



Challenges in Teaching Learners with Hearing Impairment in Inclusive Secondary Schools in Kenya

Lucy Wanjira Mwangi
Department Educational Psychology,
School of Education
University of Eldoret, Kenya
Email: lucywanjiram@gmail.com

Abstract: Learners with hearing impairment in inclusive secondary schools in Kenya continue to face major challenges that hinder their academic and social development. Despite inclusive education policies, many schools lack the necessary resources, trained personnel, and communication support systems to adequately meet the needs of these learners. This disconnect between policy and practice undermines the right to quality and equitable education for students with hearing impairments. This paper examined the challenges encountered in teaching learners with hearing impairment in inclusive secondary school settings across Kenya. It employed secondary data analysis, drawing on peer-reviewed articles, government policy documents, and international organization reports published between 2018 and 2024. Data were thematically analyzed to identify recurring barriers and evaluate current practices and interventions. Findings revealed that most teachers lack proficiency in Kenyan Sign Language (KSL) and receive minimal training in inclusive pedagogy. A critical shortage of qualified sign language interpreters, poor adaptation of instructional and assessment materials, and widespread stigma against deaf learners were also reported. Although policies such as the Special Needs Education Policy (2018) exist, weak monitoring, limited funding, and minimal community engagement hinder their implementation. However, schools collaborating with disability organizations or using peer-support strategies achieved better outcomes. The study concludes that realizing meaningful inclusion for learners with hearing impairment requires reforms in teacher education, curriculum adaptation, policy enforcement, and stakeholder coordination. Recommendations emphasize enhancing professional development, increasing resource allocation, adapting inclusive curricula, and raising public awareness to promote equitable learning environments for all learners, regardless of hearing ability.

Keywords: Inclusive education, Hearing Impairment, Kenyan Sign Language, Secondary schools, Educational barriers, Teacher training, Policy implementation, Communication support

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1. Introduction

Learners with hearing impairment face considerable educational challenges, especially in inclusive secondary school settings where teaching strategies and infrastructure may not fully accommodate their needs. Hearing

impairment refers to a partial or total inability to hear, affecting a learner's ability to acquire language, communicate effectively, and participate fully in classroom activities (World Health Organization [WHO], 2021). Globally, over 1.5 billion people experience some degree of hearing loss, with approximately 34 million being children, many of whom attend mainstream schools

where accommodations are often limited (Olusanya et al., 2021). Inclusive education—defined as a system that accommodates all learners regardless of physical, intellectual, social, or linguistic barriers—has been embraced worldwide, but its implementation for learners with hearing impairments remains inconsistent (UNESCO, 2020).

In developed countries such as the United States, Canada, the United Kingdom, Germany, and Australia, inclusion policies have been strengthened by legal frameworks such as the Individuals with Disabilities Education Act (IDEA) in the U.S., which mandates the provision of Free Appropriate Public Education (FAPE) for students with disabilities including hearing impairments (U.S. Department of Education, 2021). In Canada, the Accessibility for Ontarians with Disabilities Act (AODA) supports the inclusion of learners with hearing loss by requiring schools to provide sign language interpreters and assistive listening devices (Canadian Hearing Services, 2022). The UK's Special Educational Needs and Disabilities (SEND) Code of Practice obliges schools to make reasonable adjustments for deaf students, including hiring communication support workers and using speech-to-text tools (National Deaf Children's Society [NDCS], 2021). Germany integrates deaf students through bilingual-bicultural education using German Sign Language and written/spoken German, although teacher preparedness remains a concern (Pfau & Steinbach, 2020). In Australia, inclusive education is guided by the Disability Standards for Education 2005, which obliges schools to consult with learners and parents about necessary support services, yet challenges such as teacher training and availability of interpreters persist (Australian Human Rights Commission, 2022).

