

Teachers' Communication Ability and Retention of Learners who are Hard of Hearing in Secondary Schools in Siaya County

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ABSTRACT

Inclusive education seeks to promote equitable access, participation, and retention of all learners, including those who are hard of hearing. Despite policy efforts to support inclusion, communication barriers between teachers and learners remain a critical challenge in regular secondary schools. This study examined the influence of teachers' communication ability on the retention of learners who are hard of hearing in regular secondary schools in Siaya County, Kenya. The study adopted a descriptive research design. The target population comprised 47 learners who are hard of hearing, 20 teachers, and 5 heads of institutions drawn from five selected secondary schools implementing inclusive education. Purposive sampling was used to select schools with inclusive education programs, while a census sampling technique was employed to include all identified learners who are hard of hearing, teachers, and heads of institutions due to the relatively small population size. Data were collected using structured questionnaires and interview schedules. Quantitative data were analyzed using descriptive statistics, including frequencies, percentages, and mean scores, while qualitative data were analyzed thematically. The study concluded that teachers' communication ability had a statistically significant effect on retention of learners who are hard of hearing ($\beta=.781$, $P=0.000<0.05$). The coefficient of determination ($R^2=0.397$) shows that approximately 39.7% of the variation in the retention of learners who are hard of hearing can be explained by teachers' communication ability. The study recommended the need to strengthen both pre-service and in-service teacher training in specialized communication strategies, as well as promoting the use of multimodal instructional approaches to enhance retention of learners who are hard of hearing.

Keywords: Inclusive education, communication ability, learners who are hard of hearing learners, retention

INTRODUCTION

Inclusive education has emerged globally as a key strategy for ensuring equitable access to quality education for all learners, regardless of their abilities or disabilities. According to UNESCO (2019), inclusive education involves restructuring education systems to remove barriers that hinder participation and achievement, particularly for learners with special needs. This approach is rooted in global frameworks such as Education for All (EFA) and the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD), which emphasize equal educational opportunities and the right of every learner to be accommodated within mainstream education systems (Lojamo & Alemu, 2025). As a result, many countries have shifted from segregated special schools to inclusive models where learners with disabilities, including those who are hard of hearing, are educated alongside their peers in regular classrooms.

Despite this global progress, the effective implementation of inclusive education remains uneven across regions. In developed regions such as Europe, inclusive education has been strengthened through well-established policies, adequate funding, and continuous teacher training (Lindner et al, 2023). Studies indicate that teacher competence, particularly in communication, plays a critical role in supporting learners with hearing impairments, as these learners rely heavily on visual, verbal, and non-verbal forms of communication for effective learning (Khuman,

2024). However, even in these contexts, challenges persist in ensuring that teachers possess specialized communication skills required to meet the diverse needs of learners who are hard of hearing.

In contrast, many African countries continue to face significant barriers in implementing inclusive education effectively. Although countries such as Nigeria, Uganda, and Tanzania have adopted inclusive education policies, their education systems are often constrained by inadequate resources, limited teacher training in special needs education, and negative attitudes toward learners with disabilities (Angwaomaodoko, 2023; Mbazzi, 2023; Losioki & Ngowoko, 2024). Research shows that communication barriers between teachers and learners who are hard of hearing remain a major challenge and this often results in reduced classroom participation, poor academic performance, and increased dropout rates. The lack of skills in sign language, limited use of visual aids, and inappropriate pacing of instruction further exacerbate these challenges.

In Kenya, the government has made notable efforts to promote inclusive education. This has been evidenced by policy frameworks such as the Special Needs Education Policy (2018) and initiatives like the 100% transition policy from primary to secondary education (Kiprop et al, 2025). These efforts have significantly improved access to education for learners with disabilities, including those who are hard of hearing. However, while enrollment rates have increased, retention and completion rates, particularly at the secondary school level, remain a concern. Learners who are hard of hearing often face difficulties adapting to mainstream classrooms due to inadequate support systems, including insufficient teacher preparedness in communication (Purity, 2025).

