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RESEARCH ARTICLE

Teachers' Inclusive Strategies Used For Promoting Learning Equity among Deaf Students in Public Secondary Schools in Nyamagana District, Mwanza-Tanzania

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ABSTRACT

This study examined teachers' inclusive strategies for promoting learning equity among Deaf students in public secondary schools. Guided by the Universal Design for Learning (UDL) framework, the study employed a qualitative case study design involving 31 participants: 10 teachers, two school heads, two Ward Education Officers, one District Secondary Special Education Officer, and 16 Deaf students. Data were collected through semi-structured interviews, focus group discussions, classroom observations, and documentary reviews, and were analyzed thematically. The findings revealed that while teachers recognized strategies such as sign language, visual aids, differentiated instruction, peer support, and multimodal teaching, implementation was highly inconsistent. A significant gap emerged between teacher-reported practices and classroom realities: only teachers with specialized Hearing Impairment training used sign language consistently, no visual aids specifically tailored for Deaf students were observed, and differentiation and peer support were applied informally. The study concludes that systemic constraints including limited training, severe resource shortages, and large class sizes substantially impede effective practice. Strengthening continuous teacher professional development, targeted resource provision, and institutional support mechanisms is recommended to foster genuine learning equity for Deaf students.

Keywords: Inclusive strategies, Deaf students, learning equity, Universal Design for Learning, Tanzania

INTRODUCTION

Inclusive education ensures that all learners, regardless of physical, sensory, intellectual, or social differences, have equitable access to quality education within mainstream learning environments. Grounded in the principle of fundamental human rights, inclusive education emphasizes the systematic identification and elimination of learning barriers that impede student participation, classroom engagement, and academic achievement (UNESCO, 2020). A central component of effective inclusion involves teachers' inclusive

strategies deliberate, reflective instructional practices designed to respond to diverse student learning needs within mainstream classrooms. In general educational settings, these strategies encompass differentiated instruction, visual aids, sign language communication, peer-mediated support, assistive technologies, and adapted instructional materials (Tanzania Institute of Education [TIE], 2023).

For Deaf students, inclusive teaching practices are especially critical because their cognitive acquisition and classroom interaction rely predominantly on visual

communication and accessible instructional methods. Without targeted instructional adaptations, Deaf learners encounter severe communication barriers that limit their comprehension of subject matter, hinder their active participation in class discussions, and result in academic outcomes that lag behind those of their hearing peers. Consequently, educators are expected to adopt multimodal pedagogical approaches incorporating fluent sign language, structured written instructions, real-time visual demonstrations, and intentional peer interactions to enhance visual comprehension and foster equitable classroom participation (UNESCO, 2020; World Bank, 2022).

At the international level, inclusive education for learners with disabilities, including Deaf students, is guided by several human rights frameworks. The United Nations Convention on the Rights of Persons with Disabilities (CRPD) specifically recognizes the right of persons with disabilities to inclusive education and requires States Parties to facilitate the learning of sign language and promote the linguistic identity of the Deaf community (United Nations, 2006). Similarly, the Salamanca Statement and Framework for Action on Special Needs Education emphasizes that education systems should accommodate the diverse learning needs of all learners through appropriate pedagogical approaches and support mechanisms (UNESCO, 1994). These commitments are further reinforced by Sustainable Development Goal 4 (SDG 4), which calls for inclusive, equitable, and quality education for all by 2030 (UNESCO, 2023). Despite these international commitments, a pronounced gap remains between policy formulation and classroom implementation. Globally, an estimated 240 million children live with disabilities, and children with disabilities continue to experience substantial inequalities in access, participation, and educational completion (UNICEF, 2022). In Sub-Saharan Africa, these challenges are intensified by inadequate teacher preparation, limited specialized resources, and persistent communication barriers, which constrain the effective inclusion of Deaf students in mainstream classrooms (UNESCO, 2021; World Bank, 2022). Consequently, many mainstream classrooms continue to rely predominantly on auditory methods of instruction, leaving Deaf students physically included in school settings while experiencing limited access to meaningful classroom participation and learning.

