**.

Education Officer: Provision of teaching and learning materials in good time and Provision of handbooks for teachers to support instruction **(EO-QN-CSO-SNE-NAN)**.

In addition, some learners highlighted significant shortages of adapted learning materials, accessible assistive devices, infrastructure and basic necessities. These gaps hinder the learners' ability to progress and transition across different educational levels and pathways by restricting curriculum access and limiting the development of essential competencies. To address these challenges, learners recommended the provision of appropriate learning resources and support systems to enable them to learn effectively. Some of the learners' voices were:

Learner: Braille books, facility and stylus are not enough. For JSS, we have to wait for Grade 9 to give us braille machines. Lack of enough teachers for JSS **(L-FGD-LIK-PB-SP-VI-MSA)**.

Learner: No books, no teaching aids, no sign language materials. Teachers do not have the necessary materials e.g. in Agriculture to show/demonstrate e.g. soil erosion and floods since deaf learners learn by observing. No internet connectivity **(L-FGD-GED-PB-SP-CP-KIL)**.

Learner: Inadequate learning materials, for example, books. Inadequate ICT materials, for example, tablets and Wi-fi. Lack of devices for low vision learners. Inadequate food. Inadequate water supply in the school **(L-FGD-APE-PB-SP-CP-BUS)**.

v) Challenges with assessment, placement and progression

Functional educational assessment is a critical step in placement as it determines whether a learner will be appropriately placed. Without proper assessment, learners risk being misplaced, which affects their educational outcomes. Education Officers indicated that sometimes placement has been done wrongly or done without proper functional educational assessment. Responses from the study findings highlighted challenges such as inadequacies in assessment centers, personnel, and equipment; need for proper placement and formative assessment procedures; need to look into the cost of functional educational assessment and systemic weaknesses in tools, training and support structures for progression and transition.

Education Officer: Placement is hampered by assessment problems (EO-QN-CSO-SIA).

Education Officer: Placement is not very effective because the methods used for identification are basic and may fail to identify the learners satisfactorily (EO-QN-CSO-SNE-ELM).

Education Officer: This is a very important thing in special need education. This should be done by the EARCs (now CSO SNE) and mostly the qualified since it is a child's life decision. Misplacement, when done is not good and reversing the process is difficult and brings delay. Some of the officers do not give proper pathways in education (EO-QN-CSO-SNE-MIG).

Hols underscored the need for appropriate assessment practices that are suited to the learner's specific special needs and disability. This is because assessment is directly related to a learner's progression and transition. Appropriate assessment practices will ensure that a learner's progression and transition is not obstructed by use of the wrong assessment tools and methods.

Head of Institution: ... need to adapt assessment tools appropriately to suit the learner's targeted sense (HOI-QN-KUJ-SP-MD-MIG).

Heads of institutions also weighed in on the challenges related to placement and resources.

Head of Institution: Placement challenges, transition progress and process. Curriculum designs are not appropriate for autistic learners and those with severe intellectual disability. Inadequate resources and facilities (HOI-QN-MER-SP-IDD-MER).

The teachers' perspectives on assessment and placement indicate that assessment is a vital tool for determining readiness and guiding learners into appropriate pathways. However, their views reveal significant concerns about the fairness, adequacy and inclusivity of current practices. While formative and summative assessments provide measurable outcomes, they often overshadow learners' talents, interests and individual needs.

Teacher: Even though LSND do well in examination just like their colleagues, their placement does not consider their needs for smooth learning process (T-QN-MOR-PB-SP-PI-TAR).

Teacher: There ought to be a comprehensive framework on criteria/ mechanisms on placement of these learners (T-QN-JOS-PB-SP-VI-KIS).

Teacher: Not appropriately of the provisions for transition and progression for LSND across levels and pathways because all categories are being helped by using the assessment of their exams to select their pathway rather than using their talents (T-QN-LIS-PB-SP-HI-TAR).

Teacher: Proper assessments for appropriate placement to enable smooth progression across levels and pathways (T-QN-NDA-PB-SP-PI-NAN).

There was a suggestion from teachers that the process of assessment and placement of LSND to special schools and units should be free or at least affordable. They also highlighted unequal treatment of learners who follow stage-based pathways compared to those in age-based pathways. Some teachers revealed that progress learners following the stage-based pathway, who progress according to skill acquisition rather than age, are often overlooked or placed later, which delays their progression. Some comments towards this were captured as follows:

Teacher: Assessment and placement of learners to special units and schools to be free or affordable (T-QN-BOG-PB-SP-IDD-KIS).

Teacher: Stage-based learners are not considered age-based learners. Their placement comes later after completing the age-based (T-QN-BUG-PB-SP-IDD-ELM).

Contributing to this subject, Education Officers highlighted critical gaps in assessment mechanisms that directly affect teachers' ability to differentiate instruction, prepare Individualised Education Programmes (IEPs), and place LSND appropriately. Their perspectives reveal systemic weaknesses in tools, training, and support structures that undermine effective transition and progression.

Education Officer: Limited training and resources, assessment and support services are limited, lack adequate infrastructure (EO-QN-CDE-KAK).

Education Officer: Not preparing an IEP or updating the same. Most of the teachers deployed recently in the special units and a number in special schools have not been retooled and are more inclined to regular school pedagogies (EO-QN-CSO-SNE-NYE).

Education Officer: Inadequacy of assessment tools. Lack of support from families of the special needs children. Inadequate funds to cater for the needs of the SNE children (EO-QN-DDE-KWA).

To address these challenges, the Education Officers recommended strengthening assessment centers, instituting continuous and multi-disciplinary assessment conducted by trained personnel, and ensuring the active involvement of CSO-SNE. Such measures would help guarantee that learners are placed in pathways aligned with their abilities, interests, and developmental needs.

Education Officer: Creating awareness on inclusion of learners/teachers of SNE. Building and registering special units and schools. Providing resources for learners with SNE. Having more personnel to assist in identifying, assessing and placement (EO-QN-CSO-SNE-KAJ).

The findings from learners reveal challenges in assessment, placement, progression and transition across schools and levels. Learners reported struggling with difficult assessments, inadequate

structures to support movement between special and regular schools, and the need for additional time to grasp concepts. To overcome these barriers, learners recommended remedial teaching, practical examinations tailored to their abilities, and the establishment of proper assessment mechanisms that reflect their diverse needs and abilities.

Learner: Few teachers, learning facilities are few. Barrier for transferring to special school to regular is not easy because there is no structure and assessment (L-FGD-TIM-PB-SP-HI-TAT).

Learner: Other concepts are difficult to understand need remedial teaching. There's a challenge we need tight security. No dining hall, dormitories and standard kitchen (L-FGD-COL-PB-SP-HI-TRN).

Learner: Lack of enough textbooks, facilities like laboratory; we have challenges to move because of poor roads; sometimes when the government sets exams some of us cannot be able to swim like swimming others cannot swim, they get zero and they would wish to swim; lack of internet for research.....the government to produce enough textbooks for us because as they have said we have that challenge; they should build us a laboratory for experiments; some of us need laptops; giving us doable practical examinations according to our abilities; add manpower (L-FGD-JOY-PB-SP-PI- KIA).

vi) Other challenges faced by learners

The findings from learners revealed challenges that posed significant social and emotional barriers which negatively impacted their placement, progression, and transition across education levels and pathways. Top among these were stigma, isolation, disrespect from peers, and a general lack of understanding from the wider community. They observed that society still stigmatises people with disabilities. They expressed a desire that society would avoid stigmatisation and accept all people irrespective of their status. To address these issues, learners suggested the need for guidance and counseling services, peer support mechanisms, and community sensitisation initiatives to foster a more inclusive and supportive learning environment.

Learner: ... stigmatization as some people consider them as if they cannot learn...People to avoid stigmatization (L-FGD-KAR-PB-SP-MD-SIA).

Learner: Disrespect from other pupils, some students hate them. They solve by assuming the hate and disrespect and they continue with their work. They also leave it to God (L-FGD-KAM-PB-ITG-PI-BAR).

Learner: Others ignore and abuse those with H1 - prone to accidents because we can't hear when vehicles are coming - sidelined - others in school don't know how to sign - some of the parents don't know sign language - in church, not able to follow sermon if no interpreter (L-FGD-OMO-PB-SP-MD-NYAM).

Learner: Some learners have bad behaviour require guidance and counselling (L-FGD-CHE-PB-SP-CP-NYAM).

Learner: *Mtu akiwa na depression, hasira inafanya mtu kufikiria kujiua, mwalimu kunionea, shule iko sawa* (When someone has depression, anger makes them think of killing themselves, the teacher being mean to me, the school is okay) (L-FGD-GAT-PB-ITG- MD-NYAN).

Findings revealed that learners identified the physical state of their schools as a significant challenge. For example, during rainy seasons, muddy conditions make it particularly difficult for those using wheelchairs to move around the school environment.

Learner: When it rains, they find difficulty moving around because of mud, especially those on wheels. Lack of basic needs. Dormitories are not in good condition. They have broken windows (L-FGD-NIN-PB-SP-HI-SIA).

vii) Monitoring and Policy Guidelines

Several respondents emphasised the need for stronger guidelines, empowered officers, and capacity building for placement personnel. They observed that without clear placement policies and trained personnel, misplacement occurs and learners' progress is delayed.

Education Officer: No proper guidelines on learners' placement (EO-QN-QAS-MAN).

Education Officer: The field officers placing resources with special needs and disabilities need to be capacity built more. Most learners placed wrongly (EO-QN-DCD-NAR).

Education Officer: This should be done by the EARCs (CSO SNE) and mostly the qualified since it is a child's life decision. Misplacement when done is not good and reversing the process is difficult and brings delay (EO-QN-CSO-SNE-MIG).

Some HoIs were in agreement with Education Officers on the issue of policy guidelines. They indicated that there were no clear guidelines on transition to vocational level. This could be an indication that there is indeed a gap in terms of policy or guidance to parents, educational assessors, and schools on the procedures for transitioning between pathways.

Head of Institution: No clear guidelines on transition to vocational level, materials in vocational level be addressed, curriculum designs and textbooks not provided in good time (HOI-QN-NAK-PB-SP-IDD-NAK).

Head of Institution: ... improve on transition plan (HOI-QN-MER-PB-SP-IDD-MER).

According to parents involved in the study, it was important that the progress of LSND be closely monitored both at home and in school. In part, this calls for appropriate assessment procedures. This would help in ensuring that learners progress and transition smoothly to the next levels of education.

Parent: Need close supervision, ensure that teachers are provided to cater for right number of learners, regular assessment to monitor progression and provide opportunity for certification of the learners (PA-INT-JOS-SP-UAG).

Parent: Follow up of learners' progress so as to help the learner transit to the next level/ stage of learning (PA-INT-BOG-SP-KIS).

Heads of institutions were in concurrence with parents on the need for close monitoring and guidance and counselling for learners with special needs and disabilities. They also underscored the need for regular workshops for teachers as well as bench marking initiatives to strengthen professional practice.

Head of Institution: ... regular monitoring for guidance and counselling. Regular workshop to sensitize teachers on how to keep improving their teaching methods and also interact with others i.e. bench marking (HOI-QN-KOI-PB-SP-MD-NAR).

Teachers' perspectives on the existence and clarity of guidelines and policies governing the transition and progression of learners with special needs and disabilities (LSND) reveal a fragmented and concerning picture. While some teachers report adherence to government provisions, many expressed uncertainty or dissatisfaction, citing the absence of clear, structured, and well-communicated policies. This inconsistency creates challenges in ensuring smooth transitions and equitable progression for LSND.

Teacher: We have every big challenge on transition and placement which needs clear guidelines and more support from the government ... (T-QN-KIM-PB-SP-PI-TRN).

Teacher: Clear guidelines should be set to help those learners with special needs for them to attain skills that will help in future (T-QN-NGU-PB-SP-IDD-NYE).

Teacher: We strictly follow the government guidance of the provision for transitions and progression for LSND across levels (T-QN-THI-PB-SP-VI-KIA).

Teacher: No clear guidelines on the appropriateness of provision in transition and progression for LSND (T-QN-KIP-PB-SP-VI-BOM).

Teacher: There are no clear guidelines for transitioning and progression for learners with special needs (T-QN-UHU-PB-SP-IDD-ISI).

Teacher: Learners with disabilities still need some clear guidance on transition and progression (T-QN-KAN-PB-SP-VI-MAC).

The findings from education officers highlight issues rooted in unclear or poorly executed policies. These gaps manifest in understaffing, lack of regular training and retooling, delays in accessing official curriculum documents, and mismatches between teacher training and their actual placement. Collectively, these challenges undermine effective learner placement, transition, and progression for LSND. To address these challenges, the education officers recommended the development of formal guidelines from the MoE, enhanced government support through affirmative action in staffing, increased capitation, timely provision of curriculum materials, and structured frameworks that promote transparency and uniformity across schools.

Education Officer: Lack of regular refresher courses on curriculum design interpretation (EO-QN-CSO-SNE-MSA).

Education Officer: Most of the teachers deployed recently in the special units and a number in special schools have not been retooled and are more inclined to regular school pedagogies (EO-QN-CSO-SNE-NYE).

Education Officer: They should be facilitated with the required gadgets, the FPE grants should be improved, the SMP (School Meals Programme) should be fully supported by the government (EO-QN-CSO-SNE-TAR).

Education Officer: Affirmative action on staffing of SNE schools. Retooling of all teachers deployed from regular schools. Focus to be placed on construction and equipping workshops. Timely supply of adapted teaching/learning materials to special schools (EO-QN-CDE-HOM).

Responses from learners alluded to systemic gaps in policy implementation, including unclear guidelines on book supply, delays in curriculum materials, lack of certification, inadequate staffing norms, and curriculum content that does not account for learner needs. These policy gaps directly compromise the effectiveness of learner placement, transition, and progression across different education levels and pathways. To mitigate these challenges, learners recommended government-led interventions, including reliable textbook provision, timely distribution of curriculum materials, and targeted adaptations such as the incorporation of scientific terminology into KSL dictionaries.

Learner: ... Grade 5- no books at all; English none only one copy for teacher. KSL - 4,5,6 missing, Textbooks to be in large prints (L-FGD-MWA-PB- SP-HI-TAT).

Learner: Shortage of braille book these should be provided at the right time, books should be brought from different publishers (L-FGD-KIB-PB- SP-VI-KSM).

Learner: Timetable reads Maths everyday in the morning, no CBC books, should be allowed to learn Kiswahili because villagers use Kiswahili (L-FGD-KAP-PB-SP-HI-NAN).

Learner: Comprehending English subject due to vocabularies. Scientific terms to be included in the KSL dictionary. Application mathematics should be toned down (L-FGD-KAM-PB- SP-HI-THA).

The findings reveal a consensus among teachers that effective progression must prioritize learners' interests, competencies, and readiness rather than rigid, time-bound criteria. Teachers argued that a flexible, competency-based model is essential, particularly for learners with intellectual and developmental disabilities, who often require variable amounts of time to acquire and perfect skills. However, the findings also show that external factors such as absenteeism and illness can disrupt this ideal, preventing learners from achieving the competencies needed for timely progression. Some of the teachers' comments were captured as follows:

Teacher: Learners are transitioned according to their areas of interest that's when they do better. Learners are transitioned according to their potential (T-QN-HOL-PB-SP- IDD-TAR).

Teacher: There should be no specific period of time to be taken by a learner in a given level, transition should be based on acquisition of competency (T-QN-WAI-PB-SP-IDD-KIT).

Teacher: Mostly challenges experienced with learners with intellectual challenges, they need more time to acquire and perfect skills (T-QN-WAI-PB-SP-IDD-KIT).

Teacher: Transition to the relevant levels is not effective due to learners having not achieved enough in the present level due to absenteeism, sickness (T-QN-SAH-PB-SP-IDD- KIL).

Teacher: Learners transit after acquiring some skill and knowledge in the level time/years is not a limit (T-QN-UHU-PB-SP-IDD-ISI).

The education officers highlighted challenges encountered by teachers in meeting the diverse and complex needs of individual learners. It was revealed that teachers struggle with the wide variance in disabilities, the need for individualised attention, high learner-to-teacher ratios, and the difficulty of implementing a differentiated curriculum without adequate support. To address these issues, the education officers recommended employing more SNE-trained and qualified teachers, alongside regular and continuous professional development. The education officers also highlighted the need for retooling teachers on inclusive practices and Competency-Based Curriculum implementation to ensure the teachers remain equipped with effective and responsive pedagogies that respond to varied needs of learners.

Education Officer: Higher learner teacher ratios. Insufficient support services; therapists, psychologists, teacher aids ... **(EO-QN-CSO-SNE-MSA).**

Education Officer: Inadequate resources, learners' disability difference, inadequate support from parents, learners' population fluctuation **(EO-QN-CSO-SNE-KSM).**

Education Officer: Inadequate teaching and learning resources. Understaffing challenges -not able to provide individualised learning **(EO-QN-QAS-SNE-HOM).**

Education Officer: Deploy more teachers and match specialization area with the speciality school to post to. Have more/spare specialists for serving a particular disability group. Re-tool frequently and support with adequate/relevant teaching and learning resources. Employ and facilitate the CSO SNE well. Pay the teachers and officers well to improve their morale. **(EO-QN-CSO-SNE-UAG).**

The findings from learners pointed to challenges related to differentiated instruction, health-related learning barriers, the need for personalised learning plans, and practical life skills. These challenges directly undermine the effectiveness of learner placement, progression, and transition, across different education levels and pathways. To address these issues, learners recommend enhanced teacher support, peer assistance, Individualised Education Programmes (IEPs), experiential learning opportunities such as field trips, and adaptive teaching strategies tailored to their specific needs. Some of the respondent's voices were:

Learner: Low vision, use small prints making them struggle, and they are not given time **(L-FGD-KAN-PB- SP-VI-MAC).**

Learner: Sometimes we cannot see what the teachers write on the board, so teachers read for us what they have written. The textbooks have small prints so the teachers write for us on the blackboard so that we can see. The compound is hilly so our movement is a challenge so we assist each other to move around with ease **(L-FGD-MOI-PB-ITG-VI-BAR).**

Learner: Feeding self - be assisted when at school. Child labour inhibits their learning (told to work in the farm instead of going to school ... Reading- be given an IEP **(L-FGD-BOG-PB- ITG-MD-KIS).**

Learner: Lack of some practical life experiences of what they learn. Ways to be assisted is more field trips, supportive equipment in different subjects such as sprinklers in agriculture **(L-FGD-KER-PB-SP-HI-KIR).**

4.8.3 Learners' Views on Progression

To establish the extent to which learners with special needs and disabilities were making progress in school, they were asked to describe how attending school had transformed their lives. Almost all of the learners had positive sentiments about their schooling experience. A few cited some areas where they desired to see improvement. Their responses generally alluded to a number of categories of how learners had gained from going to school. These were: development of self-esteem/self-worth; acquisition of values or character formation; acquisition of learning, skills (academic, vocational, social) and core competences; identification of talents and abilities and acquisition of orientation and mobility skills and a sense of security.

i) Development of self-esteem/self-worth

Learners reported that attending school had helped them develop greater confidence and independence. They also came to recognise that many other children live with disabilities, which in turn fostered self-acceptance and a stronger sense of belonging.

Learner: Now more confident. More independent and can be able to do things on your own. Has help to take care of self-building skills (L-FGD-MAS-PB-SP-PI-MAC).

Learner: Has helped me to know that blind people are valuable. Has mentored us to be of good behaviour. Knowing how to read. Taught us to be creative, to be confident. Helped to build self-esteem (L-FGD-LIK-SP-VI-PI-MSA).

Learner: Provided an opportunity to know others too have disability. Not being judged by others; self-belief. Blind can also learn. Has helped in performance and singing. School understands learner has needs (L-FGD-KAN-PB-SP-VI-MAC).

ii) Acquisition of values and character formation

Learners indicated that attending school had helped them to acquire values such as love, courtesy, responsibility, respect, etiquette and time management. These values have played a vital role in shaping their character.

Learner: I am happy to have values like courtesy and love, responsibility, I have gained knowledge on KSL (L-FGD-MAS-PB-SP-HI-KSM).

Learner: To be good children. To be respectful. Doing work the teacher has given you. Love parents and teachers. How to manage my time. Have good health and be responsible (L-FGD-NAL-PB-SP-PH-BUN).

Learner: *Kutengeneza maua, kinyozi, kucheza pamoja, usidharau watu, usimtusi mtu, kusaidia kutembeza wengine kwa wheelchair, good manners in eating* (To tend flowers, barbering, playing with others, not to look down on others, not to insult others, to assist those using wheelchairs, good manners in eating.) (L-FGD-NGE-PB-SP-MD-LAI).

iii) Acquisition of learning, skills and core competences

During the focus group discussions with learners, they reported that attending school had enabled them to acquire various skills. These ranged from academic skills like reading and writing; vocational skills

such as cookery, pottery, carpentry and weaving; social skills such as interacting with others, making friends, courteous behaviour like greeting people and life skills such as self-care. Some observed that 'out there' they did not have many friends but in school they were there.