Middle-income economies such as Brazil, South Africa, India, Indonesia, and Mexico face additional constraints due to limited resources and inconsistent policy implementation. In Brazil, although the Law of Inclusion (2015) mandates support for all students, infrastructural gaps and a shortage of specialized teachers hinder effective inclusion of learners with hearing impairment (Mendes & Santos, 2021). In South Africa, despite progressive policies under the Inclusive Education White Paper 6, implementation is uneven due to insufficient teacher training and lack of sign language resources (Donohue & Bornman, 2020). In India, the Rights of Persons with Disabilities Act (2016) supports inclusive education, but challenges such as large class sizes and inadequate use of Indian Sign Language persist (Kumar & Sharma, 2022). In Indonesia, efforts to mainstream deaf students are ongoing, but teachers often lack the skills to communicate in Bahasa Isyarat Indonesia (Indonesian Sign Language), limiting learners' participation (Suwastini et al., 2021). In Mexico,

while inclusive education policies exist, a lack of coordinated services and teacher preparedness continues to restrict effective learning among deaf students (Márquez & Vázquez, 2020).

Developing countries like Kenya, Uganda, Tanzania, Nigeria, and Ethiopia encounter even more complex challenges in teaching learners with hearing impairment in inclusive settings. In Uganda, although the Education White Paper (1992) supports inclusive education, implementation is hindered by teacher shortages and low awareness of sign language (Ssebunnya et al., 2022). Tanzania's inclusive education strategy acknowledges the rights of deaf learners, but there is a critical shortage of interpreters and adapted learning materials (Mmbaga, 2021). In Nigeria, inclusive education is supported by the Universal Basic Education Act (2004), yet deaf students face marginalization due to cultural stigma and inadequate classroom support (Adebisi et al., 2022). In Ethiopia, government policy supports inclusive education, but resource limitations and poor teacher training affect the inclusion of learners with hearing impairments (Woldehanna et al., 2021). In Kenya, inclusive education is enshrined in the Basic Education Act (2013) and the Special Needs Education Policy (2018), but systemic issues persist, including a lack of trained teachers in Kenyan Sign Language (KSL), inadequate infrastructure, and large class sizes (Mugo et al., 2022).

Recent studies in Kenya indicate that most secondary schools are ill-equipped to support deaf learners due to limited access to assistive technologies and a shortage of sign language interpreters (Mureithi & Orodho, 2021). Teachers in inclusive schools often lack professional development in deaf education, leading to ineffective classroom communication and learner disengagement (Mutua & Mwangi, 2023). Additionally, societal attitudes and stigma around hearing impairment continue to hinder the full inclusion of deaf learners in mainstream education (Ng'ang'a & Kariuki, 2022). Despite policy commitments, financial constraints and administrative bottlenecks affect the consistent delivery of inclusive services to learners with hearing impairments (Wambugu et al., 2023). Furthermore, the integration of deaf learners in co-curricular and extracurricular activities remains minimal, further isolating them from their hearing peers and affecting their social development (Otieno & Okello, 2023). Thus, while Kenya has made commendable efforts through policy and advocacy, significant gaps remain in realizing equitable education for learners with hearing impairments in inclusive secondary schools.

2. Literature Review

Inclusive education, as promoted by global policy frameworks such as the Salamanca Statement (UNESCO, 1994) and the UN Convention on the Rights of Persons with Disabilities (UNCRPD, 2006), encourages the integration of all learners into mainstream education settings regardless of disability. However, learners with hearing impairments encounter significant educational challenges within inclusive secondary schools, despite global efforts to ensure equal access to quality education. Hearing impairment refers to a partial or complete loss of hearing that affects a learner's communication, language development, and classroom participation (World Health Organization [WHO], 2021). Inclusive education aims to provide appropriate modifications and accommodations to meet the diverse needs of learners, including those with hearing impairments (UNESCO, 2020).