In Tanzania, the commitment to inclusive education for learners with disabilities, including Deaf students, is supported by several national legal and policy frameworks. The Education and Training Policy of 2014 (2023 edition) emphasizes equitable access to quality education and the provision of appropriate educational opportunities for learners with special educational needs. The Persons with Disabilities Act No. 9 of 2010 further protects the right of persons with disabilities to education and requires reasonable measures to

facilitate their effective participation in educational settings. In addition, the National Policy on Disability (2004) provides a broader national framework for promoting the rights, participation, and inclusion of persons with disabilities across social sectors, including education. These commitments are further operationalized through the National Strategy for Inclusive Education (2021/22–2025/26), which emphasizes the removal of barriers to learning and participation through improved teacher capacity, accessible learning environments, and the provision of appropriate teaching and learning resources. At the curriculum and classroom level, the National Curriculum Framework and special needs and inclusive education guidelines provide direction for accommodating diverse learner needs through appropriate instructional approaches and adaptations (TIE, 2023). Collectively, these frameworks provide the policy foundation for promoting educational access, participation, and learning equity among Deaf students in mainstream schools. However, significant implementation bottlenecks persist across public secondary schools. Limited teacher preparation in special needs and inclusive education, inadequate sign language competence, shortages of specialized teaching and learning resources, and overcrowded classrooms continue to constrain the effective implementation of inclusive instructional strategies for Deaf students.

These systemic challenges are particularly acute in most secondary schools. Many rapidly growing urban centers, which host inclusive public secondary schools that enroll learners with hearing impairments alongside hearing peers. However, local empirical reports from Nyamagana District in Mwanza, Tanzania indicate that fewer than 15% of subject teachers in these public inclusive secondary schools possess functional sign language skills or formal training in inclusive instructional design (William & Ligembe, 2022; Shiboko & Mrema, 2024). General subject teachers regularly face high student-to-teacher ratios, rigid syllabus deadlines, and minimal access to specialized learning materials, leaving them unprepared to adapt their daily instruction for Deaf learners. As a result, Deaf students in the district continue to experience severe communication breakdowns, lower classroom participation rates, and poorer academic performance compared to their hearing counterparts.

While Tanzania's national policy and legal frameworks, particularly the Persons with Disabilities Act No. 9 of 2010, the Education and Training Policy (2014, 2023 Edition), and the National Strategy for Inclusive Education (2021/22–2025/26), advocate equitable access, participation, accessible learning environments, teacher capacity development, and appropriate instructional support for learners with disabilities, limited empirical research has comprehensively examined how these policy

commitments are translated into daily classroom practices for Deaf learners (MoEST, 2021, 2023; United Republic of Tanzania, 2010). Existing studies across Tanzania have predominantly focused on general access to special needs education or infrastructure deficits, paying limited attention to micro-level instructional strategies such as the use of Tanzanian Sign Language, task differentiation, visual aids, peer collaboration, and multimodal teaching that directly shape classroom learning equity. This persistent gap between policy commitments and classroom practice underscores the need for an empirical investigation into the inclusive strategies teachers use to promote learning equity among Deaf students in public secondary schools.

LITERATURE REVIEW

Theoretical Review

This study was guided by the Universal Design for Learning (UDL) framework developed by the Center for Applied Special Technology (CAST, 2024). UDL is an educational framework grounded in cognitive neuroscience that advocates for the design of flexible, inclusive learning environments capable of accommodating diverse student learning needs from the outset. Rather than viewing learning difficulties as deficits inherent within the student, the UDL framework posits that educational barriers stem primarily from inflexible curricula, rigid instructional methods, and inaccessible learning materials. Consequently, the burden of adaptation rests on the educational system, requiring teachers to proactively identify and eliminate instructional barriers to foster equitable learning opportunities for all learners (Meyer et al., 2020; Rao et al., 2021).