Learner: I have gained skills in cooking, pottery, reading the Bible, washing, cleaning (L-FGD-MAC-PB-SP-HI-MAC).

Learner: I can now take care of chickens, can now plant crops, make bead bags (L-FGD-LUT-PB-SP-MD-KSM).

Learner: Interact with others, respect responsibilities (L-FGD-TIM-PB-SP-MI-TAT).

Learner: Increased language /knowledge. Friendship- they don't have good friends at home compared to schools (L-FGD-ZIW-PB-SP-HI-MSA).

Learner: I have become a carpenter. I can weave a basket. I know how to greet people. We have learnt sharing (L-FGD-EQU-PB-SP-MD-SIA).

Learner: I can read and write my own name. I understand our country. I play with others. I make friends. I have learned sign language (L-FGD-ALU-PB-SP-CP-BUS).

iv) Identification and nurturing of talents and abilities

The study also found that through attending school, learners were able to identify and grow their talents and abilities.

Learner: I am able to gain speaking skills in Kiswahili and English, nurturing talents and values, it helped me to realise capabilities (L-FGD-KIB-PB-SP-VI-KWA).

Learner: We have clubs on Saturdays like talent shows where we perform. We perform games and sports and music. Our school motto is opportunity and not sympathy. This makes every learner strive to excel in their talents (L-FGD-ODA-PB-SP-VI-SIA).

Learner: The teachers encourage us to go for music festivals and participate; The teachers allow us to join different activities that are in school; ... if there are some people who know how to talk and then teacher encourage us to make more practice so that they can nature their talent; perform PE; the school allow us to have various activities like playing chess, scrabble and even badminton that help us to know our talents and even try to nurture them (L-FGD-JOY-PB-SP-PI-KIA).

Learner: Has helped me to know how to sing. Has helped to know how to read. To participate in drama activities (L-FGD-KIN-PB-SP-HI-KWA).

Learner: Help us develop good values such as responsibility. Help us to know the importance of cleanliness. Gained a lot during sports to identify my talents. Nurture the importance of cleanliness (L-FGD-ANG-PB-SP-HI-KAK).

v) Acquisition of orientation and mobility skills and sense of safety

Learners indicated that the school was a safe space where they felt safe, comfortable, and appreciated. They indicated that school had taught them orientation and mobility skills which are particularly important skills for learners with visual impairment.

Learner: The school makes us feel we can move around the environment and feel safe. We should be given books for each one of us to be able to read (L-FGD-GED-PB-SP-CP-KIL).

Learner: Being in school has guaranteed their safety. School has enabled them to learn skills, for example, farming, cleaning, entrepreneurship skills (L-FGD-KHA-PB-SP-HI-BUN).

4.9 Chapter Summary

The study findings indicate that the implementation of the Competency-Based Curriculum in special schools and units has achieved moderate progress, with overall availability and adequacy of adapted and stage-based curriculum designs, curriculum support materials, interactive digital content and assistive technologies ranging between 45% and 62%.

While stage-based and adapted curriculum designs are officially available and moderately adequate, significant gaps remain in their accessibility and practical use. The moderate agreement levels among HoIs and teachers, coupled with observations, highlight the need for improved distribution, increased physical availability, and better adaptation of curriculum designs to meet the diverse needs of learners with disabilities.

The findings show persistent shortages and poor adaptation of textbooks and learning materials in special schools, severely hindering inclusive education. Accessible formats such as Braille, Kenya Sign Language resources and stage-appropriate, level-specific resources are scarce, disproportionately affecting learners with visual and hearing impairments at foundation and vocational levels. While some schools improvise with local materials and counties are boosting resource provision, progress is limited by funding and internet connectivity.

The findings further indicate that the availability and appropriateness of interactive digital content in special schools and units is moderate but uneven across institutions. While quantitative data from Heads of Institutions and teachers suggests moderate presence of digital learning resources, field observations reveal lower levels of actual access and use, indicating that these tools are often unevenly distributed and not consistently integrated into teaching and learning. The availability of assistive technologies such as braille machines, hearing aids, communication boards, and mobility devices is even more limited, largely due to financial constraints, inadequate ICT infrastructure, limited internet connectivity, and shortages of specialized devices.

Teachers generally report strong ability to plan and deliver CBC lessons for learners with special needs and disabilities, especially in preparing professional documents and developing individualized plans, and they feel fairly confident using learner-centred and differentiated approaches. The main weaknesses relate to limited support and guidance, inadequate time and structures for developing adapted materials, and uneven proficiency in disability-specific communication such as KSL, braille,

and alternative communication. Observations indicate that many teachers use inclusive methods and varied assessment approaches, but documentation and consistent updating of professional documents such as schemes of work and lesson plans is sometimes weak. Overall, the evidence points to the need for stronger professional support systems, continuous retooling, improved staffing/workload management, and targeted training in specialized communication and practical skills areas.

The findings indicate that auxiliary personnel and support services in special schools and units are largely insufficient and institutionalised. Access to specialised professionals such as therapists, interpreters, braille transcribers, nurses, and trained caregivers remains limited, resulting in teachers frequently assuming additional support roles. Similarly, essential therapeutic, psychosocial, and sensory support services are inconsistently available or absent in many schools. These gaps constrain effective curriculum implementation and limit meaningful participation and equitable learning opportunities for learners with special needs and disabilities.

The findings indicate that schools have moderately established systems and opportunities for identifying, nurturing, and supporting learners' talents, including those of learners with special needs, though effectiveness varies. Heads of Institutions reported a relatively high level of agreement (76.1%) that clear systems exist, particularly in talent identification and integration of talent-nurturing activities into classroom instruction, while documentation and monitoring of talent development were comparatively weak. Teachers expressed a moderate level of agreement (68.9%), with opportunities for diverse talent pathways and showcasing talents rated positively, but the availability of adapted equipment and resources was identified as a major gap. Qualitative evidence further shows that talent identification largely occurs through curricular and co-curricular activities, curriculum-based and vocational pathways, learner-centred pedagogies and assignment of responsibilities that reveal leadership and other abilities. However, some schools lack deliberate strategies and face constraints such as inadequate resources, limited trained personnel, insufficient facilities, weak follow-up, and poor documentation, resulting in missed or underdeveloped talents.

Observations reported high participation in curricular and co-curricular activities (80.4%). Most schools have talent identification structures (77.6%) and platforms for showcasing talents. However, documentation of the identified talents and abilities is only moderate and often unsystematic. Parents and learners agreed that schools play a central role in identifying and nurturing talents. Teachers monitor and communicate progress of nurturing talents and abilities while parents support development of the same at home. Learners build their skills through classroom and co-curricular activities, especially sports and vocational programmes, with support from teachers, peers, and

sponsors. Despite this commitment, poor communication, limited facilities, financial constraints, and restricted opportunities for some disabilities hinder full and equal participation.

The findings showed that parental empowerment and engagement initiatives for supporting learners with special needs and disabilities was mainly driven through school-initiated strategies, especially structured parent-school forums that enabled guidance, updates, and shared follow-up on learner progress. Schools also organised for sensitisation and disability-awareness activities to improve on learner acceptance, although denial and low awareness engagement were still limited in some contexts. Communication and follow-up were strengthened through phone calls, SMS, WhatsApp groups, and occasional digital reporting, but access to such platforms remained uneven. Parental support was most visible in provision of basic needs and learning materials, alongside home-based monitoring and academic support, though communication barriers, particularly limited Kenya Sign Language skills, constrained support for learners with hearing impairment. Parental participation varied widely across schools, with strong involvement in some settings but poor turnout and weak follow-up in others, often shaped by poverty, distance, transport costs, and disability-related resource demands, with a few schools responding through targeted linkages such as home visits, referrals, and certification support.

The findings on effectiveness of learner placement, progression and transition revealed that there were mixed perceptions across the different categories of stakeholders. Heads of Institutions (HoIs) reported relatively strong confidence in placement and transition processes (81.8%) while teachers expressed lower confidence (74.3%). Areas that were well rated were identified as documentation of transition plans, parental involvement in placement decisions, and alignment of placement with policy guidelines. The area that teachers rated lowest was provisions for LSND to transition across levels and pathways. The commonly reported barriers to smooth placement, progression and transition included inadequate assessment capacity and equipment, shortages of specialist personnel (therapists, trained SNE teachers), insufficient adapted learning materials and assistive devices, weak collaboration between feeder and receiving institutions, and low parental awareness and involvement which is further compounded by stigma. The findings showed that attending school under CBC has delivered meaningful progression benefits for learners with special needs and disabilities, especially when assessment, placement, transition plans, parental engagement and adapted resources are in place. The report highlights some of the benefits to learners as: development of self-esteem/self-worth; acquisition of values or character formation, acquisition of learning, social skills, life skills, vocational skills and core competences; identification and nurturing of talents and abilities; and acquisition of orientation and mobility skills and sense of safety.

The study findings indicate that the implementation of the Competency-Based Curriculum in special schools and units showed moderate progress, with overall availability and adequacy of adapted curriculum designs, curriculum support materials, interactive digital content and assistive technologies ranging between 45 and 62 percent. Adapted curriculum designs and support materials were generally present, but the diversity and sufficiency of specialized resources remained limited. Use of interactive digital content was moderate and ICT integration was partially implemented, although inadequate infrastructure and limited devices restricted meaningful use of ICTs in teaching and learning. Assistive devices and mobility aids were insufficient, affecting learners' independence and participation. Observations revealed that only a portion of schools had adequate textbooks, adapted materials, and assistive equipment, while many learners relied on improvised resources. Verbatim responses highlighted that teachers frequently adapted the curriculum informally, while learners faced challenges such as lack of braille books, large-print materials, mobility aids, and accessible classroom facilities. Heads of Institutions emphasised the need for more classrooms, boarding facilities, specialised equipment and funding, while education officers noted gaps in staffing, teacher training and ICT infrastructure. Learners reported difficulties with seating, tables, dormitories, sanitation and access to essential learning and mobility aids. Overall, despite teachers' commitment to adapting instruction and using IEPs where possible, systemic challenges in resources, infrastructure, staffing and stakeholder support continued to limit the full and effective implementation of CBC for learners with special needs and disabilities.

CHAPTER FIVE

DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of the study, draws conclusions, and offers actionable recommendations based on the findings on the implementation of the CBC in special schools and units in Kenya. The study focused on key aspects of CBC implementation for learners with special needs and disabilities, including the availability and adequacy of adapted curriculum designs, curriculum support materials, interactive digital content, teacher capacity, infrastructure, and assistive technologies. Data was collected from multiple stakeholders, including heads of institutions, teachers, and observations within schools, to provide a comprehensive assessment of the status of CBC implementation. The chapter synthesizes the findings, interprets their implications for inclusive education, and identifies critical areas that require policy attention, resource allocation, and capacity building to enhance access, equity and quality learning outcomes for learners with special needs and disabilities.

5.2 Discussion of Findings

5.2.1 Availability and Adequacy of Adapted Curriculum and Learning Materials

The findings reveal that adapted curriculum designs and support materials for learners with special needs and disabilities show moderate availability and alignment with the CBC. A majority of respondents agreed that adapted curriculum designs were available, and that support materials aligned reasonably well with CBC competencies, though adequacy for learning and assessment was weaker. This aligns with research showing that resource availability significantly influences the effectiveness of CBC implementation, and that gaps in instructional materials can undermine curriculum delivery (Mumbe & Njagi, 2024). In the Kenyan context, studies have noted persistent limitations in the sufficiency of teaching and learning resources for competency-based approaches, emphasizing that curriculum designs must be supported by appropriate materials for learners with diverse needs to foster meaningful participation (Mumbe & Njagi, 2024).

Despite this foundational progress, critical gaps in resource diversity and specialized supports were evident. The relatively low levels of agreement on the availability of interactive digital content, and assistive technologies reflect broader systemic challenges. Observers have noted that many schools continue to lack alternative instructional resources and specially adapted materials for inclusive CBC delivery, which impedes effective learning for learners with disabilities (Otieno, 2023). These

shortfalls are consistent with documented barriers to inclusive education, where insufficient instructional resources, limited assistive technologies, and inadequate training constrain the capacity of schools to meet diverse learner needs. Without expanded provision of specialized materials and technologies, the impact of CBC on inclusive learning outcomes will remain limited (Otieno, 2023).

The HoIs reported moderate levels of provision and utilization of resources and assistive technologies for learners with special needs and disabilities, highlighting ongoing constraints in budgetary support. The relatively low level of agreement on budgetary provision for adapted materials, assistive technology, and digital content reflects broader challenges in resource allocation for inclusive education. Research in the Kenyan context confirms that insufficient financial provision remains a significant barrier to the implementation of inclusive and CBC, as schools struggle to secure and sustain essential instructional resources (Kakuru, 2022). These limitations can undermine the intended outcomes of CBC by constraining learners' access to materials that would facilitate differentiated instruction and accessibility.

Perceptions of digital content access and alignment were more positive, with a majority of HoIs agreeing that teachers have access to digital resources and that these resources generally align with learner needs. The moderate agreement on the appropriate use of digital content during lesson delivery suggests that schools are beginning to integrate technology into teaching practices. This aligns with findings from recent studies showing that when digital resources are available and contextually relevant, they can enhance learner engagement and support differentiated instruction for diverse learning needs (Wambui & Maina, 2021). However, in many contexts, access alone does not guarantee effective use; strategic training, contextual adaptation, and ongoing support are critical to ensure that digital content positively impacts learning outcomes for learners with disabilities.

Despite these positives, significant gaps remain in the availability and functionality of assistive technologies and support materials. While a majority of HoIs agreed that assistive technology devices were functional and matched to learner needs, the lower levels of agreement on the availability and adequacy of assistive technologies suggest persistent shortfalls that may limit teachers' capacity to deliver inclusive instruction. The high level of agreement on the application of online safety protocols reflects a commendable emphasis on safeguarding learners in digital environments, a priority increasingly highlighted in policy discussions on ICT integration in education (Republic of Kenya, 2020). Overall, although HoIs recognize efforts to provide and utilize IDC resources and assistive technologies, the findings reinforce the need for enhanced budgetary allocation, improved distribution of support materials, and scaled access to specialized technologies to fully realize CBC implementation for learners with special needs and disabilities.

Teachers' responses on the availability and adequacy of adapted curriculum designs and support materials reveal moderate levels of implementation under the CBC. A majority of teachers agreed that adapted curriculum designs aligned to CBC were available, but fewer agreed that these designs were adequate for learning and assessment. This pattern is consistent with research showing that while many schools in Kenya have access to adapted curriculum designs limitations in content depth and contextual relevance undermine their full usefulness for teaching and learning (Kilonzo & Njoroge, 2023). Such gaps in curriculum adequacy can particularly disadvantage learners with diverse needs, as inclusive education requires not only availability but also contextual adaptation of curriculum to ensure meaningful access and participation (Wango, 2022).

The Salamanca Statement and Framework for Action on Special Needs Education (1994) affirms that education is a universal right, obligating governments to guarantee access to regular schooling for all children, including those with disabilities or special needs. Despite this guiding principle, the moderate adequacy ratings reported by both Heads of Institutions and teachers suggest that, even where adapted and stage-based curriculum designs are present, they may not fully meet the diverse and specific needs of all learners. The observed discrepancy between self-reported availability and actual field observations highlights the importance of not only developing these curriculum designs but also ensuring their physical distribution and practical usability within schools. Ultimately, while policy frameworks and institutional reports indicate some progress, these findings underscore the need for continued efforts to bridge the gap between official provision and real-world accessibility, so that all learners with disabilities can truly benefit from inclusive and well-supported learning designs (Salamanca Statement, 1994).

Regarding specialized resources, teachers reported considerably lower levels of agreement on the availability and diversity of support materials. Less than half agreed that schools had a sufficient variety of CSMs for different disability categories, and similar proportions indicated limited availability of assistive technologies and adequate textbooks. This mirrors findings from other studies that highlight persistent challenges in resource provision for inclusive education, including shortages of tactile, visual, and auditory materials essential for learners with disabilities (Mwangi & Mutiso, 2021). Without a diverse range of specialized tools and resources, teachers' ability to deliver differentiated and competency-based instruction remains constrained, potentially undermining learners' ability to engage fully with the curriculum.

Overall, while teachers acknowledged the presence of some adapted curriculum designs and support materials, the moderate levels of agreement reflect gaps that may hinder effective implementation of CBC for learners with special needs and disabilities. These limitations underscore the need for

strengthened resource provision, diversified instructional materials, and enhanced access to assistive technologies to support inclusive pedagogy. Research emphasizes that when teachers are equipped with both appropriate resources and professional development, they are better positioned to implement inclusive and competency-oriented instruction that meets the diverse needs of all learners (Gitonga, 2024). Addressing these gaps is therefore critical to advancing equitable and quality education for learners with special needs.

Observations conducted in special schools and units revealed moderate visibility of adapted curriculum designs, with adapted CBC curriculum materials observed in 66.3% of schools and units. This observation aligns with research emphasizing that the presence of tailored curriculum designs is foundational to inclusive education, as these materials provide the essential framework for facilitating learning among learners with diverse needs (Mugo & Wambua, 2022). However, the fact that over one-third of institutions lacked observable adapted curriculum designs underscores ongoing challenges in the equitable distribution and implementation of specialized curriculum resources across educational settings.

Despite the presence of curriculum designs, observations showed limited access to crucial digital and assistive resources. Interactive digital content suitable for various disability categories was noted in slightly more than half of the schools (52.0%), indicating that technology integration remains inconsistent. Research in inclusive educational contexts has highlighted that while digital tools can significantly enhance engagement and accessibility for learners with disabilities, their effectiveness is dependent on consistent availability, teacher readiness and contextual relevance (Njenga & Chege, 2021). The relatively low observed presence of interactive digital content suggests that schools may be constrained by technological infrastructure, funding, or capacity to fully integrate digital learning resources into daily instruction.

Moreover, the observation checklist revealed considerable deficiencies in assistive technology devices and printed curriculum support materials, with only 44.4% of schools having adequate assistive technologies and just 28.3% having sufficient copies of approved textbooks and other materials. These findings reflect broader systemic gaps reported in studies on special needs education in Kenya, where shortages of assistive devices, Braille materials, and adapted instructional texts have been shown to limit meaningful access to learning for students with disabilities (Kahiga & Kamau, 2023). Such resource shortfalls can hinder the effective delivery of the CBC and impede learning outcomes, reinforcing the need for enhanced provision and equitable distribution of essential educational resources to support inclusive and quality learning for all learners.

Responses highlighted the lack of assistive devices and technologies such as Braille, large print, tactile diagrams, orbit readers, KSL resources. Accessibility gaps are not merely about format. They determine whether learners can engage with content, participate in assessments and progress towards achievement of learning outcomes. This resonates with Konga and Cheboi (2021) whose study revealed that schools equipped with assistive devices reported comparatively better academic performance among learners with visual impairment. When accessibility is treated as an add-on rather than a design principle, learners with special needs and disabilities experience reduced content exposure, which translates into lower achievement and limited progression opportunities. These findings are congruent with Wafula (2019) who posits that shortages of assistive devices and alternative format resources constrain learner participation.

5.2.2 Capacity of teachers in effective delivery of the curriculum for learners with special needs and disabilities

The findings indicate that teachers generally demonstrate a substantial level of capacity to deliver the curriculum for learners with special needs and disabilities. This is particularly in areas related to instructional planning, individualised learner support and learner-centred pedagogy. Teachers rated their capacity at 82.0%, while Heads of Institutions rated it slightly higher (83.0%), with Field Education Officers giving a comparatively lower rating (75.7%). These findings suggest that although teachers and school administrators perceive capacity to be relatively strong, external observers identify gaps that may not be immediately visible within the school context.

The study further revealed that teachers are relatively strong in professional documentation and instructional planning, including preparation of schemes of work, lesson plans and IEPs. Classroom observations also showed that many teachers apply differentiated instruction using strategies such as modelling, songs, demonstrations, visual aids, discussions and portfolios to support learners with diverse needs. These findings align with the literature which conceptualizes teacher capacity as a combination of pedagogical skills, assessment competence and the ability to adapt instruction to learner diversity. Fränkel et al. (2023) and Johnson and Erasmus (2024) argue that teachers are central to the success of inclusive education because they design flexible learning environments and implement strategies that make curriculum accessible to all learners.