Globally, various countries have adopted inclusive education models with varying levels of success. In Russia, inclusive education policies exist, but implementation remains inconsistent due to inadequate teacher training and a lack of sign language interpreters (Krasnopolskaya & Pinskaya, 2021). A study by Petrova and Dautova (2022) used qualitative interviews with educators in Moscow and found that while policies support inclusion, the absence of professional development for teaching deaf students hindered actual practice. In Germany, inclusive education for deaf learners has been advanced through bilingual education in both German Sign Language and spoken/written German (Pfau & Steinbach, 2020). Using a mixed-methods approach, Becker and Krause (2021) evaluated academic performance and found that students in inclusive settings outperformed those in special schools when given sufficient support services. Finland is recognized for its strong inclusive education system, underpinned by universal design and extensive teacher training (Takala et al., 2024). A nationwide quantitative survey revealed that teachers feel confident supporting deaf learners due to high institutional support and use of individualized education plans (IEPs).

In Canada, the Accessibility for Ontarians with Disabilities Act (AODA) ensures provisions for learners with hearing impairments, including assistive technologies and sign language services (Canadian Hearing Services, 2022). MacDonald and McKee (2021) conducted a longitudinal study in Ontario and concluded that early access to sign language and inclusive early childhood education significantly improved literacy outcomes for deaf students. In Australia, inclusive education is regulated by the Disability Standards for Education (2005), yet gaps remain in interpreter provision and classroom accommodations (Australian Human Rights Commission, 2022). A mixed-

method study by Higgins and Jacks (2023) reported that deaf students in mainstream classrooms felt socially excluded due to limited peer communication opportunities. In the Netherlands, inclusive policies emphasize collaborative teaching and individualized support for deaf learners (de Boer et al., 2021). Their study combined classroom observations and teacher interviews, showing that inclusive classrooms with co-teaching models led to better academic and social outcomes for hearing-impaired students.

In Britain, the Special Educational Needs and Disabilities (SEND) framework provides guidance for inclusive education; however, disparities in resource allocation persist (National Deaf Children's Society [NDCS], 2021). A study by Lucas and Price (2022) used case studies across several secondary schools and found that while most teachers were willing to include deaf learners, many lacked competence in British Sign Language (BSL). New Zealand emphasizes the principles of Te Whāriki, which include inclusive practices for all children, including those with hearing impairments (Ministry of Education NZ, 2021). Research by Wills and Murray (2024) used thematic analysis of teacher interviews and revealed that schools with strong community engagement were more effective in supporting deaf students.

In Asia, countries such as China and India are expanding their inclusive education policies. In China, inclusive education is guided by the Learning in Regular Classrooms (LRC) policy, yet rural areas remain underserved (Zhou & Wang, 2021). A comparative study by Liu and Zhang (2023) found that urban schools with better access to hearing aids and interpreters reported improved outcomes for deaf learners. In India, the Rights of Persons with Disabilities Act (2016) mandates inclusive education, but large class sizes and insufficient teacher training impede its success (Kumar & Sharma, 2022). A survey-based study by Patil and Sinha (2023) revealed that most teachers lacked familiarity with Indian Sign Language (ISL), leading to limited instructional effectiveness. In Bangladesh, inclusive education is supported by the Persons with Disabilities Rights and Protection Act (2013), but limited awareness among educators restricts implementation (Rahman & Akter, 2022). Their study involved a qualitative analysis of school environments and found that deaf learners were often marginalized due to language barriers.

In Latin America, Chile has made progress in inclusive education through the Inclusive Education Law (2016), yet teacher attitudes remain a barrier (Rosas & Flores, 2021). Using focus groups, Morales and Castillo (2023) found that while inclusive policies exist, inadequate teacher training and lack of visual learning materials hindered deaf

learners' participation. In Africa, the situation is diverse across countries. In South Africa, the Education White Paper 6 emphasizes inclusion, but limited access to South African Sign Language (SASL) and low resource availability in rural schools present challenges (Donohue & Bornman, 2020). A longitudinal study by Maseko and Phasha (2022) noted that inclusive policies work best when supported by community-based programs. In Nigeria, despite the existence of the Universal Basic Education Act (2004), deaf students face societal stigma and insufficient classroom adaptations (Adebisi et al., 2022). Uche and Obi (2023) conducted a mixed-methods study showing that teacher attitudes were a significant predictor of inclusive success.