In Siaya County, which is the focus of this stud, evidence indicates that the county experiences low retention rates of learners who are hard of hearing in regular secondary schools compared to neighboring counties. Although more learners are transitioning from primary to secondary education, a significant proportion fail to complete their studies. This trend suggests that access alone is insufficient and that the quality of inclusive practices within schools plays a critical role in determining learner retention. Data spanning between 2019 to 2022 indicated a fluctuating trend in the retention of learners who are hard of hearing with 2022 recording the lowest percentage.

Table 1: Retention rate of learners who are hard of hearing in Siaya County

Year	The number of hard-of-hearing learners admitted	Number of hard-of-hearing learners dropped out at the end of the year	Number of hard-of-hearing learners retained end of the year	% retained
2019	92	30	62	67.39%
2020	98	70	28	28.57%
2021	105	55	50	47.61%
2022	120	80	40	33.33%

Also, data from counties neighboring Siaya County indicate that Siaya County had the lowest retention rate of 40%. Vihiga County has a retention rate of 75%, Busia had a retention rate of 50% and Kisumu had a retention rare of 58%.

Table 2:Showing data from different neighboring Counties

County	Number of hard-of-hearing learners enrolled in school	Number of hard of hearing learners out of school	Number of hard-of-hearing learners retained in school	% retention
Vihiga	160	40	120	75%
Busia	90	45	45	50%
Kisumu	102	42	60	58%
Siaya	100	60	40	40%

The success of inclusive education for learners who are hard of hearing is influencing by numerus factors. One of them is the ability of teachers to communicate effectively with learners who are hard of hearing. Learners who are

hard of hearing depend on a combination of strategies such as clear verbal communication, use of gestures, facial expressions, lip reading, visual aids, and appropriate pacing of instruction to access content (Molapisi, 2024). When teachers lack these competencies, communication breakdown occurs which limits learners' understanding, participation, and overall academic engagement.

While previous studies in Kenya have examined aspects of inclusive education such as teacher attitudes, classroom adaptation, and teaching strategies, limited attention has been given to the specific role of teachers' communication ability in influencing retention of learners who are hard of hearing, particularly in secondary schools and within the context of Siaya County. This created a critical gap that necessitated focused study. By focusing on communication as a key determinant of inclusion, this study aimed to provide insights into how teacher competencies in communication influence the retention of these learners and to inform strategies for improving inclusive education practices in the region.

Statement of the Problem

Inclusive education for learners who are hard of hearing is widely recognized as a key pillar of the Education for All (EFA) agenda, which seeks to ensure equitable access, participation, and completion of education for all learners. In Kenya, the government has made significant efforts to promote inclusive education through policy frameworks such as the Special Needs Education Policy (2018) and the implementation of the 100% transition policy (Kenya Institute of Curriculum Development, 2018). Despite these initiatives, national reports, including the Kenya National Survey on Children with Disabilities (2018), indicate that although access to education has improved, the retention and completion rates of learners who are hard of hearing remain low. This indicated that the challenge is no longer access alone, but the effectiveness of inclusive practices within schools.

In Siaya County, the problem is even more pronounced. Data from selected secondary schools show that while learners who are hard of hearing are enrolled, their retention rates are low and inconsistent. For instance, retention declined from 67.39% in 2019 to 28.57% in 2020, slightly improved to 47.61% in 2021, and dropped again to 33.33% in 2022. This trend indicated that many learners who are hard of hearing are unable to remain in school through completion which exposes them to a higher risk of dropout and educational exclusion. The situation pointed to underlying challenges in the implementation of inclusive education practices within regular secondary schools.

One key factor that influences retention of learners who are hard of hearing in regular secondary schools is the ability of teachers to communicate effectively with the learners. These learners depend heavily on clear verbal communication, appropriate pacing of instruction, gestures, visual aids, and other non-verbal strategies to access learning. However, existing studies in Kenya have largely focused on primary schools and have paid limited attention to teachers' communication ability at the secondary school level. This created a gap in understanding how communication practices affect learner retention. Therefore, this study sought to evaluate the ability of teachers to communicate with learners who are hard of hearing in regular secondary schools in Siaya County and how this influences their retention in school.