Parents' responses further confirmed the presence of teacher capacity in the implementation of the SNE curriculum. The parents reported improvements in learners' communication skills, social skills, independence and daily living skills, attributing these developments to teachers' support and dedication. These findings resonate with Jala (2025), whose narrative inquiry in the Philippines found

that Special Needs Education teachers actively adapt instruction to learner needs and collaborate with families to enhance learning outcomes. The present findings similarly show that teachers often engage closely with parents and provide holistic support to learners beyond academic instruction.

However, the findings also revealed that teacher capacity is uneven across competencies. Teachers demonstrated lower proficiency in highly specialised areas such as Kenya Sign Language (KSL), braille literacy and alternative communication systems. These gaps reflect broader concerns raised in the literature that inclusive education requires teachers to possess not only general pedagogical competence but also specialised knowledge to address disability-specific learning needs. Mendoza and Heymann (2024) as well as Mpolomoka et al. (2025) emphasise that modern inclusive education demands a broader conception of teacher competence that addresses diverse forms of learner identity, including disability, language and socio-cultural context. The moderate ratings in specialized competencies in this study therefore suggest that although teachers possess foundational teaching skills, additional professional development is needed to strengthen specialised inclusive pedagogies. Overall, the findings support the literature's central argument that teacher capacity is a key determinant of successful curriculum implementation. As noted by Huang and Moon (2009) and Ngobeni et al. (2020), teachers' educational preparation significantly influences learner outcomes. The relatively strong capacity observed in instructional planning and learner support in this study therefore provides a positive indication that teachers possess important foundational competencies for implementing CBC for LSND.

Despite the generally positive capacity indicators, the findings reveal several challenges that constrain teachers' ability to deliver the curriculum effectively. A major challenge identified in this study was understaffing and high teacher-learner ratios, which limits the level of individualised support teachers can provide to learners with disabilities. Many teachers reported handling multiple levels of learners or diverse disability categories simultaneously, which significantly increases workload and reduces instructional effectiveness.

These findings are consistent with the evidence presented by Lamin (2022) in Sierra Leone, which identified shortages of trained teachers and inadequate infrastructure as key barriers to effective SNE implementation. Lamin (2022) observed that even where teachers possess relevant training, shortages in staffing and resources can undermine their ability to deliver the curriculum effectively. Similarly, the present findings show that teacher capacity is not determined solely by knowledge and skills but also by the institutional conditions within which teachers work.

The study also found that teachers face limited specialised training and professional preparation in areas such as braille, KSL and vocational instruction. This challenge reflects the misalignment between teacher preparation and classroom realities identified by Jacob et al. (2024). Their study in Nigeria found that teacher education programmes often fail to adequately prepare teachers for inclusive instruction, resulting in gaps in the knowledge and skills required to effectively teach learners with disabilities. The current findings mirror this observation, as some teachers reported insufficient training to support learners with specific disabilities or to teach specialised vocational skills.

Communication barriers, particularly in schools serving learners with hearing impairments, were another key challenge identified in the findings. Teachers reported difficulties arising from variations in sign language and the absence of standardised signs for certain academic concepts. These challenges echo the findings of Dumilig and Abdulrahman (2024), who argue that teaching learners with special educational needs requires adaptability, creativity and resilience due to the complex nature of learners' needs and the limited resources available to support instruction.

Heavy workload and limited instructional time also emerged as significant constraints. Teachers reported insufficient time to prepare adapted materials, support slow-paced learners and implement individualised learning plans. These challenges highlight the complex and demanding nature of teaching learners with disabilities. This concern was similarly noted by Jala (2025), who observed that SNED teachers often experience mental and physical fatigue due to the complexity of IEP design and the extensive support required by learners with disabilities.

The findings also showed that teachers frequently work without adequate multidisciplinary support systems, such as therapists, teacher aides and counsellors. This lack of auxiliary support increases the responsibilities placed on teachers and limits their ability to address the diverse needs of learners effectively. These findings are consistent with those of Kimanzi (2024), who found that limited professional support and inadequate teacher training contribute to ineffective implementation of the SNE curriculum in Kenyan special units. Kimanzi (2024) further noted that inadequate professional skills among teachers can negatively affect learner engagement and academic outcomes.

The findings highlight several areas of support required to strengthen teacher capacity and improve curriculum implementation for LSND. One of the most frequently proposed interventions is the recruitment and equitable deployment of more trained SNE teachers. Increasing the number of specialised teachers would reduce teacher–learner ratios and enable more individualised support for learners with disabilities. This recommendation aligns with Lamin's (2022) findings that recruiting

qualified SNE teachers is essential for strengthening curriculum delivery in resource-constrained settings.

Respondents also emphasized the need for continuous professional development and teacher retooling. Teachers require ongoing training in specialised competencies such as KSL, braille, inclusive pedagogy, ICT integration and vocational instruction. This finding strongly supports the conclusions of Maithya et al. (2024), whose study in Kenya demonstrated that increased training of SNE teachers leads to improved learning outcomes among learners with hearing impairments. Maithya et al. (2024) advocate for continuous professional retraining to strengthen teachers' pedagogical content knowledge and attitudes toward inclusive education. The study further revealed the need for stronger professional support systems, including mentorship from experienced SNE educators, improved curriculum guidance and collaboration among teachers. Teachers also require support from multidisciplinary professionals such as speech therapists, occupational therapists and physiotherapists. These forms of support would enable teachers to focus more effectively on instructional delivery while specialists address therapeutic and behavioural needs.

Improving teachers' working conditions and motivation was also identified as an important support strategy. Respondents recommended incentives, promotions and improved allowances to enhance teacher morale and retention in SNE settings. These recommendations reflect the literature's recognition that teaching learners with disabilities requires high levels of commitment and resilience. Dumilig and Abdulrahman (2024) note that teachers working with learners with special needs must demonstrate strong dedication and emotional strength, particularly in environments characterized by limited resources and complex learner needs.

Respondents emphasized the need for stronger parental engagement and collaboration. When parents understand their children's needs and support learning at home, teachers are better able to reinforce learning outcomes achieved in school. This finding reinforces Jala's (2025) observation that collaboration between teachers and families plays a crucial role in enhancing educational outcomes for learners with special needs.

Generally, the findings of this study reinforce the literature's assertion that teacher capacity is a critical determinant of effective curriculum delivery for learners with special needs and disabilities. While teachers demonstrate considerable strengths in instructional planning, learner-centred pedagogy and individualised support, their effectiveness is constrained by staffing shortages, limited specialized training, communication barriers and inadequate support systems. These challenges mirror those identified in both regional and international studies, highlighting that improving inclusive education

requires sustained investment in teacher preparation, professional development and institutional support. Strengthening teacher capacity through targeted training, improved staffing and stronger support systems will therefore be essential for ensuring effective implementation of the curriculum for learners with special needs and disabilities.

5.2.3 Adequacy and suitability of Infrastructure, Auxiliary Personnel and Support Services

Access to adequate and adapted physical infrastructure ensures that the learning environments are both supportive and nurturing. The findings from HoIs 73% and 68.6%, on accessibility of dormitories and dining areas to all learners, and adaption of classrooms to accommodate different disability needs falls within the expectations of the social model theory that advocates for dealing with disability by organizing schools to make them comfortable for learners as opposed to focussing on their individual deficits. In practice, this finding points to measures that have been made by schools to remove barriers by ensuring the physical environment has accessible buildings and learning spaces. It encourages inclusivity in education characterized by a range of flexible supports like assistive technology and adapted infrastructure.

Despite these findings, there were still general inadequacies evidenced in the facilities in institutions of learners with special needs. The adequacy and functionality of therapy rooms recorded an average mean percentage of 51.4% among HoIs. Additionally, the availability of maintenance and repair services for specialized equipment registered a low mean percentage of 24.1% and 26.5% from teachers and education officers, respectively. The implication of the finding is that specialized equipment is in a state of disrepair, limiting optimum functionality. This further falls short of the expectations of ongoing inclusion of learners with special needs as espoused in Kenya's 2010 Constitution.

Moreover, focus group discussions with learners pointed out that some toilets were not adapted, thus disadvantaging learners with multiple disabilities. The conditions do not align with Humanistic Theory (Marslow, 1943). The theory is founded on tenets of sense of belonging and self-esteem. Lack of modified toileting facilities do not assure psychological comfort of learners. Recommendations from Presidential Working Party on Education Reform (2023) which outlines a system-wide push for equity and inclusion in Kenya. It also stipulated the provision of accessible school infrastructure.

The findings of this study indicate that auxiliary personnel remain insufficient in many schools serving learners with special needs and disabilities. The quantitative findings in Table 12 showed that only 29.8% of education officers reported that support services were available in schools, while a majority

(70.2%) indicated that such services were not available. Similarly, only 18.3% of teachers confirmed the availability of support services in their schools, while 81.5% reported that these services were not available.

These findings suggest that the availability of auxiliary personnel required to support curriculum implementation for learners with special needs and disabilities remains limited. Although some heads of institutions reported moderate agreement with the availability of certain support mechanisms, the results from teachers and education officers indicate that schools still face significant shortages of specialized personnel.

The qualitative findings further reinforce these results. Teachers indicated that auxiliary staff such as caregivers, interpreters, and support staff were either unavailable or insufficient to meet the needs of learners with special needs and disabilities. As a result, teachers often take on additional responsibilities such as assisting learners with feeding, mobility, personal hygiene, and health-related needs. This increases teacher workload and may affect the time available for effective curriculum delivery.

Respondents also highlighted the limited availability of specialized professionals such as physiotherapists, occupational therapists, speech therapists, nurses, and braille transcribers. These professionals are essential in supporting learners with complex disabilities, yet many schools reported that such services are either unavailable or accessed only occasionally.

These findings are consistent with the view that effective inclusive education requires multidisciplinary collaboration among educators and specialized support personnel. UNESCO (2020) emphasizes that inclusive education systems depend on the availability of support specialists such as therapists, psychologists, and social workers to address the diverse needs of learners with disabilities. Similarly, the World Health Organization and World Bank (2011) note that learners with complex disabilities often require coordinated services involving education, health, and social protection sectors.

The study also revealed the presence of informal support systems within schools. Teachers reported that peers sometimes assist learners with mobility and daily activities when specialized support personnel are unavailable. While such peer support contributes to learner inclusion, it reflects a coping mechanism rather than a structured support system. Similar observations have been reported where informal collaboration among educators and learners emerges in contexts where formal support systems are weak (Gavade, Sidotam & Varanasi, 2023; Irish et al., 2023).

The findings of this study further reveal significant gaps in the status of support services required for effective curriculum implementation for learners with special needs and disabilities.

The quantitative findings in Figure 10 show that more than half of teachers (52.6%) reported that none of the listed support services were available in their schools. Among the services that were reported as available, counselling was the most common, cited by 32.9% of teachers. However, other critical services were reported at very low levels, including physiotherapy (5.7%), occupational therapy (2.5%), social work (2.3%), audiology (2.1%), and both speech therapy and vision support (0.9%).

These findings indicate that most specialized support services remain largely unavailable in many schools serving learners with special needs and disabilities. The limited availability of therapy services such as speech therapy, physiotherapy, and occupational therapy is particularly concerning given their importance in supporting learners with communication difficulties, mobility challenges, and developmental disabilities.

The qualitative findings further highlight these gaps. Teachers emphasized that learners require regular therapeutic interventions to support communication, motor development, and independence in daily activities. However, such services were reported to be largely unavailable within schools, forcing parents and teachers to rely on external providers such as hospitals, non-governmental organizations, and well-wishers.

Similarly, the findings indicate gaps in sensory support services such as audiology and vision support. Teachers reported the need for hearing assessments, hearing aids, braille transcription services, and low-vision devices to enable learners with sensory impairments to access instructional materials effectively.

Counselling services were reported to be relatively more available compared to other support services. However, respondents noted that these services were often delivered informally by teachers rather than trained counsellors or social workers. While teachers play an important role in supporting learners' emotional well-being, the absence of professional psychosocial support services may limit the effectiveness of these interventions.

These findings reflect challenges reported in previous studies on inclusive education across Africa, where the implementation of inclusive policies is often constrained by limited resources, inadequate support services, and shortages of specialized personnel (Armstrong & Wray, 2023; Mokoena, 2017; Smith & Nkosi, 2021).

5.2.4 Strategies for identifying, nurturing and supporting the talents of learners with special needs and disabilities

The findings show that schools have moderately established systems for identifying and nurturing talents of LSND. Heads of Institutions reported strong agreement on the presence of structured systems and the integration of talent development into classroom instruction. This aligns with the Basic Education Curriculum Framework (KICD, 2017) which promotes opportunity, inclusion, excellence and differentiated learning pathways. Integrating talent development into teaching reflects the policy's emphasis on flexible and inclusive curriculum practices.

However, a study conducted in Indonesian inclusive schools by Hamirta et al. (2025) revealed lack of established systems for identification, nurturing and supporting talents and abilities among learners with special needs. The study went further and established that schools were relying on parental reports and teacher observations instead of well-established systems. The findings from this study and specifically from teacher respondents are to some extent in agreement with the findings from the study conducted by Hamirta and others.

Curricular and co-curricular activities emerged as the main platforms for talent identification. Learners participate in sports, music, drama, clubs and competitions, including national and international events. This supports Genovesi (2025) who emphasizes that talent development extends beyond academic achievement to creative, social and vocational domains. The findings are also consistent with Yoro et al. (2020) who highlight cooperative learning, peer support, and curriculum differentiation as effective inclusion strategies. Further, this is also supported by Undie and Dada (2025) who conducted a study and found out that talent identification must include creative, vocational and social competencies, cultivated through co-curricular and community engagement programs.

Vocational and curriculum-based pathways further support talent development. Learners engage in practical activities such as tailoring, agriculture, knitting, sewing, plaiting, dressmaking, carpentry and entrepreneurship. These hands-on approaches align with strength-based and functional models of inclusion. They promote independence and meaningful skill acquisition. Schools also apply learner-centered pedagogies, IEPs, observation and formative assessment to identify strengths. The findings are in line with research conducted by Sekulova et al. (2022), Sundararam et al. (2021) and Burau et al. (2022) who assert that systematic observation and project-based tasks help teachers recognize emerging talents.

Despite these positive efforts, key gaps were identified. Documentation of learner portfolios is moderate and often unsystematic. Without proper documentation, talent development becomes

inconsistent. Weak monitoring reduces continuity and limits recognition of progress. Literature stresses that structured assessment and progress tracking are central to strengths-based identification (Genovesi, 2025). Monitoring of the learner progress in relation to nurturing talents should be done by all stakeholders. Stakeholder engagement has also been noted as a crucial element in the support for learners with special needs and disabilities. Studies suggest that collaborative strategies involving educators, families and specialists enhance the identification of learner talents, enabling tailored interventions that support both academic and non-academic strengths (Genovesi, 2025). These strategies include using individualised learning plans, differentiated instructional pathways and mentorship programs that provide personalised support and opportunities for skill development.

The most critical gap is the limited availability of adapted equipment and assistive technology. Many schools lack modified sports gear and appropriate devices. Magableh and Abdaullah (2021) and Cavioni et al. (2024) emphasize that assistive technology is essential for equitable participation. Without it, inclusion is compromised. There is a rapidly growing number of assistive technology devices and tools. Identifying the most appropriate tool is important to best meet the specific needs and enhance the abilities of the learner with special needs and disabilities.

Teacher capacity is consistently identified as a pivotal determinant of whether curriculum content is delivered effectively to learners with special needs and disabilities. Capacity is understood as a composite of teachers' knowledge of SNE, pedagogical skills for differentiation, assessment practices and access to appropriate resources and supports. Identification, nurturing and supporting learners with special needs to realise their full potential relies heavily on the teachers' capacity. Limited teacher capacity impedes the process of identification and nurturing of learners' talents and abilities. Some teachers lack specialized training to support LSND effectively. This concern aligns with Hamirta et al. (2025) and Yoro et al. (2020), who call for continuous professional development in inclusive strategies. Findings from a study conducted by Mumbu (2020) highlight that the availability of trained instructors is a key driver of academic performance. When well-trained teachers are in place, student outcomes improve, suggesting that capacity constraints can limit the realization of curriculum goals. Similarly, Ssengonzi & Muwanguzi (2020) found that most teachers lacked formal training in special needs education, leading to low confidence and competency in curriculum adaptation and instruction.

A study conducted by Kimanzi (2024) on School based factors influencing implementation of special needs education curriculum in special needs units in public primary schools in Kitui west sub-county, Kenya, found that there was a deficiency of professional skills training amongst special needs

education teachers that resulted to ineffective, poor curriculum implementation procedures and methodologies that were antagonistic to learners' academic achievements and outcomes.

Findings from this study revealed that parental involvement presents both strengths and challenges. Many parents collaborate with schools and support talent development at home. This reflects research by Zeng and Huang (2021), Rodriguez et al. (2021), and Clark (2015), which highlights stakeholder collaboration as critical for learner success. However, communication barriers, distance, stigma, and limited sign language skills reduce effective engagement. Mutoni (2025) notes that family acceptance and community support enhance learner independence.

Co-curricular activities, vocational pathways, differentiated instruction and parental collaboration provide meaningful opportunities for talent development. However, implementation is inconsistent. Inadequate resources, limited teacher capacity, weak documentation, and communication barriers reduce effectiveness. The findings suggest that while opportunities exist, schools require stronger systems, adequate resources, structured monitoring, and sustained professional support to fully nurture the talents of learners with special needs and disabilities.

5.2.5 Parental Empowerment and Engagement in supporting the education of learners with special needs and disabilities.

The study findings positioned parental empowerment and engagement as a multidimensional process that combined participation in school forums, sustained communication, home-based learning support and material provision, while also being shaped by parental knowledge, attitudes and contextual constraints. This broad framing aligned with the view in the literature that parental engagement in special needs education strengthens academic achievement as well as social, emotional and behavioural development, particularly when parents are treated as partners in an inclusive support system (Hoover-Dempsey & Sandler, 1995; Şengönül, 2022; Sibuyi et al., 2025). In this study, the mixed pattern of moderate to high agreement in HoIs' ratings on forums, communication, and barrier identification, alongside lower ratings on parents' participation in progress review and parents' understanding of CBC expectations, echoed existing scholarship that parents often value involvement but may lack access to structured knowledge and opportunities to participate meaningfully in planning and decision-making (Finnerty, 2022; Springer, 2025; Kenya Institute of Special Education, 2023).

A key finding was that structured parent-school engagement forums served as the main mechanism through which schools mobilized parents, shared guidance and sustained follow-up. This converged with research emphasising that structured involvement such as attendance in meetings, planning forums, and training opportunities supports stronger home-school partnerships and improved learner

outcomes (Hoover-Dempsey & Sandler, 1995; Gaspar & Sahay, 2025). The prominence of meetings in this study also reflected a school-led model of partnership, where participation was largely activated through institutional invitations rather than parent-led structures. From an ecological perspective, such forums may be understood as a bridging space connecting home and school systems, enabling information flow and alignment of expectations (Şengönül, 2022). However, the observation evidence that some schools held meetings only once a year pointing to a potential weakness noted in the literature where engagement structures existed in some schools but varied in depth, regularity, and practical follow-up, limiting their effectiveness for sustained parental empowerment (Hornby & Lafaele, 2011; Finnerty, 2022).

The findings further showed that sensitisation and disability awareness efforts were used to improve acceptance, reduce stigma, and encourage schooling for learners with disabilities, including through parent meetings, barazas, and community outreach such as roadshows and local media. This pattern aligned strongly with African and Kenyan literature that highlights the need for sensitisation to strengthen parental understanding of disability and improve participation in learners' education (Nthuku et al., 2024; Kenya Institute of Special Education, 2023). It also resonated with studies emphasizing that parental engagement is strengthened when schools intentionally cultivate trust and shared understanding, especially in contexts where beliefs and socio-cultural narratives shape educational decisions (Şengönül, 2022; Hornby & Lafaele, 2011). At the same time, continued reports of denial and low awareness in this study mirrored evidence from Kenya and beyond that parental non-acceptance remains a persistent barrier that undermines enrolment, follow-up, and collaborative planning, reinforcing the need for repeated and sustained engagement rather than one-off sensitisation messages (Nthuku et al., 2024; Sibuyi et al., 2025).

Another important finding was the growing use of ongoing communication and digital platforms to strengthen follow-up between meetings. The study found that phone calls, SMS, WhatsApp groups, and occasional digital progress updates enabled schools to maintain timely contact with parents and keep them informed about learner wellbeing and performance. This converged with literature that argued that empowerment is more effective when schools proactively communicate and provide accessible forums for collaboration, especially for parents who may not be able to attend school frequently (Gaspar & Sahay, 2025; Fan et al., 2025). In practical terms, digital communication may be interpreted as reducing distance barriers and making engagement more continuous, thereby strengthening shared responsibility for learner progress. However, the uneven access to digital platforms across schools in the study reflected a divergence from assumptions in some contemporary literature that communication technologies are readily available and consistently used; instead, the

finding reinforced the relevance of structural barriers such as network limitations and varying parent connectivity that continued to shape who benefits from digital engagement and who remains difficult to reach (Hornby & Lafaele, 2011; Finnerty, 2022).