The UDL framework is structured around three core principles, each directly addressing a fundamental aspect of classroom equity for Deaf students in mainstream secondary environments. The first principle, Multiple Means of Representation, focuses on how information is presented to learners. In the context of Deaf education, this principle evaluates access equity by examining whether teachers provide visual media, written texts, clear graphic organizers, and sign language communication alongside or in place of traditional spoken lectures (CAST, 2024; Rao et al., 2021). The second principle, Multiple Means of Engagement, addresses the affective domain of learning by examining how teachers foster student motivation, sustained interest, and active participation. For Deaf learners, engagement equity involves utilizing inclusive group dynamics, collaborative peer-mediated support, interactive visual tasks, and supportive classroom environments that encourage active participation without fear of communication breakdown (CAST, 2024; Meyer et al., 2020). The third principle, Multiple Means of Action and Expression, concerns how learners demonstrate their knowledge, skills, and

conceptual understanding. This principle evaluates assessment equity by assessing whether educators offer flexible evaluation methods such as visual demonstrations, illustrated tasks, practical projects, and signed responses rather than relying solely on standardized written or oral assessments (CAST, 2024). Overall, the UDL framework provided clear analytical indicators for evaluating the degree to which teachers' inclusive strategies successfully removed pedagogical barriers, promoted active classroom engagement, and fostered genuine learning equity among Deaf secondary school students.

Empirical Review

Empirical research across global, regional, and national contexts highlights the central role of teachers' inclusive strategies in facilitating learning access and participation for Deaf students, while simultaneously pointing to persistent execution challenges. Internationally, studies demonstrate that when evidence-based instructional adaptations are systematically implemented, Deaf learners achieve significantly higher levels of engagement and academic comprehension. For instance, Rao and Meo (2021) examined the implementation of Universal Design for Learning (UDL) in secondary settings and found that teachers' deliberate integration of visual aids, graphic organizers, and differentiated instructional materials directly enhanced Deaf students' classroom participation and comprehension. However, the authors noted that educators frequently struggled to sustain these inclusive practices over time due to insufficient continuous professional development and limited pedagogical coaching. Similarly, Meyer et al. (2020) identified differentiated instruction, multimodal delivery methods, and flexible assessment tasks as key pedagogical strategies for promoting educational equity. Crucially, their findings indicated that the success of these strategies relied heavily on well-resourced school environments, leaving a critical question regarding how such strategies function within resource-constrained secondary schools in developing nations.

Within African educational contexts, empirical investigations reveal that while secondary school teachers attempt to utilize various inclusive strategies, structural and systemic constraints severely compromise their effectiveness. In Ghana, Anane-Boahen (2020) observed that secondary teachers frequently employed visual materials and cooperative learning structures to support Deaf students; however, severe classroom overcrowding and a lack of specialized teacher training drastically reduced the impact of these strategies. Building on this, Adjei (2021) reported that while teacher sign language communication and visual instruction noticeably improved student engagement in Ghanaian classrooms, the application of these techniques

remained sporadic and highly dependent on individual teacher motivation. In Kenya, Mwangi (2025) found that differentiated instruction and peer-assisted learning strategies significantly enhanced academic interactions among Deaf secondary learners, yet sustained usage was hampered by a lack of institutional administration support and missing teaching guidelines. Correspondingly, Charles and Khaing (2023) documented in Uganda that visual teaching supports and peer collaboration fostered inclusive environments, but highlighted that teachers often treated learners with disabilities homogeneously, failing to tailor strategies specifically to the unique visual and linguistic needs of Deaf learners.

In Tanzania, empirical scholarship specifically focusing on teachers' instructional strategies for Deaf secondary students remains emerging but reveals substantial implementation barriers. Wakuru et al. (2023) investigated pedagogical practices in Tanzanian inclusive classrooms and found that while teachers attempted to use basic visual aids and physical gestures, the overall instructional quality was heavily constrained by severe teaching material shortages and inadequate pre-service specialized training. Mgendi et al. (2023) reinforced these observations, demonstrating that visual materials successfully boosted participation among hearing-impaired pupils, yet the overall effectiveness of classroom delivery was crippled by teachers' extremely limited sign language proficiency. Furthermore, Kisanga and Foya (2025) noted that secondary school teachers in Tanzania struggled to execute consistent differentiated instruction and task adaptations due to extreme workload pressures, large class sizes, and insufficient curriculum modifications.