In Ghana, the Inclusive Education Policy (2015) has improved awareness, but implementation is hindered by lack of sign language interpreters (Mensah & Ofori, 2022). Ethiopia's inclusive education strategy highlights equity, yet deaf students face communication barriers and poor academic performance (Woldehanna et al., 2021). In Malawi, inclusive education is recognized under the National Education Sector Plan, but challenges include poor infrastructure and lack of trained personnel (Kalua & Chitsulo, 2022). Their qualitative study highlighted the isolation of deaf learners in mainstream classrooms. In Zimbabwe, inclusive education faces funding constraints, and deaf learners often lack access to visual aids (Chimedza & Mukuku, 2022). Uganda's inclusive education policy acknowledges the rights of learners with disabilities, but limited community involvement and teacher preparedness reduce effectiveness (Ssebunnya et al., 2022). A comparative study by Namusoke and Kajubi (2023) found that schools with partnerships with deaf associations performed better in inclusion. In Tanzania, the Education and Training Policy promotes inclusive education, but deaf learners continue to face exclusion due to the scarcity of Tanzanian Sign Language users in schools (Mmbaga, 2021). Rwanda has made strides in inclusive education through its Inclusive Education Strategic Plan (2019–2024), yet inclusive practices remain inconsistent due to a shortage of specialized educators (Habimana & Uwineza, 2022).

2.1 Theoretical Perspective

This study was anchored on Vygotsky's Sociocultural Theory of Learning (1978), which emphasizes the critical role of social interaction, language, and cultural tools in the cognitive development of learners. The theory postulates that learning is fundamentally a socially mediated process, where learners construct knowledge through interactions with more knowledgeable others within their cultural context. Central to this theory is the concept of the Zone of Proximal Development (ZPD), which refers to the gap

between what a learner can do independently and what they can achieve with guidance and support. In the context of hearing-impaired learners, this theory underscores the importance of communication, collaborative learning, and cultural-linguistic tools—such as sign language—in facilitating learning within inclusive classroom settings.

In this study, the theory was applied to understand how the absence or presence of social and communicative support systems affects the learning outcomes of students with hearing impairment in inclusive secondary schools in Kenya. Vygotsky's perspective on language as a primary tool for cognitive development directly relates to the challenges deaf learners face when teachers lack proficiency in Kenyan Sign Language (KSL), or when sign language interpreters are unavailable. The ZPD concept helped frame the analysis of peer-assisted learning and the role of trained educators and interpreters as scaffolding agents who help bridge learners' potential and actual performance. Thus, the theory provided a useful lens through which to evaluate the adequacy of teacher support, learning materials, and social engagement in the inclusive education environment.

Several scholars have applied Vygotsky's Sociocultural Theory to studies involving learners with disabilities, including hearing impairments. For instance, Maseko and Phasha (2022) used the theory to analyze how peer interactions and community support influence inclusive learning outcomes among deaf students in South African schools. Similarly, Mutua and Mwangi (2023) applied Vygotsky's concepts to explore how language barriers limit cognitive engagement for hearing-impaired learners in Kenyan secondary schools. In a study conducted in India, Kumar and Sharma (2022) employed the theory to examine how inclusive classroom environments facilitate or hinder collaborative learning for students with communication difficulties. These applications support the relevance of Vygotsky's framework in inclusive education research, particularly in highlighting the social, cultural, and linguistic dimensions that are crucial for effective learning among students with hearing impairments.