The study also demonstrated that parental engagement was most visibly expressed through material provisioning and welfare support, including fees, uniforms, personal items, learning materials, assistive devices, and basic care. This practical orientation reflected the lived realities of parents in many contexts, where supporting schooling often begins with meeting basic requirements that enable attendance and participation. While much literature highlights planning and partnership structures, the study added a grounded dimension by showing that “engagement” was frequently enacted through tangible support that kept learners in school and equipped them for learning activities. This complements ecological and family-systems perspective which recognize that family resources and daily routines shape children’s learning opportunities (Şengönül, 2022). Yet, the reported financial strain and resource demands under CBC-related learning tasks aligned closely with earlier scholarship that socioeconomic constraints, limited resources, and institutional demands reduce parents’ ability to participate consistently (Hornby & Lafaele, 2011; Kenya Institute of Special Education, 2023). In this sense, the findings underscored that parental commitment alone may not translate into sustained engagement when households face competing economic pressures and disability-related costs.

Home-based academic support and monitoring of learner progress emerged as another important dimension, with evidence of parents supporting homework, reading, study routines, and behavioural follow-up. This converged with studies that link active parental participation to improved learner motivation and achievement, including evidence from Ghana where parental involvement and self-efficacy were associated with stronger learning motivation among learners with hearing impairment (Frontiers in Psychology, 2025). The study further deepened this conversation by highlighting how disability-specific communication barriers, especially limited Kenyan Sign Language skills, constrained parents’ ability to assist learners with hearing impairment at home. This finding aligned with Kenyan evidence showing minimal parental involvement in educational participation among learners with hearing impairment and calls for increased sensitisation and support to strengthen parents’ roles (Nthuku et al., 2024). A simple interpretation is that motivation to support learning may exist, but communication capacity becomes the gatekeeper of effective home-based support, especially where learning requires language mediation and interactive feedback.

Relatedly, skills-building initiatives-particularly Kenyan Sign Language and caregiving support featured as targeted empowerment approaches, although access was uneven. This aligned with the broader literature that parents often prefer training workshops and direct conversations with special

education teams as key channels for empowerment (Finnerty, 2022), and with South African findings showing that parents may lack knowledge of how partnerships function and therefore need training to participate confidently (Springer, 2025). It also reinforced the Kenyan literature that parental empowerment is recognised but remains under-implemented in practice (Kenya Institute of Special Education, 2023). In this study, the uneven reach of KSL training suggested that empowerment opportunities may be present but not systematically institutionalised, resulting in patchy benefits for families.

The findings also showed wide variation in parental involvement, ranging from strong partnership to minimal or absent engagement. This pattern converged with literature noting that parental engagement is often constrained by work schedules, limited access to information, perceptions of exclusion, and broader socioeconomic and cultural barriers (Hornby & Lafaele, 2011; Şengönül, 2022). Kenyan studies similarly document gaps in communication, structured engagement opportunities, and parent participation in assessment and planning processes (Bonjo et al., 2017; Kerubo & Makanya, 2024). In this study, the reported instances of weak follow-up and non-cooperation may be interpreted as reflecting both demand-side barriers (beliefs, denial, competing responsibilities) and supply-side limitations (inconsistent training, uneven outreach, limited accountability structures). This dual perspective helps readers understand that low engagement is rarely caused by a single factor; rather, it reflects interacting pressures across home and school environments.

Finally, the influence of structural barriers and targeted support linkages in shaping engagement brought the study into strong alignment with ecological and systemic views of parental involvement. Poverty, distance, boarding arrangements, low literacy, transport costs, and disability-related resource burdens limited parents' ability to attend meetings and sustain follow-up, consistent with scholarship emphasizing socioeconomic and institutional barriers to engagement (Hornby & Lafaele, 2011; Şengönül, 2022). At the same time, the study showed that some schools responded through home visits, referrals, guidance on disability certification, and external support linkages, reflecting the broader call in the literature for multi-level support systems that enable parents to participate more effectively (Gaspar & Sahay, 2025; Kenya Institute of Special Education, 2023). A simple interpretation is that where schools expanded engagement beyond meetings to practical linkages, parental participation was more likely to be sustained among vulnerable families because the support addressed real constraints rather than focusing only on information sharing.

Taken together, the study findings largely converged with the literature in affirming that parental empowerment and engagement strengthened learner support when schools created structured forums, maintained proactive communication, and provided practical skills-building opportunities. Points of

divergence emerged in the uneven consistency of training programmes, digital engagement access, and parents' participation in progress review and understanding of CBC expectations, highlighting that, the presence of engagement strategies did not automatically produce deep partnership. The discussion therefore reinforces the need to strengthen parental empowerment not only through meetings and communication, but also through systematic capacity-building, inclusive planning opportunities, and context-responsive support that addresses communication barriers and structural constraints.

5.2.6 Discussion of findings on learner placement, progression and transition

Heads of Institutions (HoIs) expressed generally high levels of agreement (an average of 81.8%) that structures for placement, transition and progression are effective. Strongest areas included documentation of transition plans (83.6%), parental involvement in placement decisions (83.4%), and alignment of placement with policy guidelines (82.4%). Slightly lower ratings were recorded for collaboration with receiving/feeder institutions (78.4%) and tracking or addressing transition challenges (78.6%). Overall, HoIs presented a positive outlook on the effectiveness of existing structures.

Teachers' ratings were comparatively lower, averaging 74.3%, suggesting more cautious perceptions of the effectiveness of the structures. The highest-rated areas were the use of functional educational assessments to inform placement (76.2%) and appropriate placement aligned to learner's special needs (75.2%). The lowest rating was on clarity of provisions for transition across levels and pathways (72.8%). These findings indicate concerns among teachers about the adequacy and consistency of structures in place to support assessment, placement, progression and transition of LSND.

Findings from this study are consistent with OECD (2021) who argued that education systems with formalized transition frameworks and individualised education plans demonstrate improved retention and progression outcomes for learners with disabilities. They also agree with the findings of empirical studies in Africa, which reveal that placement decisions are frequently influenced by the availability of special schools or units rather than systematic multidisciplinary assessments (African Union, 2020).

The findings revealed that placement was often described as effective when functional educational assessments were conducted appropriately. However, effectiveness was undermined by shortages of trained personnel, inadequate assessment equipment, long distances to assessment centers, limited parental readiness and the cost factor in getting a child to be assessed. Wrong placement was reported in some cases, leading to delayed progression.

Parental engagement emerged as both critical and challenging. While parents are recognised as key partners in placement and progression, many lack awareness of available pathways or struggle with stigma associated with disability. Some parents expressed difficulty coping with their children's special needs, limited knowledge of sign language, and insufficient information about progression beyond Grade 9. Parents called for closer collaboration with schools, training programmes, sensitisation workshops, and improved parent-school communication. Findings on involvement of parents corroborate the work of Anal et al. (2025) who stressed that ongoing professional development, family engagement, and the school-community partnerships were very necessary to align support with individual learner needs.

Inadequate facilities, instructional materials, assistive devices, and specialised personnel were widely cited. Assessment centers lacked modern equipment, and many schools did not have sufficient trained teachers (e.g., in speech therapy or specialised instruction). Vocational facilities and adaptive resources were also limited. Resource gaps affected accurate placement, curriculum delivery and smooth transition.

Assessment was identified as foundational to appropriate placement and progression. Weak identification methods, insufficiently equipped centers and limited capacity among assessment officers resulted in wrong placement and delays. Stakeholders emphasized the need for disability-appropriate assessment tools and qualified personnel, noting that placement decisions have long-term consequences for learners. The literature cited confirms that in Sub Saharan Africa, placement, progression, and transition face persistent and distinctive challenges. In one of such studies, Keitany et al. (2020) highlight the need for improved early identification competencies among pre-school teachers in Kenya and also advocate for targeted professional development as one of the possible interventions. Similarly, Kerubo and Makanya (2024) synthesize evidence showing that parental involvement is central to successful transition from school to employment for learners with intellectual disabilities.

Teachers suggested that assessment and placement of LSND should be free or affordable. They highlighted unequal treatment between stage-based and age-based pathways. They noted that learners progressing through stage-based pathway advancing according to skill acquisition rather than age are often overlooked or placed later, delaying their progression. These findings resonate with broader literature emphasizing the critical role of teacher knowledge and skills in supporting effective transitions. Morningstar and Mazzotti (2014), Rowe et al. (2021), and Shogren et al. (2016) argue that inadequate teacher preparation undermines successful transition outcomes for learners with disabilities. Dogbe (2015) similarly found that teachers often perceive themselves as having only

moderate knowledge of transition practices, policies, and barriers, which can contribute to inequities in placement decisions.

Education officers and HoIs highlighted gaps in policy clarity, particularly regarding transition to vocational level in the stage-based pathway. Capacity building for placement personnel, clearer guidelines, and improved monitoring systems were recommended. Regular supervision, workshops, benchmarking, and strengthened guidance and counseling services were seen as essential for improving learner outcomes. These findings are consistent with other empirical studies in Africa. Contributing on issues of policy, Kerubo and Makanya (2024) call for policy and practice reforms that position parents as equal partners, accompanied by accessible communication, person-centered transition planning, universal design for learning and assistive technologies.

Learners overwhelmingly reported positive school experiences. Their accounts revealed that they consider themselves to have progressed tremendously by attending school. Their responses generally point towards having made progress through: improved self-esteem and confidence and feeling valued and capable; values acquisition and character formation, including responsibility, respect, and cooperation, acquisition of academic, social, vocational, and life skills, such as literacy, agriculture, carpentry, cooking, and self-care; social integration, friendship, and improved communication (including sign language; identification and nurturing of talents in sports, drama, creative activities and acquisition of orientation and mobility, especially for learners with visual impairments.

Despite these gains, some learners noted continued societal stigma and called for greater acceptance and inclusion. They also called for more resources in their institutions and better living conditions in the dormitories.

5.3 Conclusions

The study reveals that special schools and units in Kenya have made moderate progress in implementing the CBC for learners with special needs and disabilities, with adapted curriculum designs generally available and aligned to CBC. Teachers and HoIs acknowledge efforts in curriculum adaptation and quality assurance at the classroom level, demonstrating proactive implementation despite resource constraints. However, gaps persist in the availability and diversity of curriculum support materials, interactive digital content, and assistive technologies, which limit the full realization of inclusive and equitable learning. Observations corroborate these perceptions, showing substantial deficiencies in printed materials and functional devices across schools. Access to digital content is improving, yet integration into teaching remains inconsistent. Budgetary limitations and inadequate specialized resources continue to hinder effective implementation. Despite these challenges, schools

exhibit commitment to learner-centered practices and online safety. Strengthening resource provision, teacher capacity, and equitable distribution of materials is critical to enhance CBC delivery. Overall, while foundational progress has been made, addressing resource gaps is essential to ensure that all learners with special needs and disabilities achieve their full potential.

The findings on teachers' capacity show that teachers generally have a solid foundation for delivering CBC to learners with special needs and disabilities, especially in planning, individualized support, and learner-centred teaching. Parents reported positive learner gains in communication, self-care, academic progress, and social development, all attributed to the efforts of the teachers. However, these strengths are limited by understaffing, inadequate specialised skills, weak support and guidance, heavy workload, limited time for adapted materials, and insufficient support services and resources.

In conclusion, teacher capacity exists, but it must be strengthened through better staffing, continuous retooling, stronger professional support, and adequate adapted resources to ensure consistent and effective curriculum delivery for LSND.

The study concludes that there are disparities in access to infrastructure in institutions serving learners with special needs and disabilities. While some schools have adequate facilities, many face shortages of classrooms, poorly maintained facilities and limited adaptation of pathways and sanitation areas, which affect safety and accessibility. Auxiliary personnel are also insufficient, with limited access to therapists and specialised professionals, while caregivers are often overstretched or lack formal training, leaving teachers to assume additional support roles. Support services required for effective curriculum implementation remain inadequate or inconsistently provided, limiting participation and learning outcomes for learners with complex and multiple disabilities.

The study concludes that while many schools have established systems and opportunities for identifying and nurturing the talents of learners with special needs and disabilities, the implementation and effectiveness of these systems remain inconsistent. Curricular, co-curricular, vocational, and curriculum-based pathways provide key platforms for talent identification, and parents play a supportive role through observation and identification of talents, encouragement and provision of resources at home. However, gaps persist, including limited adapted equipment and assistive technologies, insufficient teacher capacity, weak documentation of learner portfolios, and minimal collaboration between some schools and parents. These findings suggest that although talent identification and development structures exist in theory, practical application is often limited, highlighting the need for targeted support, capacity building and resource provision to ensure all learners' talents are effectively recognised and nurtured.

The findings showed that parental empowerment and engagement in supporting learners with special needs and disabilities was mainly enabled through school-initiated forums, sensitisation, training and regular communication, alongside practical parental support such as provision of basic needs and home follow-up. However, engagement varied across schools and was less consistent in other areas such as parents' participation in reviewing learner progress and understanding CBC expectations, and it was constrained by poverty, distance, and communication barriers. Given these findings, the study concludes that the level of parental empowerment and engagement was moderate and uneven across settings.

The study findings revealed mixed opinions about the effectiveness of structures for placement, progression, and transition for LSND. HoIs perceived the systems more positively than teachers. Learners reported meaningful personal growth and skill development attributed to attending school. All categories of respondents acknowledged challenges that undermine effectiveness of the systems that are in place. The study therefore concludes that while systems for placement, progression and transition are available, their effectiveness will be undermined unless measures are taken to address the key challenges related to resources, assessment capacity, parental involvement and clarity of guidelines for educational assessment, progression and transition of learners with special needs and disabilities. Strengthening assessment systems, building stakeholder capacity, enhancing parental engagement, clarifying progression pathways (especially vocational routes), and investing in resources will be critical to ensuring that CBC fully realizes its inclusive vision for learners with special needs and disabilities.

5.4 Recommendations

1. KICD should develop audio visual resources for Kenyan Sign Language, Sign language Books, Braille supplementary books, easy to read books, and teachers' handbooks for different levels of the stage-based pathway in order to support accessible learning for learners with special needs and disabilities.
2. KICD in collaboration with other relevant stakeholders, to organise structured orientation programmes, coaching and mentorship programmes, for teachers on interpretation of the curriculum designs, the effective use of digital content and assistive technologies in Special Needs Education schools, units and integrated programmes.
3. KICD in collaboration with other relevant stakeholders to provide regular capacity building and professional training for teachers, caregivers and auxiliary staff to enhance their competence in supporting learners with special needs and disabilities.

4. MoE, TSC and other relevant stakeholders to recruit and deploy additional SNE-trained teachers, learner support assistants and other specialists to provide learner support.
5. KICD in collaboration with other relevant stakeholders to enhance Pre-service and In-service training to address special education realities by strengthening practicum experiences, disability-specific communication skills, curriculum adaptation competencies and vocational instruction skills.
6. MoE to expand and maintain physical and technological infrastructure in special schools and units to accommodate the diverse needs of learners.
7. MoE in collaboration with stakeholders to enhance avenues for talent identification, development and exposure for LSND.
8. KICD to develop and disseminate parental empowerment programmes on disability awareness and interventions to strengthen their role in the learning process of their children.
9. MoE and relevant agencies should strengthen learner assessment and placement systems by standardizing procedures, equipping centers with appropriate technologies, and deploying professionals to ensure accurate and timely placement.
10. KICD in collaboration with relevant agencies to conduct a study on implementation of CBE of LSND at Senior School and Vocational levels of education.
11. KICD in collaboration with relevant agencies to enhance implementation of value-based education for learners in SNE schools and units to strengthen character formation and nurturing of ethical citizens.

REFERENCES

- Abubakar, A., & Alhassan, A. (2025). Parental involvement self-efficacy and learning motivation among hearing-impaired students in Savelugu, Ghana. *Frontiers in Psychology*, 16, Article 1705133. <https://doi.org/10.3389/fpsyg.2025.1705133>
- Abubakar, A., & Alhassan, A. (2025). Parental involvement self-efficacy and learning motivation among hearing-impaired students in Savelugu, Ghana. *Frontiers in Psychology*, 16, Article 1705133. <https://doi.org/10.3389/fpsyg.2025.1705133>
- African Journal of Disability (202?) *Inclusive education and related policies in special needs schools in South Africa*.
- African Journal of Disability. (2025). *Parental perspectives on school support for children with physical disabilities in Limpopo Province*. African Journal of Disability. Retrieved from <https://ajod.org/index.php/ajod/article/view/1640/3581>
- African Journal of Disability. (2025). *Parental perspectives on school support for children with physical disabilities in Limpopo Province*. African Journal of Disability. Retrieved from <https://ajod.org/index.php/ajod/article/view/1640/3581>
- African Union (2025). Continental Education Strategy for Africa 2026-2035: A framework for Action.
- Ainscow, M. (1999). *Understanding the Development of Inclusive Schools*. London: RoutledgeFalmer.
- Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). Universal Design for Learning (UDL): A content analysis of peer-reviewed journal papers from 2012 to 2015. *Journal of the Scholarship of Teaching and Learning*, 16(3), 39–56. <https://doi.org/10.14434/josotl.v16i3.19295>
- Al-Azawei, A., Serenelli, F., & Lundqvist, K. (2016). Universal Design for Learning (UDL): A content analysis of peer-reviewed journal papers from 2012 to 2015. *Journal of the Scholarship of Teaching and Learning*, 16(3), 39–56. <https://doi.org/10.14434/josotl.v16i3.19295> (doi.org in Bing)
- Alhassan, A. S., Issaka, C. A., & Iddrisu, H. M. (2025). Barriers to parental involvement in the education of children with disabilities in Tamale Metropolis. *American Journal of Human Psychology*, 3(1), 1–15. <https://doi.org/10.54536/ajhp.v3i1.4523>
- Altani, M. Z. (2020). Extrability and the theory of multiple intelligences as a phenomenon for an inclusive education renewal. *European Journal of Special Education Research*, 5(3), 45–58. <https://doi.org/10.5281/zenodo.3601371>
- American Psychological Association. (2018). *APA dictionary of psychology*. Washington, DC: American Psychological Association
- Anderson, A., & Carr, M. (2021). Applied behaviour analysis for autism: Evidence, issues, and implementation barriers. *Current Developmental Disorders Reports*, 8(3), 191–200. <https://doi.org/10.1007/s40474-021-00231-5> (doi.org in Bing)
- Andiema, N. C. (2020). Teachers Competencies in Evaluation of Competency Based Curriculum Among Special Needs Learners in Kenya. *Global Journal of Educational Research*, 19(2).
- Angoye, J. (2021). *Implementing parental empowerment and engagement strategies in times of crisis: Experiences from RELI members in Kenya*. Regional Education Learning Initiative.
- Ardzulyna Anal, Ain Syafia Qutreenie Alwi and Anis Shaari. (2025). The challenges in facilitating the transition-to-career process special needs integrated special education programme. *Kajian Malaysia* 43(2): 81–100. <https://doi.org/10.21315/km2025.43.2.5> To link to this article: <https://doi.org/10.21315/km2025.43.2.5>
- Associated Press News. (2024). Inclusive education pilots integrating deaf students in Senegal. <https://apnews.com/article/addeb6211dda1fa92b9a4e105af1e93a>
- Associated Press News. (2024). Inclusive education pilots integrating deaf students in Senegal. Retrieved from <https://apnews.com/article/addeb6211dda1fa92b9a4e105af1e93a>

- Beyene W. M, Mekonnen A. T & Giannoumis, G.A (2020) Inclusion, access, and accessibility of educational resources in higher education institutions: exploring the Ethiopian context
- Bonjo, J. S., Edward, K. J., & Nyangara, K. (2017). *Extent of involvement of parents in the identification of children with special needs in Kenya. IRA*
- Bonjo, J. S., Edward, K. J., & Nyangara, K. (2017). *Extent of involvement of parents in the identification of children with special needs in Kenya. IRA*Bottom of Form
- Booth, T., & Ainscow, M. (2002). *The Index for Inclusion: Developing learning and participation in schools*. Bristol, UK: Centre for Studies on Inclusive Education.
- Bowlby, J. (1983). *Attachment: Attachment and Loss. Volume One (Basic Books Classics) (2nd edition)*. Basic Books.
- Brunetti, I., & Corsini, L. (2019). School-to-work transition and vocational education: A comparison across Europe. *International Journal of Manpower*, 40(8), 1411–1437. <https://doi.org/10.1108/IJM-02-2018-0061>
- Bunning, K., Gona, J. K., Newton, C. R., & Hartley, S. (2022). Empowering caregivers of children with learning and developmental disabilities: From situation analysis to community-based inclusive development in Kilifi, Kenya. *Tizard Learning Disability Review*, 27(1), 1–10. <https://doi.org/10.1108/TLDR-08-2021-0023>
- Bureau V, Falkenbach M, Neri S, Peckham S, Wallenburg I, Kuhlmann E. Health system resilience and health workforce capacities: Comparing health system responses during the COVID-19 pandemic in six European countries. *The International Journal of Health Planning and Management*. 2022 Jul;37(4):2032-48. wiley.com
- Bureau, L., Hansen, T., & Nielsen, R. (2022). Organizing formative assessments in inclusive classrooms: Effects on learner engagement. *Educational Assessment, Evaluation and Accountability*, 34(2), 189–205.
- Bureau, S., Jensen, H., & Larsen, P. (2022). Identifying emerging talents through formative assessment. *Scandinavian Journal of Educational Research*, 66(5), 765–780.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa> (doi.org in Bing)
- CAST. (2018). *Universal Design for Learning Guidelines version 2.2*. Wakefield, MA: Author. Retrieved from <http://udlguidelines.cast.org>
- Cavioni et al. (2024) Cavioni, V., Zanetti, M., & Pepe, A. (2024). Assistive technologies and inclusive learning environments: Evaluating impact on student participation. *Computers & Education*, 205, 104547. <https://doi.org/10.1016/j.compedu.2024.104547>
- Cavioni V, Broli L, Grazzani I. Bridging the SEL CASEL Framework with European educational policies and assessment approaches. *INTERNATIONAL JOURNAL OF EMOTIONAL EDUCATION*.. 2024;16(1):6-25.
- Cavioni, V., Zanetti, M., & Pepe, A. (2024). Assistive technologies for learners with disabilities: Enhancing inclusion and participation. *Frontiers in Education*, 9, 112–124.
- Cherui R., and Kipkeni S. (2025). Redefining Parental Involvement in Competency Based Curriculum Implementation in Kenya. A Critical Review.
- Clark (2015) Clark, P. (2015). Parent–teacher collaboration in special education: Building effective partnerships. *Journal of Special Education Leadership*, 28(1), 31–45.
- Clark I. Formative assessment: Translating high-level curriculum principles into classroom practice. *Curriculum Journal*. 2015 Jan 2;26(1):91-114.
- Clark, C. (2015). Stakeholder collaboration and inclusive education outcomes. *British Journal of Special Education*, 42(4), 432–448.