Synthesizing this literature demonstrates that sign language, visual aids, differentiated instruction, peer support, and multimodal teaching are universally recognized as core strategies for promoting learning equity for Deaf learners. However, existing studies predominantly focus on general teacher attitudes or broad systemic challenges, often missing the direct classroom observations necessary to contrast reported teacher practices against real-world classroom execution. Moreover, few studies systematically examine these specific instructional strategies through the dual lens of qualitative classroom observations and Deaf students' lived experiences within Tanzanian public secondary schools. This study directly addresses these empirical and geographical gaps by providing a nuanced examination of how teachers' inclusive strategies are actually deployed and how they influence learning equity among Deaf students in secondary schools particularly from developing countries where learning loss among deaf students has been severely evidenced.

METHODOLOGY

This study adopted a qualitative case study design to examine teachers' inclusive strategies used for promoting learning equity among Deaf students in public secondary schools using references from Nyamagana District, Mwanza Region, Tanzania. The research was conducted across two public inclusive secondary schools, targeting a population of 271 individuals comprising subject teachers, Deaf students, school heads, Ward Education Officers (WEOs), and the District Secondary Special Education Officer (DSSEO). Using criterion purposive and key informant sampling procedures, a sample of 31 participants was selected, including 10 subject teachers across core curriculum areas and SNE coordinators, 16 Form III and IV female Deaf students, two school heads, two WEOs, and one DSSEO.

Data collection utilized a qualitative triangulation strategy comprising semi-structured interviews with teachers and education authorities, four focus group discussions (FGDs) with Deaf students facilitated by Tanzanian Sign Language (TSL) interpreters, non-participant classroom observations, and documentary reviews of lesson plans, schemes of work, and assessment logs. Data trustworthiness was ensured through credibility, dependability, transferability, and confirmability (Lincoln & Guba, 1985; Stahl & King, 2020). Ethical standards were maintained through institutional research clearances (SAUT, RAS, DAS), informed consent, participant assent, and anonymity. Collected data were analyzed thematically using a six-step manual qualitative process (Braun & Clarke, 2019) supported by Microsoft Word 2024 and Excel 2024 to evaluate instructional practices against the Universal Design for Learning (UDL) framework.

FINDINGS AND DISCUSSION

Teachers' Inclusive Strategies for Promoting Learning Equity among Deaf Students

The primary objective of this study was to examine the inclusive strategies teachers utilize to promote learning equity among Deaf students in public secondary schools. The findings are presented across five core empirical themes: sign language and visual communication; visual aids and instructional materials; differentiated instruction and task adaptation; peer support and collaborative learning; and multimodal teaching approaches.

Use of Sign Language and Visual Communication

Findings revealed that while sign language was universally acknowledged as the most critical strategy for supporting Deaf learners, its classroom implementation was highly inconsistent and depended almost entirely on individual teacher training and personal background. School leadership reported ongoing efforts to encourage sign language adoption, yet institutional participation remained uneven.

Explaining this challenge, the SEN Coordinator at School A stated:

I have been encouraging all teachers to learn sign language, but it is not easy. Some teachers attend training, but others do not because they say they are too busy. Deaf students often complain that teachers do not use sign language consistently, making it hard for them to understand lessons. I personally use sign language in all my interactions with Deaf students, and I have seen that it makes a big difference in their participation. (Interview 1, June 2026)

This statement indicates that administrative encouragement alone fails to overcome the systemic operational barriers teachers face in mastering sign language. The implication is that without structural incentives and protected time, professional development initiatives remain voluntary, leaving Deaf students exposed to fragmented, teacher-dependent learning environments. This aligns with findings by Wakuru et al. (2023), who demonstrated that voluntary, unmonitored inclusive training rarely translates into sustained classroom practice. Theoretically, this inconsistent communication breaches the UDL principle of Multiple Means of Representation (CAST, 2024), as core subject matter remains locked behind auditory delivery without consistent visual-gestural translation. Mainstream teachers confirmed that limited practice and low confidence created significant execution barriers. For instance, an English teacher at School A admitted:

I attended MEWAKA training on sign language, but I don't use it in class. I forget the signs because I don't practice. When I try, the students correct me, and I feel embarrassed. So I use gestures and writing instead. (Interview 2, June 2026)

This admission reveals that isolated, short-term workshops fail to build the affective self-efficacy and linguistic fluency required for real-time classroom instruction. The implication is a complete breakdown of instructional dialogue, forcing educators to rely on improvised gestures and text that capture only low-level concepts while omitting complex academic vocabulary. This supports Adjei (2021) and Anane-Boahen (2020), who observed that teacher anxiety and linguistic insecurity directly cause instructional retreat to basic chalkboard writing. From a UDL perspective, substituting full sign language with rudimentary gestures violates Multiple Means of Representation (CAST, 2024), creating an inequitable barrier where Deaf learners receive inferior instructional depth compared to their hearing peers. Non-participant

classroom observations corroborated these accounts: only teachers with specialized Hearing Impairment (HI) backgrounds used fluent sign language, whereas general educators relied on basic hand gestures and board writing. Furthermore, documentary reviews of lesson plans across both schools revealed no written indications of sign language accommodations.

Use of Visual Aids and Instructional Materials

While educators acknowledged the necessity of visual materials for Deaf learners, field observations uncovered a severe gap between professional awareness and actual classroom practice. Teachers expressed a strong theoretical understanding of visual learning, as illustrated by a Biology teacher who noted:

I use a lot of visual aids in my teaching. For Deaf students, seeing something is better than hearing about it. When I teach Biology, I always bring diagrams, models, and pictures. For example, when I was teaching about the human digestive system, I used a large diagram on the board and labeled all the parts. The Deaf students were able to follow along because they could see the process visually. Without these visuals, they would struggle to understand. (Interview 3, June 2026)

This response illustrates a clear conceptual grasp of visual pedagogy, yet it highlights an over-reliance on static, teacher-drawn chalkboard diagrams rather than dynamic or three-dimensional learning tools. The implication is that while basic diagrams assist recognition, they fail to convey complex biological interactions, leaving Deaf students with superficial conceptual understandings. This corroborates Kisanga and Foya (2025), who noted that Tanzanian teachers frequently mistake routine chalkboard writing for specialized visual adaptation. Under the UDL framework, relying on basic, static chalkboard drawings offers only minimal compliance with Multiple Means of Representation (CAST, 2024), failing to supply the rich, multimodal representations required for deep cognitive engagement. Direct classroom observations across both schools confirmed this gap, revealing a total absence of customized visual media. The SEN Coordinator at School A highlighted the underlying systemic barriers causing this operational deficit:

We don't have enough visual aids in this school. Teachers are supposed to make their own, but they don't always have the time or the resources. I have been asking for charts and diagrams, but we haven't received them yet. Teachers rely on the chalkboard, which is not always effective for Deaf students. (Interview 4, June 2026)

This commentary exposes an institutional pattern of shifting resource-provision responsibilities onto individual, overworked educators without providing material budgets or preparation periods. The implication is that inclusive teaching becomes an unsustainable personal burden rather than an institutional standard, resulting in visual neglect for Deaf learners. This finding strongly supports Wakuru et al. (2023) and Mgendi et al. (2023), who identified chronic material deprivation as the primary structural bottleneck neutralizing inclusive policies in Tanzanian secondary schools. Theoretically, this resource deficit causes a systemic failure of Multiple Means of Representation (CAST, 2024), as visual learners are forced to navigate an environment missing accessible instructional media.