3. Methodology

The study employed a secondary data collection approach, drawing upon a diverse array of existing sources to examine the challenges of teaching learners with hearing impairment in inclusive secondary schools across multiple global contexts. The use of a secondary data collection approach in this study is well-supported within qualitative research, particularly in exploring complex, multidimensional educational issues such as inclusive practices for learners with hearing impairment. Secondary

data allows researchers to synthesize a wide range of perspectives, contextual variations, and policy implementations from multiple countries without the resource constraints of primary fieldwork (Johnston, 2017). Recent studies have affirmed the value of secondary data in special education research. For instance, Zhou and Wang (2021) employed secondary analysis to examine inclusive education policies for deaf learners in China, while Mugo, Orodho, and Njoka (2022) used document analysis to assess the status of inclusive education in Kenya. Similarly, Woldehanna, Gebeyehu, and Yisak (2021) utilized policy reviews and previously published data to evaluate the implementation of inclusive education strategies in Ethiopia. Scholarly articles were retrieved through systematic searches of databases such as Scopus, Web of Science, and ERIC, using keywords including “inclusive education,” “hearing impairment,” “sign language,” and country-specific terms. Government and non-governmental organization reports (e.g., UNESCO Global Education Monitoring Reports, World Health Organization publications, and national special education policy documents) were reviewed to capture policy frameworks and statistical overviews. Literature published between 2018 and 2024 was prioritized to ensure currency, and only English-language sources were included. Each document was screened for relevance based on its focus on secondary-level inclusive settings and the presence of empirical findings or policy analyses related to hearing impairment.

Data extraction focused on study design (qualitative, quantitative, or mixed methods), sampling or data-collection techniques, geographic setting, participant characteristics, and key outcomes related to instructional strategies, resource availability, teacher preparedness, and learner engagement. Policy documents were analyzed through content analysis to identify recurring themes in legislative mandates and implementation guidelines, while academic studies were coded for methodological rigor, theoretical framing, and reported findings. Synthesized findings were then organized thematically—covering definitions and prevalence, pedagogical accommodations, infrastructural and resource constraints, and socio-cultural influences—to facilitate cross-country comparisons. Triangulation of policy analyses with empirical research allowed for a comprehensive interpretation of how secondary data sources converge or diverge in explaining both universal and context-specific barriers to meaningful inclusion of learners with hearing impairment.

4. Results and Discussion

The findings from this study revealed that one of the primary challenges in teaching learners with hearing

impairment in inclusive secondary schools in Kenya is the limited proficiency of teachers in Kenyan Sign Language (KSL). Many teachers reported lacking the skills necessary to communicate effectively with deaf learners, resulting in communication breakdowns and reduced learning outcomes (Mutua & Mwangi, 2023). Further, the absence of standardized training programs in KSL across teacher training institutions has contributed to inconsistencies in classroom support for hearing-impaired learners (Mureithi & Orodho, 2021). This suggested that the education system has not adequately prepared its workforce for inclusive instruction. This aligns with the findings by Takala, Pirttimaa, and Törmänen (2024), who observed that in Finland, the lack of standardized training in sign language for teachers resulted in inconsistent support for deaf learners in inclusive classrooms.

Similarly, there was insufficient access to sign language interpreters in most inclusive schools. Schools either lacked interpreters altogether or relied on untrained individuals, such as fellow students, to facilitate communication (Mugo et al., 2022). This suggested that systemic underinvestment in human resources has undermined the implementation of inclusive education policies. Moreover, interpreters who were available were often overburdened, having to serve multiple learners across several classes simultaneously, thereby reducing their effectiveness (Ng’ang’a & Kariuki, 2022). Similarly, Mensah and Ofori (2024) found that in Ghana, the shortage and overburdening of sign language interpreters in inclusive secondary schools significantly hindered effective classroom instruction for students with hearing impairment.

Another critical finding was the scarcity of teaching and learning materials adapted for deaf learners. Teachers reported that most textbooks and classroom materials were designed for hearing students and were not modified to meet the needs of students with hearing impairments (Otieno & Okello, 2023). This suggested that curriculum development processes in Kenya have not adequately integrated principles of inclusive education. Furthermore, there was a lack of visual aids and captioned educational videos, which could enhance comprehension among deaf learners (Wambugu et al., 2023). Similarly, Rahman and Akter (2024) reported that in Bangladesh, the exclusion of accessible learning resources such as visual aids and captioned materials from national curricula significantly limited the participation and comprehension of hearing-impaired students in inclusive classrooms.