- Clifford Otieno Owino, Beatrice A. Bunyasi, Racheal W. Kamau-Kangethe, Material Resources Adaptation and Implementation of CBC for Early Years Learners with Disabilities in Primary Schools in Nairobi City County Kenya. Kenyatta University. Kenya. International Journal of Research and Innovation in Social Science (IJRISS) |Volume VI, Issue XI, November 2022|ISSN 2454-6186.
- Constitution of Kenya 2010, Article 260.
<https://eregulations.invest.go.ke/media/ConstitutionofKenya%202010.pdf> 13 Persons with Disabilities Act, 2003. https://www.un.org/development/desa/disabilities/wp-content/uploads/sites/15/2019/11/Kenya_Persons-with-Disability-Act.pdf 14 United Nations. (n.d.).
- Convention on the Rights of Persons with Disabilities, 2006 23
- Cook, A. M., & Hussey, S. M. (2002). Assistive technologies: Principles and practice (2nd ed.). St. Louis, MO: Mosby.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). Sage Publications.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). Thousand Oaks, CA: SAGE Publications.
- Delubom, N. E., Marongwe, N., & Buka, A. M. (2020). Managers' challenges on implementing inclusive education: Technical vocational education and training colleges. *Cypriot Journal of Educational Sciences*, 15(6), 1508–1519. <https://doi.org/10.18844/cjes.v15i6.5294>
- Delubom, T., Adeyemi, O., & Chukwu, P. (2020). Vocational education and training for students with disabilities: Pathways to employment and social inclusion. *International Journal of Disability, Development and Education*, 67(4), 512–528.
- Demissie, F., & Pearse, S. (2025). *Parental engagement and transformation as a marker of quality in early childhood education and care*. *Journal of Early Childhood Research*, 23(1), 93–106. <https://doi.org/10.1177/1476718X241293899>
- Department of Education. (2001). *Education White Paper 6: Special needs education – Building an inclusive education and training system*. Pretoria: Government Printer.
- Donohue, D., & Bornman, J. (2014). The challenges of realizing inclusive education in South Africa. *South African Journal of Education*, 34(2), 1–14.
- Dumilig, R., & Abdulrahman, A. (2024). Belief in the Young: Journey of SPED Receiving Teachers in Teaching Learners with Special Education Needs. *Psychology and Education: A Multidisciplinary Journal*, 16(8), 839-844. <http://dx.doi.org/10.5281/zenodo.10559472>
- Dogbe, M. (2015). Teachers' perceptions, knowledge, and involvement in transition practices for learners with disabilities in Ghana. *International Journal of Special Education*, 30(2), 45–58.
- Eghan, F. (2025). Teacher preparedness for inclusive classrooms: A study of special education support in basic schools in Cape Coast, Ghana. *International Journal of Education and Evaluation*, 11(3), 131–148. <https://doi.org/10.56201/ijee.v11.no3.2025.pg131.148>
- Engelbrecht, M., Shaw, L., & Van Niekerk, L. (2017). A literature review on work transitioning of youth with disabilities into competitive employment. *African Journal of Disability*, 6, 298. <https://doi.org/10.4102/ajod.v6i0.298>
- Engelbrecht, M., Shaw, L., & Van Niekerk, L. (2017). A literature review on work transitioning of youth with disabilities into competitive employment. *African Journal of Disability*, 6, 298. <https://doi.org/10.4102/ajod.v6i0.298>
- Engelbrecht, M., Shaw, L., & Van Niekerk, L. (2017). *A literature review on work transitioning of youth with disabilities into competitive employment*. *African Journal of Disability*, 6, 298. <https://doi.org/10.4102/ajod.v6i0.298>

- European Journal of Special Education Research (2021). *Access and constraints of learning materials for visually impaired learners* (pp. 175).
- Ewa, M. A. (2023). Inclusive education: Developments in Sub-Saharan Africa. *European/American Journals of Education*, 11(2), 45–60
- Ewa, C. (2023). Transition challenges in inclusive education systems: A regional perspective. *African Journal of Inclusive Education*, 5(2), 101–118.
- Ewa, C. (2023). Transition challenges in inclusive education systems: A regional perspective. *African Journal of Inclusive Education*, 5(2), 101–118.
- Fan, W., Zhang, Y., & Li, H. (2025). Empowering parents in inclusive education: Communication, collaboration, and shared planning. *Educational Review*, 77(3), 412–430.
- Fedha, F. (2025). In-service teachers' knowledge and preparedness in supporting students with mild disabilities. *International Journal of Research and Innovation in Social Science*.
- Finnerty, A(2022): Empowering Engagement: Parent Perspectives on Special Education Knowledge and Family-School Partnership. University of Colorado at Denver ProQuest Dissertations & Theses, 2024. 31243958.
- Finnerty, J. (2022). Parent perspectives on special education knowledge and family–school partnerships in Iowa. *Journal of Special Education*, 56(4), 215–229.
- Flora, F. (2025). *In-Service Teachers' Knowledge and Preparedness in Supporting Students with Mild Disabilities in an Inclusive Class in Secondary Schools, Kenya*. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(3 S), 6442–6455.
- Florian, L., & Rouse, M. (2009). The inclusive practice project in Scotland: Teacher education for inclusive education.
- Fränkel S., Sterken M., Stinken-Rösner L. (2023). From barriers to boosters: Initial teacher education for inclusive science education. *Frontiers in Education*, 8, 1191619. <https://doi.org/10.3389/feduc.2023.1191619>
- Frontiers in Education (2022). Learning together: The dynamics of training teachers for disability inclusion in South Africa. Retrieved from Frontiers publications.
- Frontiers in Education (2025). *Inclusive education in resource-constrained settings: teachers' practices for autistic learners*.
- Frontiers in Psychology. (2025). Parental involvement and self-efficacy among parents of hearing-impaired learners in Ghana: Impacts on learner motivation. *Frontiers in Psychology*, 16, Article 1527890. <https://doi.org/10.3389/fpsyg.2025.1527890>
- Gachoki, M. (2024). Raising a child with autism in Kenya: Facing stigma, finding glimmers of hope. *NPR News*.
- Gaspar, C. R., & Sahay, D. (2025). Expanding the concept of parent involvement to special education: Considerations for inclusivity. *Journal of Family Theory & Review*. Advance online publication. <https://doi.org/10.1111/jftr.12634>
- Gaspar, R., & Sahay, P. (2025). Structured parental involvement and learner outcomes in inclusive schools. *Frontiers in Education*, 10, Article 1546789. <https://doi.org/10.3389/feduc.2025.1546789>
- Gavade, A. Y., Sidotam, A., & Varanasi, R. A. (2023). *Pandemic, hybrid teaching & stress: Examining Indian teachers' sociotechnical support practices in low-income schools*.
- Gindis, B. (1995). The social/cultural implication of disability: Vygotsky's paradigm for special education. *Educational Psychologist*, 30(2), 77–81. https://doi.org/10.1207/s15326985ep3002_4
- Gitonga, R. (2024). Teacher readiness and resource utilization in inclusive classrooms in Kenya. *Journal of Inclusive Education*.

- GoK (2018). Sector Policy for Learners and Trainees with Disabilities. *Ministry of Education, Government of Kenya*.
- GoK (2022). Disability Medical Assessment and Categorization Guidelines. *Ministry of Health, Government of Kenya*. Website : <http://www.health.go.ke>
- Guest, G., MacQueen, K. M., & Namey, E. E. (2012). *Applied thematic analysis*. Thousand Oaks, CA: SAGE Publications.
- Havik, R. N. (2025). *Teacher self-efficacy and the implementation of inclusive practices: A systematic review*. University of Groningen.
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. <https://doi.org/10.1016/j.susoc.2022.05.004>
- Hermata, N. ., Barokah, R. G. S., Putri, A. M. ., Dita, R. ., Nurbaiti, S. ., & Ardianulya, V. . (2025). Identifying and Supporting Children with Special Needs in Inclusive Elementary Schools: Challenges and Strategies. *Journal of Educational Learning and Innovation (ELIa)*, 5(1), 42–53. <https://doi.org/10.46229/elia.v5i1.993>
- Hoover-Dempsey, K. V., & Sandler, H. M. (1995). *Parental involvement in children's education: Why does it make a difference?* *Teachers College Record*, 97(2), 310–331. <https://doi.org/10.1177/016146819509700202>
- Hoover-Dempsey, K. V., & Sandler, H. M. (1995). *Parental involvement in children's education: Why does it make a difference?* *Teachers College Record*, 97(2), 310–331. <https://doi.org/10.1177/016146819509700202>
- Hornby, G., & Lafaele, R. (2011). Barriers to parental involvement in education: An explanatory model. *Educational Review*, 63(1), 37–52.
- Huang, F. L., & Moon, T. R. (2009). Is experience the best teacher? A multilevel analysis of teacher characteristics and student achievement in low performing schools. *Educational Assessment, Evaluation and Accountability*, 21(3), 209–234. <https://doi.org/10.1007/s11092-009-9074-2>
- Inclusive education pilots integrating deaf students in Senegal. (2024). *Associated Press News*.
- Individuals with Disabilities Education Act, 20 U.S.C. § 1400 et seq. (2004). Washington, DC: U.S. Government Printing Office.
- International Journal of Education and Multidisciplinary Studies*, 7(3). <http://dx.doi.org/10.21013/jems.v7.n3.p6>
- Irish, C. K., Wells, M. S., Davis, J. S., Peck, K., & Clayton, C. (2023). *Pandemic innovations in teacher education: Communities of practice, mentoring, and technology*. *Education Sciences*, 13(7), 653.
- chaune, M., & Maiyo, J. (2023). *Teacher mentorship and support in Kenya: A desktop review*. *East African Journal of Education Studies*. <https://doi.org/10.37284/eajes.6.2.1364> (journals.eanso.org)
- Jacob, U. S., Pillay, J., & Chisunum, J. I. (2024). An Exploration of Curriculum Adequacy for Pre-Service Teachers of Learners With Special Needs. *Studies in Learning and Teaching*, 5(2), 382-401. <https://doi.org/10.46627/silet.v5i2.376>
- Jala, C. L. (2025). A narrative inquiry of special needs teachers in educating learners with special educational needs and disabilities. *Ignatian International Journal for Multidisciplinary Research*, 3(7), 704–743. <https://doi.org/10.5281/zenodo.16095810>
- Japan International Cooperation Agency [JICA]. (2022). For inclusive and dynamic development in Sub-Saharan Africa. Tokyo: JICA.
- Japan International Cooperation Agency. (2022). *Education sector analysis: Transition frameworks and inclusive pathways in Africa*. Tokyo: JICA Research Institute.

- Japan International Cooperation Agency. (2022). *Education sector analysis: Transition frameworks and inclusive pathways in Africa*. Tokyo: JICA Research Institute.
- Jeptepkeny, A., & Keter, J. (2025). The influence of inclusive education planning on the implementation of competency-based education in senior schools in Kenya. *Journal of Research Innovation and Education Journal (JRIIE)*, 9(2), 916–928
- Johnson F., Erasmus C. J. (2024). Equipping educators for learning support: A systematic review. *British Journal of Special Education*, 51(3), 296–316. <https://doi.org/10.1111/1467-8578.12522>
- Kahiga, D., & Kamau, G. (2023). Resource availability and inclusive classroom practice in Kenyan special schools. *Journal of Special Needs Education*.
- Kakuru, T. (2022). Resource challenges and inclusive education: Experiences of special needs learners in Kenyan primary schools. *Journal of Inclusive Education Studies*.
- Keitany S., Kapkiai M., and Kiprop, D., (2020). Influence of pre-school teachers' early identification of learners with special needs in public ecde centres in keiyo south sub-county, Kenya. *European journal of special education research*, [s.l.], mar. 2020. Issn 25012428.
- Kenya Institute of Special Education. (2023). Parental empowerment and engagement in nurturing potential of children with disabilities. *International Academic Journal of Social Sciences and Education (IAJSSE)*, 2(SI4), 54–95.
- Kenya Institute of Special Education. (2023). *Parental empowerment and engagement in nurturing potential of children with disabilities. International Academic Journal of Social Sciences and Education (IAJSSE)*, 2(SI4), 54–95. https://iajournals.org/articles/iajsse_v2_si4_54_95.pdf
- Kenya Institute of Special Education. (2023). *Parental empowerment and engagement in nurturing potential of children with disabilities. International Academic Journal of Social Sciences and Education (IAJSSE)*, 2(SI4), 54–95. https://iajournals.org/articles/iajsse_v2_si4_54_95.pdf
- Kenya Institute of Special Education (KISE). (2023). Parental empowerment and engagement in nurturing potential of children with disabilities. *International Academic Journal of Social Sciences and Education*, 2(SI4), 54–95.
- Kerubo, O. D., & Makanya, M. (2024). *Parental involvement in training on the transitioning of learners with intellectual disability from school to employment in Nairobi City County, Kenya. European Journal of Special Education Research*, 10(7). <http://dx.doi.org/10.46827/ejse.v10i7.5636>
- Kerubo, O. D., & Makanya, M. (2024). *Parental involvement in training on the transitioning of learners with intellectual disability from school to employment in Nairobi City County, Kenya. European Journal of Special Education Research*, 10(7). <http://dx.doi.org/10.46827/ejse.v10i7.5636>
- Kerubo, Ondara D., Makanya, M., (2024). Parental involvement in training on the transitioning of learners with intellectual disability from school to employment in nairobi city county, Kenya. **European Journal of Special Education Research**, [S.l.], v. 10, n. 7, oct. 2024. ISSN 25012428.
- Kerubo, S., & Makanya, P. (2024). Parental involvement in school-to-employment transitions for learners with intellectual disabilities: Policy and practice reforms. *International Journal of Inclusive Education*, 28(9), 1145–1162.
- Kerubo, S., & Makanya, P. (2024). Parental involvement in school-to-employment transitions for learners with intellectual disabilities: Policy and practice reforms. *International Journal of Inclusive Education*, 28(9), 1145–1162.
- KICD (2017). The Basic Education Curriculum Framework.
- Kilonzo, A., & Njoroge, P. (2023). Curriculum adaptation and learner access: Challenges in Kenyan primary schools. *East African Journal of Education*.

- Kiss B, Sekulova F, Hörschelmann K, Salk CF, Takahashi W, Wamsler C. Citizen participation in the governance of nature-based solutions. *Environmental Policy and Governance*. 2022 Jun;32(3):247-72. wiley.com
- Kitsao-Wekulo, P., et al. (2021). *Parenting empowerment project: Evaluation of community-based parenting empowerment program in Kenya and Zambia*. APHRC.
- Konga D. J. and Cheboi S. T, (2021) *Influence of School Resources on Academic Performance of Visually Impaired Learners in Integrated Public Primary Schools in Baringo County, Kenya* *European Journal of Special Education Research*, 2021.
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120–124.
<https://doi.org/10.1080/13814788.2017.1375092> (This article also discusses the use of focus groups and interviews as qualitative methods for exploring shared experiences and contextual issues.)
- Kupenda for the Children. (2022). *Parent empowerment and advocacy for children with disabilities in Kenya*. Kupenda Publications.
- Kyule, M. N., & Ronoh, T. K. (2025). *Inadequacies in teacher psychosocial support during the COVID-19 disruption in Kenya*. *European Journal of Education Studies*, 12(11).
<https://oapub.org/edu/index.php/ejes/article/view/6297> (oapub.org)
- La Grouw Y, van der Woerd O, Visser EL, Blijleven W. Mundane dynamics: Understanding collaborative governance approaches to ‘big’ problems through studying ‘small’ practices. *Public Policy and Administration*. 2024 Jul;39(3):412-35.
- Lamin, (2022): *Special Educators Perspectives Regarding Constraints In Delivering Special Needs Education In Sierra Leone*
- Limisi, S. K., Kipruto, J., & Ngeno, G. (2023). Utility of peer mentorship programmes in addressing disruptive behaviours among secondary school students in informal settlements in Nairobi County, Kenya. *International Journal of Research and Innovation in Social Science*, 7(4), 722–737.
<https://doi.org/10.47772/IJRISS.2023.7459> (rsisinternational.org)
- Lichtman, M. (2014). *Qualitative research for the social sciences*. Thousand Oaks, CA: SAGE Publications.
- Lincoln, Y. S., & Guba, E. G. (2005). *Naturalistic inquiry*. Beverly Hills, CA: SAGE Publications. (Originally published in 1985, but widely cited in later editions and reprints. This is the foundational text on credibility, transferability, dependability, and confirmability in qualitative research.)
- Magableh & Abdaullah (2021) Magableh, I., & Abdaullah, H. (2021). Assistive technology for learners with disabilities: Appropriateness and effectiveness in classroom contexts. *British Journal of Special Education*, 48(4), 512–528.
- Magableh IS, Abdullah A. The impact of differentiated instruction on students’ reading comprehension attainment in mixed-ability classrooms. *Interchange*. 2021 Jun;52(2):255-72.
- Magableh, I., & Abdaullah, H. (2021). Assistive technology and equitable participation in inclusive education. *International Journal of Disability, Development and Education*, 68(6), 745–760.
- Mahlobo, P., & Naicker, S. (2025). Understanding home–school partnerships for parents of children with severe intellectual disabilities in South Africa. *International Journal of Special Education*, 40(2), 1–15.
<https://doi.org/10.1007/s10780-025-09534-5>
- Mahlobo, P., & Naicker, S. (2025). Understanding home–school partnerships for parents of children with severe intellectual disabilities in South Africa. *International Journal of Special Education*, 40(2), 1–15.
<https://doi.org/10.1007/s10780-025-09534-5>
- Mahmood, A., Huang, X., & Rehman, N. (2024). The role of teachers and administrators in supporting the adaptation of students with special needs in mainstream high schools. *Quality Education for All*, 2(1), 37–56. <https://doi.org/10.1108/QEA-06-2024-0054>