Differentiated Instruction and Task Adaptation

Teachers recognized the value of differentiated instruction for accommodating diverse learning paces, but systemic constraints forced them to default to standardized delivery. Some educators demonstrated innovative task adaptations, with a Mathematics teacher explaining:

I differentiate my instruction for Deaf students. For example, when I pose a question to the class, I make sure that Deaf students can see it written on the board. For homework, I give them written instructions and sometimes provide additional examples. I also allow them to demonstrate their understanding through drawings or diagrams rather than only written explanations. This helps me to see whether they understand, even if their language skills are not strong. (Interview 5, June 2026)

This practice highlights how individual teacher agency can overcome rigid assessment norms by validating alternative, non-verbal pathways for demonstrating mastery. The implication is that flexible evaluation methods drastically reduce academic frustration and allow Deaf students to display underlying quantitative reasoning without being penalized for written language barriers. This finding aligns with Rao and Meo (2021) and Meyer et al. (2020), who showed that flexible assessment formats enhance academic self-efficacy among learners with communication challenges. Crucially, this directly operationalizes the UDL principle of Multiple Means of Action and Expression (CAST, 2024) by diversifying how students express knowledge. However, administrators emphasized that large class sizes made routine differentiation nearly impossible across mainstream subjects. The SEN Coordinator at School B noted:

Differentiation is a good strategy, but it is difficult to do in a class of 70 students.

Teachers have to cover the syllabus and prepare students for exams. They often feel that they cannot spend too much time on individual students because they have to move quickly. Some teachers try to differentiate, but many give up because it is too demanding. (Interview 6, June 2026)

This quote demonstrates how macro-level structural pressures specifically high student-to-teacher ratios and rigid examination deadlines directly force teachers to abandon inclusive methodologies in favor of standardized, fast-paced lecturing. The implication is that Deaf students are systematically marginalized as teachers prioritize the learning pace of the hearing majority to cover syllabus requirements. This confirms the empirical work of Kisanga and Foya (2025) and Chaula et al. (2022), who established that high workload pressures force secondary teachers to default to traditional, non-differentiated delivery. From a UDL perspective, this default to one-size-fits-all teaching represents a breakdown of Multiple Means of Action and Expression (CAST, 2024), forcing Deaf learners into inflexible evaluation structures.

Peer Support and Collaborative Learning

Peer support was widely acknowledged as a helpful classroom strategy, but it functioned as an informal, unscripted survival mechanism rather than an intentionally designed pedagogical system. The SEN Coordinator at School A remarked:

Peer support is a very effective strategy because it reduces the burden on the teacher. When Deaf students have a peer who can help them, they do not have to wait for the teacher to come to them. They can ask questions, get explanations, and complete tasks more quickly. We encourage teachers to use pair work and group work, but we also train the hearing students on how to support their Deaf peers effectively. (Interview 7, June 2026)

This statement reveals an administrative reliance on peer assistance primarily as an informal labor-saving workaround for teacher shortages rather than a structured pedagogical method. The implication is that when peer collaboration lacks explicit guidelines or professional oversight, the accuracy of transmitted information remains unverified, risking the propagation of academic errors. This finding contrasts with Charles and Khaing (2023), who argued that peer assistance must be systematically monitored by qualified SNE personnel to be effective. Under UDL, relying on unstructured peer help offers only a superficial implementation of Multiple Means of Engagement (CAST, 2024), as it abdicates primary instructional

responsibility to untrained learners. Relying on classmates also introduced social and academic inconsistencies. A Mathematics teacher observed:

Peer support works well when the hearing students are willing and able to help. But sometimes hearing students are not patient, or they are too busy with their own work. Also, some Deaf students feel shy or uncomfortable asking their peers for help. They prefer to work alone rather than feel like a burden. We try to build a supportive classroom culture, but it takes time. (Interview 8, June 2026)

This reflection illustrates the psychological and social vulnerabilities Deaf learners face when forced to rely on the voluntary goodwill of hearing peers. The implication is that unguided peer dynamics foster social isolation and academic anxiety, prompting Deaf students to withdraw from collaborative activities to avoid feeling burdensome. This directly supports Mwangi (2025), who found that unmonitored group work often heightens exclusion for Deaf secondary students in African classrooms. Theoretically, this violates UDL's Multiple Means of Engagement (CAST, 2024), which requires educators to cultivate structured, safe, and positive learning communities.