However, the study noted that some schools made individual efforts to support deaf learners by using peer-to-peer learning and incorporating gestures and visuals into instruction. While these strategies were helpful, they were

inconsistent and depended heavily on individual teacher initiative (Mutua & Mwangi, 2023). This suggested that there is a need for institutional support rather than relying solely on teacher goodwill. On the contrary, some schools discouraged the use of sign language, believing it would hinder the acquisition of spoken language skills. This suggested that misinformation and outdated beliefs about deaf education still influence practice in some institutions (Ng'ang'a & Kariuki, 2022).

In addition, the study found that large class sizes in Kenyan public secondary schools significantly hinder the ability of teachers to provide individualized attention to learners with hearing impairment. Teachers stated that managing a class of 40–60 students made it nearly impossible to ensure deaf learners were following the lesson (Mugo et al., 2022). This suggested that inclusive education without class size reduction may be ineffective for learners with special needs. Similarly, overcrowded classrooms were found to limit mobility and visibility, reducing the opportunity for deaf learners to see facial expressions and lip movements—critical elements in their learning process (Otieno & Okello, 2023).

Moreover, the study revealed that societal attitudes and stigma towards hearing impairment negatively affect the inclusion of deaf learners. Some teachers and students perceived deaf learners as intellectually inferior or burdensome, leading to discrimination and isolation (Ng'ang'a & Kariuki, 2022). This suggested that inclusion must go beyond policy and involve community sensitization and cultural change. However, schools that had undergone disability inclusion training showed more positive attitudes among staff and peers, which enhanced learning outcomes (Wambugu et al., 2023). This suggested that continuous professional development has a transformative role in changing mindsets.

On the contrary, the availability of inclusive policies, such as the Special Needs Education Policy (2018), has not translated into effective classroom implementation due to weak monitoring and evaluation mechanisms. Teachers and school heads admitted to having little knowledge of the policy content or how to apply it (Mureithi & Orodho, 2021). This suggested a disconnect between policy formulation and ground-level practice. Similarly, the study found that education officials rarely conducted follow-up visits or offered support to inclusive schools, further weakening policy enforcement (Mugo et al., 2022).

The study also found that funding constraints severely limited the capacity of inclusive schools to support deaf learners. Schools lacked the budget to hire interpreters, purchase assistive devices, or adapt learning materials (Wambugu et al., 2023). This suggested that inclusive

education has not been adequately prioritized in budgetary allocations. Moreover, parents of deaf learners were often unable to afford private support services, such as hiring personal tutors or purchasing hearing aids (Ng'ang'a & Kariuki, 2022). This suggested that inclusive education remains inaccessible to learners from low-income households.

Similarly, the study highlighted a lack of collaboration between regular teachers and special needs education (SNE) specialists. Teachers reported feeling isolated and unsupported in their efforts to include deaf learners, as few schools had designated SNE resource persons (Mutua & Mwangi, 2023). This suggested that building multidisciplinary support teams within schools could enhance inclusive practices. On the contrary, schools that partnered with organizations for the deaf showed better outcomes, including teacher training workshops, material support, and peer mentorship (Otieno & Okello, 2023). This suggested that stakeholder collaboration can bridge resource gaps in public education.

Further, the study observed that deaf learners were often excluded from co-curricular activities such as debates, drama, and sports, due to communication barriers and low expectations from teachers (Wambugu et al., 2023). This suggested that inclusion should extend beyond the classroom to the social and emotional domains of student life. Similarly, deaf students reported feelings of isolation and depression due to limited peer interaction and bullying (Ng'ang'a & Kariuki, 2022). This suggested that schools need to adopt holistic approaches that promote psychological safety.

The study also found that assessment methods in inclusive schools were not adapted for deaf learners. National exams and class assessments often relied heavily on oral instructions or auditory comprehension, which disadvantaged hearing-impaired learners (Mureithi & Orodho, 2021). This suggested that assessment reform is necessary to accommodate different learning needs. However, some schools used continuous assessment records and visual-based evaluations, which showed better performance among deaf students (Mutua & Mwangi, 2023). This suggested that inclusive pedagogy can be effective when creatively adapted.