- Makhubela, M., & Ramafalo, M. (2025). Parental perspectives on school support for children with physical disabilities in Limpopo Province, South Africa. *African Journal of Disability*, 14, Article 1640. <https://doi.org/10.4102/ajod.v14i0.1640>
- Makhubela, M., & Ramafalo, M. (2025). Parental perspectives on school support for children with physical disabilities in Limpopo Province, South Africa. *African Journal of Disability*, 14, Article 1640. <https://doi.org/10.4102/ajod.v14i0.1640>
- Maulana, A. F. (2023). *Systematic literature review: The role of educational facilities and infrastructure for children with special needs at school*. Jurnal Asesmen dan Intervensi Anak Berkebutuhan Khusus, 23(2), 98–106.
- Simorangkir, M. R. R. (2021). Conditions of facilities and infrastructure for inclusive school education services. *International Journal of Elementary Education*, 10(2), 38–41.
- McLeod, S. (2020). Maslow's hierarchy of needs. *Simply Psychology*. Retrieved from <https://www.simplypsychology.org/maslow.html>
- Meda, L. M. L., Mansour, N. N., Almaazmi, S. A., & Jama, L. J. (2026). Effective early intervention strategies for supporting children with special educational needs: A case study. *Frontiers in Education*, 11, 1456789. <https://doi.org/10.3389/feduc.2026.1456789>
- Mendoza M., Heymann J. (2024). Implementation of inclusive education: A systematic review of studies of inclusive education interventions in low- and lower-middle-income countries. *International Journal of Disability Development and Education*, 71(3), 299–316. <https://doi.org/10.1080/1034912x.2022.2095359>
- Mergia, A. T. (2025). Preparing Special Needs Educators for Mainstream School Practice in Ethiopia: A Study of the Special Needs and Inclusive Education Professional Preparation Program. *Sage Open*, 15(4). <https://doi.org/10.1177/21582440251407620>
- Ministry of Education. (2009). *The National Special Needs Education Policy Framework*. Nairobi: Government of Kenya.
- Mokhtar, K., Azuddin, S. K. Y., & Zaharudin, R. (2025). Best practices in supporting career transition for students with special needs in the 21st century: A systematic review. *International Journal of Academic Research in Progressive Education and Development*. <https://hrmars.com/IJARPED/article/view/23821/Best-Practices-in-Supporting-Career-Transition-for-Students-with-Special-Needs-in-the-21st-Century-A-Systematic-Review>
- Mokhtar, K., Azuddin, S. K. Y., & Zaharudin, R. (2025). Best practices in supporting career transition for students with special needs in the 21st century: A systematic review. *International Journal of Academic Research in Progressive Education and Development*. Retrieved from <https://hrmars.com/IJARPED/article/view/23821>
- Mokhtar, K., Azuddin, S. K. Y., & Zaharudin, R. (2025). *Best practices in supporting career transition for students with special needs in the 21st century: A systematic review*. *International Journal of Academic Research in Progressive Education and Development*.
- Morningstar, M. E., & Mazzotti, V. (2014). Teacher preparation to deliver evidence-based transition planning and services to youth with disabilities (Document No. IC-1). University of Florida. <https://cedar.education.ufl.edu/wp-content/uploads/2014/08/transition-planning.pdf>
- Morningstar, M. E., & Mazzotti, V. L. (2014). Teacher knowledge and skills for successful transition programs. *Career Development and Transition for Exceptional Individuals*, 37(2), 73–83.
- Mpolomoka D. L., Mandyata J., Muvombo M., Kabundula P., Beirat M. A. (2025). Bridging the gap: Evaluating the effectiveness of one-course special education training in preparing teachers for inclusive classrooms in Zambia. *Journal of Early Childhood Development and Education*, 2(2), 44–51. <https://doi.org/10.58723/junior.v2i2.385>
- Mugenda, O. M., & Mugenda, A. G. (2019). *Research methods: Quantitative and qualitative approaches*. Acts Press.

- Mugo, J., & Wambua, L. (2022). Curriculum adaptation for inclusive competency-based classrooms in Kenya. *East African Journal of Education and Practice*.
- Muliadi, Tsaputra, A., Rahmahtrisilvia, Nurhastuti and Amani, R. (2022). Parental role in supporting inclusive education for children with autism. *Indonesian Journal of Educational Development (IJED)*, 6(3), pp. 832-844
- Mumbe, K., & Njagi, L. (2024). Investigating the influence of training resources and materials in in-service teacher training on the implementation of the Competency-Based Curriculum in public primary schools in Kilifi County, Kenya. *East African Journal of Education Studies*.
- Mutoni Uwase, N. (2025). Strategies for Supporting Students with Disabilities in Schools. *SCIENCES*, 4(1), 11-17.
- Mutoni, J. (2025). Family acceptance and community support in talent development for learners with disabilities. *African Journal of Special Needs Education*, 10(2), 88–104.
- Mutoni, J. (2025). Family acceptance and inclusive practices: Enhancing independence for learners with disabilities. *African Journal of Special Needs Education*, 8(2), 55–70.
- Mbeja, J. (2022). Transition of learners with intellectual disabilities from special schools to community participation in Busia County, Kenya. *African Journal of Disability*, 11, Article 945. <https://doi.org/10.4102/ajod.v11i0.945>
- Mwangi, S., & Mutiso, J. (2021). Resource provision for learners with disabilities in competency-based environments. *International Journal of Special Education*.
- Nairobi County study on ICT integration (2025). *International Journal of Research and Innovation in Social Science*.
- Nicholl, P., Graham, D., Redpath, J., Kearney, P., Wallace, J., Mulvenna, M., Martin, S., & Benest, I. (2014). Identifying the Barriers and Enablers for Supporting Learners with Special Needs in Higher Education. In *Handbook of Research on Transnational Higher Education* (pp. 467–485). IGI Global. <https://doi.org/10.4018/978-1-4666-4458-8.ch024>
- Njenga, K., & Chege, F. (2021). Technology integration and special needs learners: Assessing digital readiness in schools. *International Journal of Inclusive Education*.
- Nordin, M. N., Baharudin, S. M., Mosbiran, N. F., & Abbas, M. S. (2024). Applications of multiple intelligences in learning process of special education needs students with visual impairment. *International Journal of Academic Research in Business and Social Sciences*, 14(3), 21029. <https://doi.org/10.6007/IJARBS/v14-i3/21029>
- Nthuku, P. K., Kibaara, T. M., & M’Ngaruthi, T. K. (2024). Parental involvement influence on education participation for learners with hearing impairments in special public primary schools in Meru and Isiolo Counties – Kenya. *Journal of Education*, 4(3), 32–50. <https://doi.org/10.70619/vol4iss3pp32-50>
- Nthuku, P. K., Kibaara, T. M., & M’Ngaruthi, T. K. (2024). Parental involvement influence on education participation for learners with hearing impairments in special public primary schools in Meru and Isiolo Counties – Kenya. *Journal of Education*, 4(3), 32–50. <https://doi.org/10.70619/vol4iss3pp32-50>
- Ndiaye, A., & Diop, M. (2023). Teacher training and integration of deaf and hard-of-hearing students in mainstream classrooms: Evidence from Senegal. *Journal of Deaf Studies and Deaf Education*, 28(1), 45–59.
- Ndiaye, A., & Diop, M. (2023). Teacher training and integration of deaf and hard-of-hearing students in mainstream classrooms: Evidence from Senegal. *Journal of Deaf Studies and Deaf Education*, 28(1), 45–59.
- Obare, C. W., & Winga, M. A. (2021). Parental and special education teachers’ influence on psychological adjustment of pupils with learning disabilities in inclusive primary schools in Kenya. *Educational Research and Reviews*, 16(9), 389–399. <https://doi.org/10.5897/ERR2021.4189>

- Ookeditse, M. (2025). Vocational transition challenges for students with disabilities in Botswana: Teacher perspectives and systemic barriers. *African Journal of Disability*, 14, Article 1532456. <https://doi.org/10.4102/ajod.v14i0.1532456>
- Oranga, J., Obuba, E., Sore, I. and Boinett, F. (2022) Parental Involvement in the Education of Learners with Intellectual Disabilities in Kenya. *Open Access Library Journal*, 9: e8542. <https://doi.org/10.4236/oalib.1108542>
- Osman, D.M., Oracha, P.A., Joel, O. (2020). Assessment of availability and Use of Teaching and Learning Resources for Retention of Learners with Special Needs in Regular Primary Schools in Dadaab Sub-County, Kenya. *IRA International Journal of Education and Multidisciplinary Studies* (ISSN 2455-2526), 16(2), 112-122. DOI: <http://dx.doi.org/10.21013/jems.v16.n2.p4>
- Otieno, C. (2023). Inclusive instructional practices influencing competency-based curriculum implementation for early years learners with disabilities in primary schools, Nairobi City County, Kenya. Kenyatta University. Parental role in supporting inclusive education for children with autism
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2020). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 47(5), 883–896. <https://doi.org/10.1007/s10488-019-00991-6>
- Pitts, L. (2020). *Utilising applied behaviour analysis in schools for pupils with special educational needs* (Doctoral dissertation, Bangor University). Bangor University.
- Prof. Paul Maithya, Dr. Lilian Milimu & Imbwaga Nixon (2024): Effect of trained teachers in special needs education on academic performance of their students with hearing impairments at karen technical training institute for the deaf. <https://doi.org/10.54922/IJEHSS.2024.0723>
- Promoting inclusive education for children with disabilities in West and Central Africa. (n.d.). Sightsavers.
- Rahman, N. A., & Yasin, R. M. (2024). Teacher training programs: The perspectives of special educational needs (SEN) teachers. *International Journal of Education and Evaluation*, 11(3), 131–148.
- Rao, K., Ok, M. W., & Bryant, B. R. (2014). A review of research on Universal Design for Learning: The need for more evidence. *Remedial and Special Education*, 35(3), 153–166. <https://doi.org/10.1177/0741932513518980>
- Republic of Kenya. (2020). National ICT Policy in Education. Ministry of Education.
- ResearchGate. (2025). *Barriers to parental involvement in the education of children with disabilities in Tamale Metropolis, Ghana*. ResearchGate. Retrieved from https://www.researchgate.net/publication/392989159_Barriers_to_Parental_Involvement_in_the_Education_of_Children_with_Disabilities_in_Tamale_Metropolis
- ResearchGate. (2025). *Barriers to parental involvement in the education of children with disabilities in Tamale Metropolis, Ghana*. ResearchGate. Retrieved from https://www.researchgate.net/publication/392989159_Barriers_to_Parental_Involvement_in_the_Education_of_Children_with_Disabilities_in_Tamale_Metropolis
- Rodina, K. A. (2007). Vygotsky's social constructionist view on disability: A methodology for inclusive education. *European Journal of Special Needs Education*, 22(3), 245–257
- Rodriguez DD, Menchaca VD, Padilla G. Social justice: School administrative staff perceptions of strengths, challenges, and training needs in Section 504-only services. *Journal of Leadership, Accountability and Ethics*. 2021;18(1):89-101. na-businesspress.com
- Rodriguez et al. (2021) Rodriguez, M., Lopez, C., & Fernandez, R. (2021). Communication and collaboration among stakeholders in inclusive schools. *Teaching and Teacher Education*, 100, 103293. <https://doi.org/10.1016/j.tate.2020.103293>
- Rodriguez, M., Lopez, A., & Sanchez, R. (2021). Parental involvement and learner success in inclusive schools. *International Journal of Educational Research*, 109, 101–115.

- Rowe, D. A., Mazzotti, V. L., Fowler, C. H., Test, D. W., Mitchell, V. J., Clark, K. A., Holzberg, D., Owens, T. L., Rusher, D., Seaman-Tullis, R. L., Gushanas, C. M., Castle, H., Chang, W., Voget, A., Kwiatek, S., & Dean, C. (2021). Updating the secondary transition research base: Evidence and research-based practices in functional skills. *Career Development and Transition for Exceptional Individuals*, 44(1), 28–46. <https://doi.org/10.1177/2165143420958674>
- Rowe, D. A., Test, D. W., & Mazzotti, V. L. (2021). Transition planning and teacher preparedness: Evidence-based practices for learners with disabilities. *Journal of Special Education*, 55(3), 157–170.
- Ryan, J. B., Randall, K. N., Walters, E., & Morash-MacNeil, V. (2019). Employment and independent living outcomes of a mixed model post-secondary education program for young adults with intellectual disabilities. *Journal of Vocational Rehabilitation*, 50(1), 61–72. <https://doi.org/10.3233/JVR180988>
- Shogren, K. A., Wehmeyer, M. L., & Lane, K. L. (2016). Embedding interventions to promote self-determination within multitiered systems of supports. *Exceptionality*, 24(4), 213–224. <https://doi.org/10.1080/09362835.2015.1064421>
- Ryan, J., O'Connor, P., & McNamara, S. (2019). Independent living and vocational challenges for individuals with disabilities. *Journal of Vocational Rehabilitation*, 51(2), 145–158.
- Saikia, D. (2025) Curriculum adaptations for children with diverse needs: an analytical study. Peer reviewed journal- Pragyayan Vol-I, issue-I, January to June-2025.
- Saunders, M., Lewis, P., & Thornhill, A. (2019). *Research methods for business students* (8th ed.). Harlow, England: Pearson Education Limited.
- SENCO. (2023). Cultural considerations in special education: Bronfenbrenner's ecological lens. *SENsible SENCO*.
- Şengönül, T. (2022). *A review of the relationship between parental involvement and children's academic achievement and the role of family socioeconomic status in this relationship*. *Pegem Journal of Education and Instruction*, 12(2), 32–57. <https://doi.org/10.47750/pegegog.12.02.04>
- Şengönül, T. (2022). *A review of the relationship between parental involvement and children's academic achievement and the role of family socioeconomic status in this relationship*. *Pegem Journal of Education and Instruction*, 12(2), 32–57. <https://doi.org/10.47750/pegegog.12.02.04>
- Şengönül, A. (2022). Family–school collaboration in inclusive education: Insights from ecological and family-systems models. *International Journal of Educational Development*, 90, 102589.
- Sharma, U., & Sokal, L. (2016). The impact of a teacher education course on pre-service teachers' beliefs about inclusion. *Teaching and Teacher Education*, 43, 1–10. <https://doi.org/10.1016/j.tate.2014.06.003>
- Sharma, U., & Sokal, L. (2021). Teacher and parent perspectives on inclusive education: Confidence, attitudes, and training. *Teaching and Teacher Education*, 99, 103276. <https://doi.org/10.1016/j.tate.2020.103276>
- Shukri, A. R. M., & Toran, H. (2020). Jean Piaget cognitive learning theory and student teaching strategies with special education needs. *Journal of Education and Special Needs Studies*, 8(1), 23–35
- Sibuyi, M., Kaya, Ü. Ü., Demircan, H. Ö., & Altun, D. (2025). *Parental engagement and satisfaction in early childhood education: The mediating role of home literacy environment*. *Early Childhood Education Journal*. Springer Nature. <https://doi.org/10.1007/s10643-025-01456-7> (doi.org in Bing)
- Sightsavers. (n.d.). Promoting inclusive education for children with disabilities in West and Central Africa. <https://research.sightsavers.org/publications/inclusive-education-for-children-with-disabilities/>
- Singal, N. (2021). *Primary schooling for children with disabilities: Review of research*. Inclusive Education Initiative. https://www.inclusive-education-initiative.org/sites/iei/files/2021-09/DisabilityandPrimaryEducation_ReviewofResearch_FINAL_.pdf
- Singal, N. (2021). *Primary schooling for children with disabilities: Review of research*. Inclusive Education Initiative.

- Singal, N., Spencer, C., & Mitchell, R. (2021). *Primary schooling for children with disabilities: A review of African scholarship* (pp. 17, 135, 224). Inclusive Education Initiative. Retrieved from https://www.inclusive-education-initiative.org/sites/default/files/2021-09/DisabilityandPrimaryEducation_ReviewofResearch_FINAL_.pdf
- Smith, B. (2022). The role of parents in the education of their children with disabilities in Sub-Saharan Africa: A critical review of the literature. *Cambridge Educational Research e-Journal*, 9, 33–42.
- Smith, J. (2022). Parental involvement in the education of children with disabilities in Sub-Saharan Africa: A critical review. *International Journal of Disability, Development and Education*, 69(7), 945–962.
- Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Rifenbark, G. G., & Little, T. D. (2016). Teacher practices and student self-determination: Implications for transition outcomes. *Exceptional Children*, 82(3), 273–293.
- Springer. (2025). *Understanding parent–school partnerships for children with severe intellectual disabilities in South Africa*. *International Journal of Special Education*. Retrieved from <https://link.springer.com/article/10.1007/s10780-025-09534-5>
- Springer. (2025). *Understanding parent–school partnerships for children with severe intellectual disabilities in South Africa*. *International Journal of Special Education*. Retrieved from <https://link.springer.com/article/10.1007/s10780-025-09534-5>
- Springer. (2025). *Understanding parent–school partnerships for children with severe intellectual disabilities in South Africa*. *International Journal of Special Education*. Retrieved from <https://link.springer.com/article/10.1007/s10780-025-09534-5>
- Stephen M., Proscovia S. & Naomi M. (2025): Implementation support: A critical examination of mechanisms enhancing equitable digital access for students with disabilities in Kenyan public university libraries *The Journal of Academic Librarianship*
- Straub, D., Boudreau, M.-C., & Gefen, D. (2004). Validation guidelines for IS positivist research. *Communications of the Association for Information Systems*, 13(24), 380–427. <https://doi.org/10.17705/1CAIS.01324>
- Sundararaman T, Muraleedharan VR, Ranjan A. Pandemic resilience and health systems preparedness: lessons from COVID-19 for the twenty-first century. *Journal of Social and Economic Development*. 2021 Sep;23(Suppl 2):290-300. [springer.com](https://www.springer.com)
- Teixeira, R. (2023). *Administrative support and job satisfaction in educational ecosystems*. *International Journal of Social Science and Human Research*.
- Teng (2022) Teng, L. (2022). Family engagement and communication in inclusive education: Practices and challenges. *Asia Pacific Journal of Education*, 42(3), 367–382.
- Teng LS. Explicit strategy-based instruction in L2 writing contexts: A perspective of selfregulated learning and formative assessment. *Assessing Writing*. 2022 Jul 1;53:100645.
- Turnbull, A. P., Turnbull, R., & Wehmeyer, M. L. (2021). *Exceptional Lives: Special Education in Today's Schools* (9th ed.). Pearson.
- Undie, A., & Dada, O. (2025). Fostering inclusive education: Strengths-based approaches to disability and belonging. Faculty of Education, Queen's University.
- UNESCO (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. Paris: UNESCO.
- UNESCO. (2020). *Global education monitoring report 2020: Inclusion and education – All means all*. Paris: UNESCO.
- UNESCO. (2023). *Global report on teachers: Addressing teacher shortages and transforming the profession*. UNESCO Publishing.
- UNESCO. (n.d.). *Inclusive education: Reaching children with disabilities in Africa*. UNESCO IICBA.

- UNESCO. (n.d.). *Inclusive education: Reaching children with disabilities in Africa*. UNESCO IICBA. <https://www.iicba.unesco.org/en/inclusive-education-reaching-children-disabilities-africa>
- United Nations Convention on the Rights of Persons with Disabilities, Art. 9. <https://social.desa.un.org/issues/disability/crpd/article-9-accessibility>
- United Nations Disability Inclusion strategy. https://www.un.org/en/content/disabilitystrategy/assets/documentation/UN_Disability_Inclusion_Strategy_english.pdf
- United Nations Educational, Scientific and Cultural Organization [UNESCO]. (2020). *Global education monitoring report: Inclusion and education – All means all*. Paris: UNESCO.
- United Nations High Commissioner for Refugees (UNHCR). (2024). *Facilitating access to assistive technology and rehabilitation*. UNHCR.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*. New York, NY: United Nations.
- United Nations. (2006). *Convention on the Rights of Persons with Disabilities*, Article 9. https://www.un.org/disabilities/documents/convention/convention_accessible_pdf.
- United Nations. (2019). *United Nations Disability Inclusion Strategy*. New York: United Nations.
- Videma Kimanzi (2024) school based factors influencing implementation of special needs education curriculum in special needs units in public primary schools in Kitui west sub-county, Kenya. Kenyatta university.
- Walker, G. (2016). Using Bronfenbrenner's ecological framework to design support systems for education and special education. In *Handbook of Research on Applied Learning Theory and Design in Modern Education* (pp. 200–215). IGI Global. <https://doi.org/10.4018/978-1-4666-9634-1.CH012>
- Wamboi, J., & Maina, M. (2021). Digital resources and learner engagement: Enhancing inclusive education in Kenyan secondary schools. *African Journal of Educational Technologies*.
- Wango, G. (2022). Inclusive education and the Competency Based Curriculum in Kenya. *African Educational Research Journal*.
- Wodon, Q. (2018). *The challenge of inclusive education in sub-Saharan Africa*. World Bank.
- Wodon, Q. (2018). *The challenge of inclusive education in sub-Saharan Africa*. World Bank. <https://documents1.worldbank.org/curated/en/171921543522923182/pdf/132586-WP-P168381-PUBLIC-WorldBank-SSAInclusive-Disability-v6-Web.pdf>
- Wodon, Q., Male, C., Montenegro, C., & Nayihouba, A. (2018). *The challenge of inclusive education in sub-Saharan Africa: The price of exclusion: Disability and education* (World Bank). Retrieved from <https://openknowledge.worldbank.org/entities/publication/50da7337-7522-592f-a524-22507949f760>
- Woolfolk, A. (2019). *Educational psychology* (14th ed.). Boston, MA: Pearson.
- World Bank. (2023). *The challenge of inclusive education in Sub-Saharan Africa*. Washington, DC: World Bank.
- World Bank. (2023). *Inclusive education in Sub-Saharan Africa: Strengthening transition pathways and reducing dropout risks*. Washington, DC: World Bank Publications.
- World Bank. (2023). *Inclusive education in Sub-Saharan Africa: Strengthening transition pathways and reducing dropout risks*. Washington, DC: World Bank Publications.
- World Federation of the Deafblind (WFDB). (2021). *Global Report on Persons with Deafblindness*. International Disability Alliance.
- World Health Organization & World Bank. (2011). *World report on disability*. Geneva: WHO
- World Health Organization. (2001). *International Classification of Functioning, Disability and Health (ICF)*. Geneva: WHO.