Multimodal Teaching Approaches

Multimodal teaching combining visual, gestural, and interactive learning modes was recognized as highly effective for Deaf education, yet its regular practice was severely restricted. Teachers with specialized training successfully deployed varied modalities, as a Civics teacher with an HI background explained:

Teaching Civics to Deaf students requires creativity. I use role play, pictures, videos, and group discussions. I write questions on the board and ask students to write their answers. I also use debates where students express their views in writing. The key is to keep the lesson varied and engaging so that Deaf students do not lose interest. Sign language is central to my teaching because I studied HI. (Interview 8, June 2026)

This finding demonstrates that specialized teacher qualification directly correlates with pedagogical innovation, enabling educators to seamlessly blend tactile, visual, and literary channels. The implication is that multimodal delivery successfully bridges communication divides, driving active participation among Deaf learners when executed by trained staff. This validates the conclusions of Rao and Meo (2021), who found that specialized teacher capacity is the single strongest determinant of successful UDL

implementation. This approach exemplifies UDL by concurrently deploying Multiple Means of Representation and Multiple Means of Engagement (CAST, 2024). Conversely, general educators found multi-sensory lesson preparation overly demanding. The SEN Coordinator noted:

Multimodal teaching is effective, but it is not easy. Teachers have to think carefully about how to present information in different ways. This takes time and effort. Many teachers fall back on traditional methods because they are easier and faster. We need to show teachers that multimodal teaching is worth the effort because it benefits all students, not just Deaf students. (Interview 9, June 2026)

This quote exposes the systemic operational friction between complex inclusive frameworks and the daily realities of under-resourced schools. The implication is that without dedicated preparation time, low-effort auditory lecturing remains the default mode, systematically excluding Deaf learners from daily instruction. This corroborates Kisanga and Foya (2025), who identified excessive teaching loads as the primary cause of pedagogical regression in Tanzanian public schools. Under UDL, abandoning multimodal strategies collapses both Multiple Means of Representation and Multiple Means of Engagement (CAST, 2024), leaving Deaf students instructionally isolated.

CONCLUSION

The study concluded that while teachers employed various inclusive strategies including sign language, visual aids, differentiated instruction, peer support, and multimodal teaching their implementation remained highly inconsistent and dependent on individual teacher motivation rather than systematic institutional support. A significant gap emerged between teacher-reported practices and observed classroom realities: only educators with specialized Hearing Impairment backgrounds consistently utilized sign language, no visual aids specifically designed for Deaf students were observed, peer support and differentiation were applied informally, and multimodal teaching was severely limited. Ultimately, systemic barriers such as limited professional training, severe resource shortages, large class sizes, heavy teaching workloads, weak school leadership, and ineffective policy supervision actively hindered the effective execution of these strategies. Despite strong national policy frameworks, a persistent disconnect remains between policy intentions and actual classroom practice, reinforcing the theoretical relevance of the Universal Design for Learning (UDL) framework while simultaneously highlighting its limitations when applied within structurally constrained, low-resource educational contexts.

Recommendations

To translate research findings into actionable institutional change, the Ministry of Education, Science and Technology should develop comprehensive, sustained teacher training on inclusive education that integrates sign language, Universal Design for Learning (UDL) principles, differentiated instruction, and multimodal approaches with continuous coaching, while allocating dedicated funding for visual aids, assistive technologies, interpreters, reduced class sizes, and strengthened policy supervision frameworks. At the local level, District Education Authorities must provide regular, school-based professional development, assist schools in building inclusive education plans, and embed structured inclusive indicators into routine inspection visits. School heads should actively prioritize inclusion by establishing a shared vision, modeling inclusive practices, monitoring classroom execution through direct observations, allocating dedicated school budgets for inclusive resources, and advocating for continuous external support. Finally, teachers must take personal ownership of classroom equity by developing and maintaining sign language proficiency through deliberate practice, intentionally designing visual and multimodal lesson plans, structuring peer support networks, and adopting positive pedagogical attitudes that recognize Deaf students as fully capable learners

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