Additionally, the study found that deaf learners rarely participated in school leadership or student governance due to exclusion and low teacher expectations (Otieno & Okello, 2023). This suggested that empowerment of learners with disabilities is critical for their self-esteem and academic motivation. On the contrary, in schools where teachers deliberately encouraged participation and leadership roles among deaf learners, improved academic

and social outcomes were reported (Ng'ang'a & Kariuki, 2022). This suggested that inclusive leadership practices are vital in promoting equity.

Moreover, the study identified a lack of parental engagement as a barrier to inclusion. Many parents were either unaware of their children's rights or lacked the skills to support home learning, especially when they were not fluent in KSL (Wambugu et al., 2023). This suggested that empowering parents through training and information sharing is a key component of inclusive education. However, some schools had established parent support groups that provided emotional and informational assistance, thereby improving home-school collaboration (Mutua & Mwangi, 2023). This suggested that community-based initiatives can enhance educational outcomes.

The findings also indicated that there is a shortage of research and data on the experiences of deaf learners in inclusive schools, making it difficult to inform evidence-based policies (Mugo et al., 2022). This suggested that more localized and disaggregated data is needed to inform inclusive education planning. Furthermore, teachers expressed the need for a platform to share best practices and experiences with teaching deaf learners (Otieno & Okello, 2023). This suggested that professional learning communities could be valuable for continuous improvement. Similarly, Wills and Murray (2024) found that in New Zealand, teachers of deaf students highlighted the importance of collaborative platforms and peer learning networks in enhancing inclusive teaching practices and addressing classroom challenges effectively.

5. Conclusion and Recommendations

5.1 Conclusion

The findings from this study conclude that while Kenya has demonstrated commitment to inclusive education through progressive policies and legal frameworks, the practical realization of these goals remains limited, particularly for learners with hearing impairment. The lack of trained teachers proficient in Kenyan Sign Language, insufficient access to interpreters, inadequate teaching and learning materials, and poor adaptation of assessment methods collectively hinder the effective participation of deaf learners in inclusive secondary schools. Additionally, structural barriers such as overcrowded classrooms, limited funding, and the absence of specialized support systems significantly compromise the quality of education for these learners. The persistence of negative societal attitudes and exclusion from co-curricular activities further amplifies their marginalization, affecting both their academic and psychosocial development.

Moreover, the study reports that effective inclusion of learners with hearing impairment requires more than policy declarations; it demands systemic and well-coordinated interventions across all levels of the education sector. Teacher capacity building, curriculum reform, inclusive assessment practices, and sustained stakeholder engagement including parents, disability organizations, and community leaders are critical to bridging the gap between policy and practice. Schools that embraced inclusive practices through external partnerships, individualized support, and a culture of acceptance showed markedly better outcomes. Thus, sustainable, well-funded, and context-specific strategies are essential to ensure that inclusive education in Kenya becomes a lived reality for all learners, regardless of hearing ability.

5.2 Recommendations

Based on the findings and conclusions of this study, the following recommendations are proposed:

1. The Ministry of Education, in collaboration with teacher training institutions, should integrate mandatory KSL training and inclusive education modules into pre-service and in-service teacher programs. This will equip teachers with the communication and instructional skills necessary to effectively support learners with hearing impairments.
2. The Teachers Service Commission (TSC) and relevant stakeholders should prioritize the employment of qualified sign language interpreters in inclusive secondary schools to bridge communication gaps and enhance learning access for deaf students.
3. Curriculum developers and examination bodies should produce and distribute teaching aids, textbooks, and assessment tools that are adapted to the needs of learners with hearing impairments, including captioned videos, visual aids, and sign language-translated content.
4. The government, schools, NGOs, and parent associations should work together to raise awareness about the rights and capabilities of learners with hearing impairments, reduce stigma, and promote a supportive environment for inclusion both in and outside the classroom.

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