- World Health Organization. (2001). *International Classification of Functioning, Disability and Health (ICF)*. Geneva, Switzerland: World Health Organization.
- World Health Organization. (2011). *World report on disability*. Geneva: WHO.
- World Health Organization. (2022). *International classification of diseases for mortality and morbidity statistics (11th Revision, ICD-11)*. Geneva: World Health Organization.
- Yakubu, I., & Fuseini, M. (2025). Barriers to parental involvement in the education of children with disabilities in Tamale Metropolis, Ghana. *Journal of Inclusive Education in Africa*, 5(1), 45–60.
- Yakubu, I., & Fuseini, M. (2025). Barriers to parental involvement in the education of children with disabilities in Tamale Metropolis, Ghana. *Journal of Inclusive Education in Africa*, 5(1), 45–60. *Frontiers in Psychology*. (2025).
- Yoro, A.J., Fourie, J.V. & Van der Merwe, M., 2020, 'Learning support strategies for learners with neurodevelopmental disorders: Perspectives of recently qualified teachers', *African Journal of Disability* 9(0), a561. <https://doi.org/10.4102/ajod.v9i0.561>
- Zamfirov, M. Z. (2019). Application of Jean Piaget's cognition development tasks on students with special educational needs. *European Journal of Special Education Research*, 5(2), 45–58. <https://doi.org/10.46827/EJSE.V0I0.2741>
- Zeng & Huang (2021) Zeng, Y., & Huang, L. (2021). Stakeholder collaboration in inclusive education: Building partnerships for learner success. *International Journal of Disability, Development and Education*, 68(6), 789–805.
- Zeng J, Huang L. Understanding formative assessment practice in the EFL exam-oriented context: an application of the theory of planned behavior. *Frontiers in Psychology*. 2021 Dec 9;12:774159.
- Zeng, Y., & Huang, J. (2021). Family–school collaboration in inclusive education: Evidence from stakeholder perspectives. *Journal of Family Studies*, 27(3), 389–405.
- Zikmund, W. G., Babin, B. J., Carr, J. C., & Griffin, M. (2021). *Business research methods* (10th ed.). Boston, MA: Cengage Learning.

APPENDICES

APPENDIX 1: LIST OF SNE SCHOOLS & UNITS VISITED

NO.	SCHOOL VISITED	COUNTY	CATEGORY (SPECIAL, UNIT, INTEGRATED)	DISABILITY CATEGORY
1.	Sayajanad Special School	Kilifi	Special	HI, VI, PI, CP, ASD, MD, IDD
2.	Kibarani School For the Deaf	Kilifi	Special	HI
3.	Gede School For VI	Kilifi	Special	HI
4.	Salvation Army Likoni School for the Visually Impaired	Mombasa	Special	VI
5.	Ziwani School for the Deaf	Mombasa	Special	HI
6.	Tom Mboya School for Children with Cerebral Palsy	Mombasa	Special	CP, PI, Autism
7.	Kwale School For the Deaf	Kwale	Special	HI
8.	Kinango School For the Deaf	Kwale	Special	HI
9.	Kafuduni School For the Deaf	Kwale	Special	HI
10.	Mwanyambo School For the Deaf	Taita Taveta	Special	HI
11.	Mwatate Special School	Taita Taveta	Unit	IDD, MD
12.	Timbila School For MH	Taita Taveta	Unit	IDD, MD
13.	Unoa Comprehensive	Makueni	Integrated	MD
14.	Kako Special School	Makueni	Special	IDD, ASD
15.	Makongo Special School	Makueni	Special	HI, IDD
16.	Ngulwa Comprehensive	Makueni	Integrated	MD
17.	St. Marys School	Machakos	Unit	MD
18.	Machakos School For the Deaf	Machakos	Special	HI
19.	Kangundo DEB	Machakos	Special	VI
20.	Masaku School For PI	Machakos	Special	PI
21.	Noonkopir Township	Kajiado	Unit	IDD
21.	Olkejuado Boys Primary	Kajiado	Integrated	VI, PI
22.	Dr. Likimani Primary	Kajiado	Unit	PI, MD
23.	Ilbisil School for the Deaf	Kajiado	Special	HI
24.	Moyale School for the Deaf	Marsabit	Special	HI
25.	Moyale Special Unit	Marsabit	Unit	MH
26.	Loglogo Integrated	Marsabit	Integrated	VI
27.	Ngaremara Intergrated	Isiolo	Integrated	PI
28.	Isiolo School For The Deaf	Isiolo	Special	HI
29.	Kambi Ya Juu Primary	Isiolo	Integrated	VI
30.	Uhuru Primary	Isiolo	Unit	MH
31.	MCK Kaaga School For the Hearing Impaired	Meru	Special	HI
32.	Meru School For Mentally Handicapped Children	Meru	Special	MH
33.	The Nkubu School For MH	Meru	Unit	MH
34.	St. Lucy's School For The Blind	Meru	Special	VI
35.	Kibos Special Senior School	Kisumu	Special	VI

NO.	SCHOOL VISITED	COUNTY	CATEGORY (SPECIAL, UNIT, INTEGRATED)	DISABILITY CATEGORY
36.	Kibos School For The Blind	Kisumu	Special	VI
37.	Lutheran Church Special School	Kisumu	Special	MH, PL, CP
38.	St Martin Deppores Special School	Kisumu	Special	PI, CP, IDD
39.	Maseno School For The Deaf	Kisumu	Special	HI
40.	Senior Chief Onunga School for the Deaf	Kisumu	Special	HI
41.	Mukuli Integrated PS	Vihiga	Integrated	HI
42.	Chekombero School for the Deaf	Vihiga	Special	HI
43.	Womulalu Friends Special School	Vihiga	Pre-vocational Special	IDD
44.	Ebuyalu Special School for the Intellectually challenged	Vihiga	Special	IDD
45.	St Clare Ebukuya Special Secondary School	Vihiga	Special	HI
46.	Friends School For The Deaf:Givavei	Vihiga	Special	HI
47.	Equator Special School	Siaya	Special	IDD
48.	Nina Special School For The Deaf	Siaya	Special	HI
49.	Karapul Primary School	Siaya	Unit	IDD
50.	St Oda Aluor School For The Blind	Siaya	Special	VI
51.	Apegei Special School	Busia	Special	PI
52.	Mundika Special School for HI	Busia	Special	HI
53.	St Francis Of Assissi Alupe for HI	Busia	Special	HI
54.	St Martin Kisoko Special School	Busia	Special	IDD
55.	Nalondo CBM Special School	Busia	Special	PI,CP,
56.	Khasoko Special School	Busia	Special	IDD
57.	Apegei Special School	Busia	Unit	IDD
58.	Nalondo CBM Special school	Bungoma	Special	PI
59.	Khasoko Special school for MH	Bungoma	Special	IDD
60.	Mupeli Special unit	Bungoma	Unit	IDD
61.	St Antony school for the Deaf	Bungoma	Special	HI
62.	Moi Kabartonjo VI	Baringo	Unit	VI
63.	Kabarnet Deaf Blind	Baringo	Special	Deaf, Blind,
64.	Kampi Ya Samaki Primary	Baringo	Integrated	MD
65.	Emining Special School For VI	Baringo	Special	VI
66.	St Patricks Shimoni	Baringo	Integrated	PI
67.	Esageri Special School For The Deaf	Baringo	Special	HI
68.	Njoro Salvation Army Special School	Nakuru	Special	MH

NO.	SCHOOL VISITED	COUNTY	CATEGORY (SPECIAL, UNIT, INTEGRATED)	DISABILITY CATEGORY
69.	Menengai Comprehensive School	Nakuru	Integrated	VI
70.	Ngala School For The Deaf	Nakuru	Special	HI
71.	Koinange School for the Deaf	Nakuru	Special	HI
72.	Nakuru Hills Special School	Nakuru	Special	MH
73.	Gilgil Special School	Nakuru	Special	MH
74.	Kedowa Special School For The Deaf	Kericho	Special	HI
75.	Kipkelion Special School	Kericho	Special	MH
76.	Kipchimchim Comprehensive School And Special Unit	Kericho	Unit	PI
77.	ST.Kizito Special School For The Deaf	Kericho	Special	HI
78.	Saseta Primary School	Kericho	Unit	PI
79.	Kipngosos Special School	Bomet	Special	IDD
80.	Bomet Township Primary	Bomet	Unit	PI
81.	Korara Special School	Bomet	Special	VI
82.	Olesankale Integrated	Narok	Unit	VI
83.	Masikonde Primary School	Narok	Unit	MD
84.	Enabelbel Primary	Narok	Unit	IDD
85.	Koitiko Primary School	Narok	Unit	MD
86.	Chesoi School For HI	Elgeyo Marakwet	Special	HI
87.	Nekwo Unit For PI	Elgeyo Marakwet	Unit	PI
88.	Bugar Special School For Mentally Challenged	Elgeyo Marakwet	Special	MD
89.	Chepsigot School For V/I	Elgeyo Marakwet	Special	VI
90.	Eldoret School For the Hearing Impaired	Uasin Gishu	Special	HI
91.	Ilula Integrated School	Uasin Gishu	Integrated	VI
92.	St Joseph's Kipyemit	Uasin Gishu	Unit	MH
93.	Matunda Rc School	Uasin Gishu	Unit	PI
94.	Ndalat Job's Outreach School for PI	Nandi	Special	PI
95.	Kapsabet Primary School For the Deaf	Nandi	Special	HI
96.	Great Highland Integrated School	Nandi	Unit	ID
97.	Lambwe Christian School for The Deaf	Homaba y	Special	HI
98.	Homabay Special Unit	Homabay	unit	MD
99.	Nyaburi Integrated Primary School	Homabay	Integrated	MD
100.	Ogande Special School	Homabay	Special	MD
101.	Nyagweso School For The Deaf And Junior School	Homabay	Special	HI

NO.	SCHOOL VISITED	COUNTY	CATEGORY (SPECIAL, UNIT, INTEGRATED)	DISABILITY CATEGORY
102.	Komotobo Special Boarding School	Migori	Special	MD
103.	Bongebo Mixed Boarding Special School For MI	Migori	Special	ID
104.	Kiranda Special School	Migori	Special	ID
105.	Kuja School For The Deaf Primary	Migori	Special	HI
106.	St. Paul's Ntimaru Special	Migori	Special	HI
107.	St. Joseph's Kiomiti School for The Blind	Kisii	Special	VI
108.	Gianchere Primary School	Kisii	Special	HI
109.	Bogitaa ELCK Primary And JSS	Kisii	Integrated	MD
110.	Nyairicha Special	Nyamira	Special	ID
111.	Omulonge Special School For I.C/H. I	Nyamira	Special	MD
112.	Kamatungu Primary	Tharaka Nthi	Unit	IDD
113.	Kamatungu Special School for the Deaf	Tharaka Nthi	Special	HI
114.	Karethani Special School	Tharaka Nthi	Special	IDD
115.	Ikuu Special School	Tharaka Nthi	Special	IDD
116.	Kambungu Primary	Embu	Unit	MD
117.	St. Michael	Embu	Unit	IDD
118.	ACK St. Monicah	Embu	Special	IDD
119.	St. Kukes School For Deaf	Embu	Special	HI
120.	Raimu Primary	Kirinyaga	Unit	MD
121.	Gitwe Primary	Kirinyaga	Integrated	IDD
122.	Kibirigwi Special	Kirinyaga	Special	IDD
123.	Kerugoya School For the Deaf	Kirinyaga	Special	HI
124.	Seneiya Special School	Samburu	Special	HI
125.	Lkrutto Pry & Junior School	Samburu	Integrated	IDD, PI
126.	St Paul	Samburu	Integrated	MD-VI ,PI IDD, CP
127.	Maralal Special School	Samburu	Integrated	VI, HI,IDD,CP, PI
128.	Lodokejek 1 School	Samburu	Integrated	VI I, IDD, PI
129.	Nyandarua Scool For the Deaf	Nyandarua	Special	HI
130.	Gatimu Special School	Nyandarua	Special	IDD
131.	Muiiri primary and Junior school	Nyandarua	Unit	MD
132.	Ol Kalou Special School	Nyandarua	Integrated	PI
133.	Ngarenaro Special School	Laikipia	Special	IDD,
134.	Sipili Special School	Laikipia	Special	H.I
135.	Thingithu Pry School	Laikipia	Integrated	PI, IDD
136.	Likii Special School for the Mentally Challenged Childern	Laikipia	Special	IDD
137.	DEB Muslim Primary	Nyeri	Unit & Integrated	LD

NO.	SCHOOL VISITED	COUNTY	CATEGORY (SPECIAL, UNIT, INTEGRATED)	DISABILITY CATEGORY
138.	Ngunguru Primary	Nyeri	Integrated	LD
139.	Tumutumu Special	Nyeri	Special	HI
140.	Allamanu Special	Nyeri	Special	MH
141.	Mbiri Primary	Murang'a	Unit	IDD
142.	Muranga School For HI	Murang'a	Special	HI
143.	Gacharage	Murang'a	Unit	MH
144.	Thuita	Murang'a	Integrated	LD
145.	Thika School School for the Blind	Kiambu	Special	VI
146.	SA Joy Town Special	Kiambu	Special	PI
147.	AIC Mukeu Special School	Kiambu	Special	MH
148.	Limuru Town	Kiambu	Unit	MD, LD
149.	Wajir School For the Deaf	Wajir	Special	HI
150.	Habaswein Mixed Day and Boarding Primary School	Wajir	Integrated	MD
151.	Griftu Integrated Primary and Junior School	Wajir	Integrated	MD
152.	Catholic Integrated Primary and Junior School	Wajir	Special	PI,CP
153.	Mandera Special School for the Blind	Mandera	Special	VI
154.	Mandera Special School for the Deaf	Mandera	Special	HI
155.	Kamor Integrated School	Mandera	Integrated	PI
156.	Daua Integrated School	Mandera	Integrated	MD
157.	Shashafey Integrated School	Mandera	Integrated	MD
158.	Lodwar Mixed Integrated	Turkana	Integrated	VI
159.	St. Michael Kawalase	Turkana	Unit	IDD
160.	St. Bernadette School For HI	Turkana	Integrated	HI
161.	Lokichar Girls	Turkana	Integrated	PI
162.	Lamu School for the Mentally Handicapped	Lamu	Special	IDD
163.	Wiyoni Primary School	Lamu	Unit	VI
164.	Mokowe Arid Zone Primary School	Lamu	Unit	MH
165.	Kasina Special School for the Mentally Handicapped	Kitui	Special	IDD
166.	Musukini Special Unit	Kitui	Unit	IDD
167.	Waita special school	Kitui	Special	MH
168.	Mwingi Special School for Hearing Impaired	Kitui	Special	HI
169.	Lisa/Hola School For The Deaf Primary School	Tana River	Special	HI
170.	Hola School for the Mentally Handicapped Primary School	Tana River	Special	MH
171.	Hola Special Unit	Tana River	Unit	VI
172.	Mororo Primary School	Tana River	Integrated	

NO.	SCHOOL VISITED	COUNTY	CATEGORY (SPECIAL, UNIT, INTEGRATED)	DISABILITY CATEGORY
173.	Garissa School for the Deaf	Garissa	Special	HI
174.	Garissa Special School for Mentally Handicapped Primary School	Garissa	Special	MH
175.	Iftin Primary and Junior Secondary - Integrated	Garissa	Integrated	IDD, HI, PI
176.	Jaribu Primary & Junior Secondary - Integrated	Garissa	Integrated	PI, VI, HI, IDD
177.	Daisy Special School	Kakamega	Special	PI
178.	Rise and Shine Special School	Kakamega	Special	PI
179.	Koyonzo Special School	Kakamega	Special	MD
180.	ST Angela Mumias Senior School for Deaf Girls	Kakamega	Special	HI
181.	Kiminini Special School	Trans Nzoia	Integrated	IDD, PI
182.	Mitoto Special School	Trans Nzoia	Special	VI
183.	Section six Special	Trans Nzoia	Special	MD
184.	ST Columban's school for the Deaf	Trans Nzoia	Special	HI
185.	Makutano Special Unit for the Mentally Impaired	West Pokot	Special	IDD, MH
186.	Nasokol Comprehensive School	West Pokot	Integrated	PI
187.	Keringet School for the Hearing Impaired	West Pokot	Special	HI
188.	ST Francis School for Visual Impaired	West Pokot	Special	VI

APPENDIX II: DATA GENERATION TOOLS



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

Nurturing Every Learner's Potential

MONITORING THE STATUS OF IMPLEMENTATION OF COMPETENCY BASED CURRICULUM IN SPECIAL SCHOOLS AND UNITS IN KENYA

OBSERVATION SCHEDULE

FEBRUARY 2026

Name of Observer: _____ Date: _____

Introduction

The Kenya Institute of Curriculum Development (KICD) is conducting a monitoring study on the implementation of the Competency-Based Curriculum (CBC) in Special Schools and Units. This observation schedule has been designed to gather information on implementation of CBC in SNE and special units in Kenya. Kindly complete this schedule by ticking in the appropriate boxes or filling in the provided spaces as necessary.

NB: Note down the evidences for each area and where appropriate take pictures.

PART A: DEMOGRAPHIC INFORMATION

1. Name of school: _____
2. County: _____
3. Type of school: Public ☐ Private ☐
4. Category of school:
 - a) Day ☐ Boarding ☐ Day and Boarding ☐
 - b) Boys Only ☐ Girls Only ☐ Mixed ☐
 - c) Special School ☐ Special Unit ☐
 - d) Category of special school
Visual impairment ☐
Hearing impairment ☐
Physical impairment ☐
Intellectual disability ☐
Other (specify): _____
5. Location of school: Urban ☐ Rural ☐ Semi-urban ☐
6. Pathway offered: Age Based ☐ Stage-based ☐ Age-based and Stage-based ☐

PART B: OBSERVATION DATA

7. Observe whether the following curriculum and curriculum support materials specific to SNE are available within the school/unit (Tick as appropriate)

s.no	Observed aspect	Yes	No
i.	Availability of SNE-adapted CBC curriculum designs		

ii.	Access to interactive digital content suitable for different disabilities of learners		
iii.	There is adequate assistive technology devices (tablets, laptops, digital Braille displays, communication boards among others)		
iv.	The school has adequate copies of the approved textbooks and other curriculum support materials		
Comment on availability of curriculum and curriculum support materials specific to SNE in your schools			

8. Observe the teacher's capacity in implementing CBC for learners with disabilities (*Use the scale 1-5 where 1= Strongly disagree 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree, 5=Strongly Agree*)

S.No	Statement	Rate (1-5)
i)	The lesson plan demonstrates appropriate adaptations and accommodations for various disability categories	
ii)	The teacher develops and uses appropriate Individualized Education Plans (IEPs) that support learners with disabilities	
iii)	The teacher organizes and delivers lessons using differentiated approaches tailored to learners' abilities and needs.	
iv)	The lesson plan is updated as per the SoW	
v)	The teacher uses varied assessment tools to track the progress of learners with diverse disabilities (e.g., portfolios, checklists, written tests, projects, observation schedules).	
Comment on aspects rated 1 or 2, noting specific gaps or areas needing improvement		

9. Indicate the extent to which you agree with the following statements about the school environment and the availability of appropriate support for learners with disabilities. *Use the scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree*

i)	Evidence of consideration for learners with special needs (e.g. ramps, signs, guard rails etc).	
ii)	Classrooms are adapted to accommodate different disability needs.	
iii)	The school has adequate teaching staff specializing in various disability categories	
iv)	The school has adequate auxiliary personnel appropriate to the learners' disability categories (e.g., therapists, caregivers, interpreters, mobility instructors, etc)	
v)	The school has appropriate safety and emergency preparedness measures in place to protect and support learners with disabilities	

Provide comments on the effectiveness of the school environment and support services for learners with disabilities.

S. No.	Statements	Score (1-5)
10.	a) Indicate the extent to which you agree with the following statements on identification and nurturing of talents in learners. (Use the scale 1-5 where 1= Strongly disagree 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree, 5=Strongly Agree)	
	Statements	Score (1-5)
i)	Existence of structured talent identification programs (Academics, arts, music, sports, vocational skills etc)	
ii)	Learners are actively engaged in sports, arts, music, technology clubs, and vocational activities adapted to different disabilities (<i>observe activity timetables and attendance registers</i>)	
iii)	Documentation of learners' talent portfolios showcasing skills, talents and achievements	
iv)	Presence and use of adapted equipment (<i>e.g. modified sports gear, musical instruments</i>)	
v)	Presence of platforms (exhibitions, performances, sports days, competitions, or school/community events) where learners with disabilities display their talents	
Comment on aspects rated 1 or 2 based on your observation		

11. Observe and assess the evidence of parental empowerment and engagement in supporting the education of learners with disabilities (*Use the scale 1-5 where 1= Strongly disagree 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree, 5=Strongly Agree*)

Statements	Score (1-5)
i) There is evidence of parental attendance in school meetings, IEP meetings, and training sessions (observe records of minutes, attendance etc)	
ii) There is evidence of school programs for parental empowerment (workshops, training on home-based support)	
iii) There is evidence of parent-school communication mechanisms (communication books, digital platforms, home visits)	
Comment on your observation on parental involvement in supporting the education of learners with disabilities	

THANK YOU



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

Nurturing every learner's potential

**MONITORING THE STATUS OF IMPLEMENTATION OF
COMPETENCY BASED CURRICULUM IN SPECIAL SCHOOLS AND
UNITS IN KENYA**

QUESTIONNAIRE FOR TEACHERS

FEBRUARY, 2026

Introduction

This questionnaire is meant to gather information from teachers in Special Schools and Units to assess the implementation of the CBC for Learners with Special Needs and Disabilities (LSND) in Kenya. Kindly respond to all the items. The information you provide will be treated with confidentiality and used only for the purpose of the study.

Section A: Respondent & School Profile (Demographics)

1. Name of school:
2. County:
3. Type of institution: Special School ☐ Special Unit in Regular School ☐ Integrated Program ☐ Other:
4. Ownership: Public ☐ Private ☐ Faith-based ☐ NGO ☐
5. School category:
 - ☐ Visual Impairment
 - ☐ Hearing Impairment
 - ☐ Intellectual Disability
 - ☐ Autism Spectrum Disorder
 - ☐ Cerebral Palsy
 - ☐ Physical Disability
 - ☐ Deafblindness
 - ☐ Multiple Disabilities
 - ☐ Other (Specify):
6. Your area(s) of specialization (Tick all that apply): VI ☐ HI ☐ ID ☐ Autism ☐
Deafblind ☐ CP ☐ Multiple Disabilities ☐ GT ☐ EBD ☐ LD ☐ Physical Impairment ☐ None ☐ Inclusive education ☐
Other:

Section B: Availability and adequacy of adapted curriculum and other materials

7. To what extent do you agree with the following statements on curriculum and curriculum support materials (CSM) for learners with special needs and disabilities?

(Use the key: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Statement	Score
a) Adapted curriculum designs aligned to CBC for my learners' disability category are available.	
b) The adapted designs are adequate for learning and assessment.	
c) Curriculum support materials align with competencies and aspirations of CBC.	
d) Our school has sufficient variety of CSMs for different disability categories (e.g., tactile, visual, auditory, simplified).	

e) Interactive digital content (IDC) is available for use by learners with special needs and disabilities.	
f) The available digital content is appropriate for use by the category of learners in our school.	
g) Assistive technology devices are available in our school (e.g., brailers, hearing aids, communication boards etc.).	
h) The school has adequate copies of the approved textbooks and other CSMs.	

8. Which assistive technologies are required by the category of learners in your school? Brailers ☐

Screen readers ☐ Magnifiers ☐ Hearing aids ☐ Mobility aids ☐

Other:

9. Are the assistive devices mentioned in 7 available in your school and are they adequate?

Available: Yes ☐ No ☐

Adequate: Yes ☐ No ☐

10. What key adapted materials are most needed but are not available?

.....

11. What strategies do you use to ensure effective curriculum delivery when some resources may not be available?

.....

Section C: Teacher Capacity for CBC Delivery in SNE

12. To what extent do you agree with the following statements on your capacity to effectively delivery the curriculum for learners with special needs and disabilities? (Use the key: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Statement	Score
a) I am confident in learner-centered pedagogies for LSND.	
b) I can differentiate instruction effectively for diverse needs in my class.	
c) I can prepare professional documents (Schemes and Lesson Plans).	
d) I am able to develop customized professional documents (IEPs and ILPs)	
e) I am proficient in SNE-relevant communication (e.g., KSL, braille, AC).	
f) I can adapt assessment tools to suit different disability categories.	
g) I receive adequate support and guidance on how to deliver the curriculum for learners with special needs and disabilities..	
h) I collaborate with colleagues to co-plan and co-teach inclusive lessons.	
i) I have adequate time and support for preparing adapted materials.	
j) I am aware of policy guidelines applicable to SNE under CBC.	

13. What challenges hinder you from effectively delivering the curriculum for LSND?

.....

14. What support would most improve your practice?

.....

Section D: Infrastructure, teaching staff, auxiliary personnel and support services

15. Indicate a Yes (Y) or No (N) whether the following statements are true for your school.

Statement on resource availability	Y/N
a) Classrooms and school environment are accessible (ramps, rails, signage, lighting, acoustics).	
b) Sanitation facilities are adapted and adequate.	
c) There are adequate and qualified teaching staff.	
d) Auxiliary staff are available (e.g., sign language interpreters, braille transcribers).	
e) Support services are available (e.g., occupational/physiotherapy, speech therapy, counseling).	
f) There is reliable electricity/internet to support digital learning.	
g) Maintenance and repair services for specialized equipment are available.	
h) Transport to/from school is accessible and safe for LSND.	

16. Which support services are currently available in your school?

Speech therapy ☐ Occupational therapy ☐ Physiotherapy ☐ Counseling ☐ Audiology
☐ Vision support ☐ Social work ☐ None ☐

17. Comment on the situation of support services required for effective curriculum implementation in your school.

.....

Section E: Identification, nurturing and support of talents of LSND

18. To what extent do you agree with the following statements on structures for identification and nurturing of talents among learners with special needs and disabilities? (*Use the key: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree*).

Statement	Score
a) Our school has systems to identify talents among LSND.	
b) Our school provides opportunities for different pathways	
c) Our school has adapted equipment/resources are for talent development.	
d) Teachers in our school receive guidance on nurturing talents among learners	
e) Our learners have opportunities to showcase talents	
f) The community partners with the school in supporting talent development.	

19. Describe a strategy used in your school to identify and nurture talent in your school/unit.

.....

Section F: Parental Empowerment & Engagement

20. To what extent do you agree with the following statements on parental empowerment & engagement in your school? (Use the key: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Statement	Score
a) Parents of LSND are regularly informed about their children's progress.	
b) Parent of LSND are offered training sessions on home support.	
c) Community and parent associations actively support LSND education.	
d) Our parents actively collaborate with the school in supporting learning.	

21. Comment on parental empowerment and engagement in your school.

.....

Section G: Learner Placement, Transition & Progression

22. To what extent do you agree with the following statements on structure of the educational placement and progression for LSND? (Use the key: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree).

Statement	Score
a) Educational assessment of LSND correctly informs placement decisions	
b) Learners in our school are appropriately placed in alignment with their educational needs	
c) There are clear provisions for LSND to transition across levels and pathways.	
d) Learners in our school have adequate guidance on career pathways selection.	
e) Parents are adequately involved during pathways selection for their children.	

23. Comment on the appropriateness of the provisions for transition and progression for LSND across levels and pathways.

.....

24. What recommendations do you have for the improvement of curriculum implementation for LSND in the country?

.....

THANK YOU



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

Nurturing Every Learner's Potential

**MONITORING THE STATUS OF IMPLEMENTATION OF
COMPETENCY BASED CURRICULUM IN SPECIAL SCHOOLS AND
UNITS IN KENYA**

OBSERVATION SCHEDULE

FEBRUARY, 2026

Name of Observer: _____ Date: _____

Introduction

The Kenya Institute of Curriculum Development (KICD) is conducting a monitoring study on the implementation of the Competency-Based Curriculum (CBC) in Special Schools and Units. This observation schedule has been designed to gather information on implementation of CBC in SNE and special units in Kenya. Kindly complete this schedule by ticking in the appropriate boxes or filling in the provided spaces as necessary.

NB: Note down the evidences for each area and where appropriate take pictures.

PART A: DEMOGRAPHIC INFORMATION

1. Name of school: _____
2. County: _____
3. Type of school: Public ☐ Private ☐
4. Category of school:
 - a) Day ☐ Boarding ☐ Day and Boarding ☐
 - b) Boys Only ☐ Girls Only ☐ Mixed ☐
 - c) Special School ☐ Special Unit ☐
 - d) Category of special school
Visual impairment ☐
Hearing impairment ☐
Physical impairment ☐
Intellectual disability ☐
Other (specify): _____
5. Location of school: Urban ☐ Rural ☐ Semi-urban ☐
6. Pathway offered: Age Based ☐ Stage-based ☐ Age-based and Stage-based ☐

PART B: OBSERVATION DATA

7. Observe whether the following curriculum and curriculum support materials specific to SNE are available within the school/unit (Tick as appropriate)

S.No	Observed aspect	Yes	No
i.	Availability of SNE-adapted CBC curriculum designs		
ii.	Access to interactive digital content suitable for different disabilities of learners		

iii.	There is adequate assistive technology devices (tablets, laptops, digital Braille displays, communication boards among others)		
iv.	The school has adequate copies of the approved textbooks and other curriculum support materials		
Comment on availability of curriculum and curriculum support materials specific to SNE in your schools			

8. Observe the teacher's capacity in implementing CBC for learners with disabilities (*Use the scale 1-5 where 1= Strongly disagree 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree, 5=Strongly Agree*)

S.No	Statement	Rate (1-5)
i)	The lesson plan demonstrates appropriate adaptations and accommodations for various disability categories	
ii)	The teacher develops and uses appropriate Individualized Education Plans (IEPs) that support learners with disabilities	
iii)	The teacher organizes and delivers lessons using differentiated approaches tailored to learners' abilities and needs.	
iv)	The lesson plan is updated as per the SoW	
v)	The teacher uses varied assessment tools to track the progress of learners with diverse disabilities (e.g., portfolios, checklists, written tests, projects, observation schedules).	
Comment on aspects rated 1 or 2, noting specific gaps or areas needing improvement		

9. Indicate the extent to which you agree with the following statements about the school environment and the availability of appropriate support for learners with disabilities. *Use the scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree*

S. No		Score (1-5)
i)	Evidence of consideration for learners with special needs (e.g. ramps, signs, guard rails etc).	
ii)	Classrooms are adapted to accommodate different disability needs.	
iii)	The school has adequate teaching staff specializing in various disability categories	
iv)	The school has adequate auxiliary personnel appropriate to the learners' disability categories (e.g., therapists, caregivers, interpreters, mobility instructors, etc)	
v)	The school has appropriate safety and emergency preparedness measures in place to protect and support learners with disabilities	
Provide comments on the effectiveness of the school environment and support services for learners with disabilities.		

10. a) Indicate the extent to which you agree with the following statements on identification and nurturing of talents in learners. (Use the scale 1-5 where 1= Strongly disagree 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree, 5=Strongly Agree)

	Statements	Score (1-5)
i)	Existence of structured talent identification programs (Academics, arts, music, sports, vocational skills etc)	
ii)	Learners are actively engaged in sports, arts, music, technology clubs, and vocational activities adapted to different disabilities (<i>observe activity timetables and attendance registers</i>)	
iii)	Documentation of learners' talent portfolios showcasing skills, talents and achievements	
iv)	Presence and use of adapted equipment (<i>e.g. modified sports gear, musical instruments</i>)	
v)	Presence of platforms (exhibitions, performances, sports days, competitions, or school/community events) where learners with disabilities display their talents	
Comment on aspects rated 1 or 2 based on your observation		

11. Observe and assess the evidence of parental empowerment and engagement in supporting the education of learners with disabilities (*Use the scale 1-5 where 1= Strongly disagree 2= Disagree, 3= Neither Agree nor Disagree, 4= Agree, 5=Strongly Agree*)

	Statements	Score (1-5)
i)	There is evidence of parental attendance in school meetings, IEP meetings, and training sessions (observe records of minutes, attendance etc)	
ii)	There is evidence of school programs for parental empowerment (workshops, training on home-based support)	
iii)	There is evidence of parent-school communication mechanisms (communication books, digital platforms, home visits)	
Comment on your observation on parental involvement in supporting the education of learners with disabilities		

THANK YOU



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

Nurturing Every Learner's Potential

**MONITORING THE STATUS OF IMPLEMENTATION OF COMPETENCY
BASED CURRICULUM IN SPECIAL SCHOOLS AND UNITS IN KENYA**

FOCUS GROUP DISCUSSION FOR LEARNERS

FEBRUARY, 2026

Introduction

The Kenya Institute of Curriculum Development (KICD) is carrying out a study on implementation of CBC for learners with special needs and disabilities (LSND) in Kenya. This Focus Group Discussion seeks to gather information on this subject from learners in Special Schools and Units. Kindly respond to all the items. The information you provide will be treated with confidentiality and used only for the purpose of the study.

Name of discussant: Date:

PART A

1. Name of School: _____
2. County: _____
3. Location of the school: Urban ☐ Rural ☐ Peri-urban ☐
4. Type of School: Public ☐ Private ☐
5. (a) Category of School: Integrated ☐ Special School ☐ Special unit ☐
(b) Category of School: Age based ☐ Stage based ☐
6. Disability category:
 - ☐ Visual Impairment
 - ☐ Hearing Impairment
 - ☐ Intellectual Disability
 - ☐ Autism Spectrum Disorder
 - ☐ Cerebral Palsy
 - ☐ Physical Disability
 - ☐ Deafblindness
 - ☐ Multiple Disabilities
7. Pathway offered: Age-based ☐ Stage-based ☐ Age-based and Stage-based ☐
8. Number of learners in the group: Male _____ Female _____ Total _____

PART B

1. (a) Mention teaching and learning materials available in your school that help you learn better according to your special learning need.
(Probe for playing and learning materials).

.....
.....

(b) Which learning materials or tools do you wish you had but do not have?

.....
.....

2. What can teachers do to help you learn better?
.....
.....
3. (a) Comment on the appropriate of facilities found in your school as per your individual learning needs.
.....
.....
(b) How are you helped in using the facilities in school when you need extra support?
(Probe: (Probe for who helps e.g. teachers, caregivers, interpreters, therapists, peers and how they help)
.....
.....
4. How does your school help you to identify and develop your talents?
.....
.....
5. How do your parents or guardians help you in learning? *(Probe for help at home and at school?)*
.....
.....
6. What more would you like your parents or guardians do to support your learning better?
.....
.....
7. How has going to school transformed your life? *(Probe for acquisition of different competencies, values, application of knowledge in real life experience)*
.....
.....
8. What challenges do you encounter in learning and how can you be assisted to learn better?
.....
.....

THANK YOU



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT
Nurturing Every Learner's Potential

**MONITORING THE STATUS OF IMPLEMENTATION OF
COMPETENCY BASED CURRICULUM IN SPECIAL SCHOOLS AND
UNITS IN KENYA.**

QUESTIONNAIRE FOR EDUCATION OFFICERS

FEBRUARY, 2026

Introduction

Kenya Institute of Curriculum Development is carrying out a monitoring study on the status of implementation of the Competency Based Curriculum in Special Schools. You have been identified as a respondent in the study. This questionnaire has been designed to gather information on your experiences as an education officer in this region. The information you provide will be used only for the purpose of the study. Kindly respond to all the questions. Your responses will be treated with confidentiality.

PART A:

1. County: _____
2. Sub-county: _____
3. Designation _____
4. Sex of Respondent: Male ☐ Female ☐

PART B:

1. Briefly outline the roles that your office plays with regard to the education of learners with special needs and disabilities (LSND) in your region.
.....
.....
2. Tick Yes or No to indicate whether the following statements are generally true for special schools and units in your region.

Statement on resource availability	Yes	No
a) Classrooms and school environments are conducive for learners with special needs (e.g. ramps, rails, signage, lighting, acoustics etc).		
b) Sanitation facilities are adapted and adequate.		
c) There are adequate and qualified teaching staff.		
d) Auxiliary staff are available (e.g., sign language interpreters, braille transcribers).		
e) Support services are available (e.g., occupational/physiotherapy, speech therapy, counseling).		
f) There is reliable electricity and internet to support digital learning.		
g) Maintenance and repair services for specialized equipment are available.		
h) Transport to/from school is accessible and safe for LSND.		

3. Comment on the availability of resources to support learners with special needs in your region.
.....
.....
4. Indicate your agreement level with the following statements on teacher capacity. (*Use the scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree*)

Statement		Score
-----------	--	-------

a) Teachers are confident in learner-centered pedagogies for LSND.		
b) Teachers can use differentiated instruction effectively for learners' diverse needs.		
c) Teachers can prepare professional documents (Schemes and Lesson Plans).		
d) Teachers are able to develop customized professional documents individualised education programmes (IEPs)		
e) Teachers are proficient in SNE-relevant communication (e.g., KSL, braille, alternative communication (AC)).		
f) Teachers can adapt assessment tools and methods to suit learners' needs.		
g) Teachers have received adequate support and guidance on how to deliver the curriculum for learners with special needs and disabilities.		
h) Teachers collaborate with colleagues to co-plan and co-teach lessons.		
i) Teachers are aware of policy guidelines applicable to SNE under CBE.		
j) Teachers are able to effectively integrate core competences, values and PCIs in their lessons.		

5. Comment on the capability of teachers to deliver the curriculum for learners with the special needs and disabilities represented in schools under your jurisdiction.

.....
.....

6. What challenges do teachers of LSND encounter during curriculum implementation?

.....
.....

7. Make suggestions to bridge the gaps indicated in number 6 for better delivery of SNE

.....
.....

8. What opportunities exist for identifying and nurturing talents among learners with special needs and disabilities?

.....
.....

What initiatives have schools in your area used to empower and engage parents in the learning of their children in SNE institutions?

.....
.....

9. Give a comment on the effectiveness of the following processes undertaken for learners with special needs and disabilities across different education levels under CBE.

a) Learner placement

.....
.....

b) Progression

.....
.....
c) Transition
.....
.....

THANK YOU



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

Nurturing Every Learner's Potential

**MONITORING THE STATUS OF IMPLEMENTATION OF
COMPETENCY BASED CURRICULUM IN SPECIAL SCHOOLS AND
UNITS IN KENYA**

PARENTS' INTERVIEW

FEBRUARY, 2026

Introduction

KICD is carrying out a study on implementation of CBC for learners with special needs and disabilities (LSND) in Kenya. This interview seeks to gather information on this subject from parents of children in Special Schools and Units. Kindly respond to all the items. The information you provide will be treated with confidentiality and used only for the purpose of the study.

Name of interviewer: Date:

Section A:

1. Name of school:
2. County:
3. Type of institution your child attends: Special School ☐ Special Unit in Regular School ☐
Integrated Program ☐ Other:
4. Category: Public ☐ Private ☐
5. Pathway offered: Age-based ☐ Stage-based ☐ Age-based and stage-based ☐
6. Sex: Male ☐ Female ☐

Section B:

7. In your view, how effectively do teachers support your child's learning needs?
.....
.....
8. Comment on the adequacy of facilities such as classrooms, assistive devices, therapy rooms, mobility aids, feeding areas, or sanitation facilities.
.....
.....
9. What support services does your child have access to through the school? (E.g., therapy, guidance & counseling, medical support, sign language interpretation)
.....
.....
10. How do you collaborate with the school to identify or nurture your child's talents or interests?
Please explain the activities involved.
.....
.....
11. Have you received empowerment, training, or information sessions on CBC for learners with special needs? Please describe.
.....
.....
12. What challenges do you experience while supporting your child with CBC work?
.....
.....

13. What improvements do you recommend regarding learner progression and transition under CBC for children with special needs?

.....

.....

THANK YOU