Objective of the Study

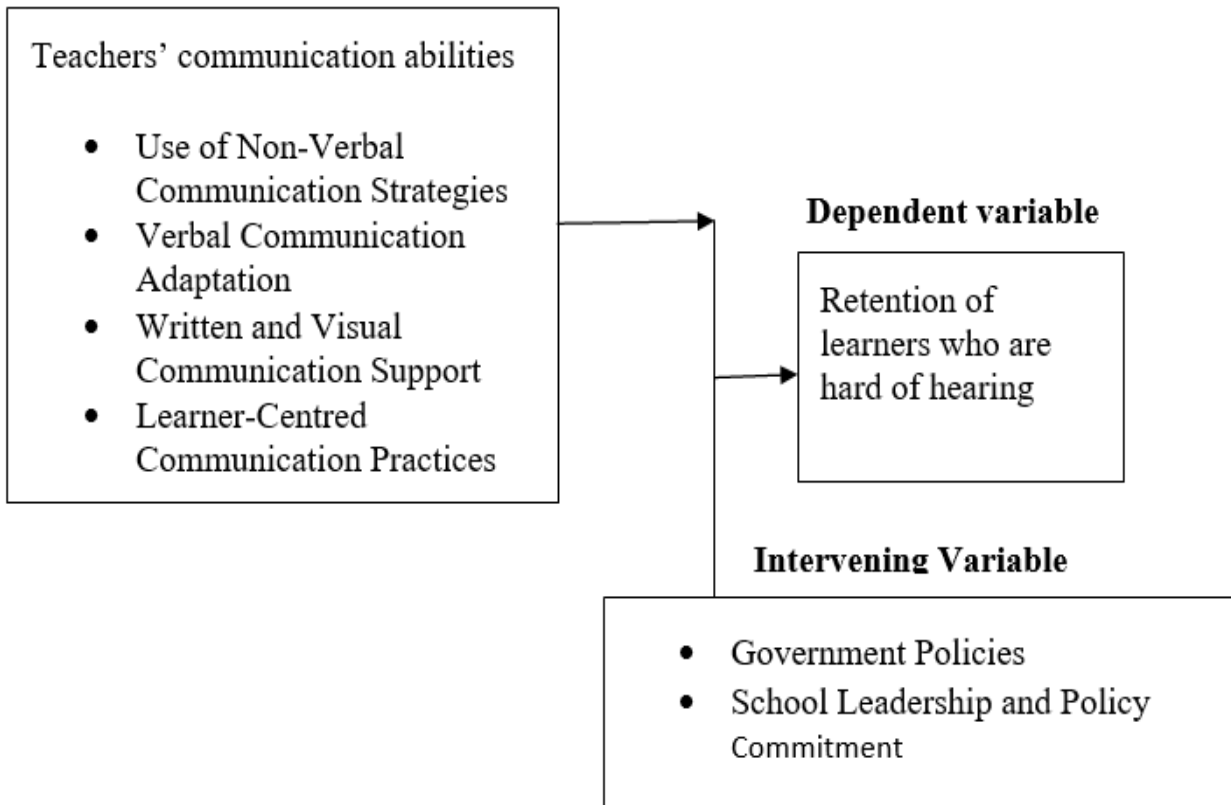
The objective of this study is to evaluate the influence of the ability of the teachers to communicate with learners who are hard of hearing on the retention of learners who are hard-of-hearing learners in regular secondary schools in Siaya County.

CONCEPTUAL FRAMEWORK

The independent variable in this study is the ability of teachers to communicate with learners who are hard of hearing in regular secondary schools in Siaya County. This variable is conceptualized in terms of use of non-verbal communication strategies, verbal communication adaptation, written and visual communication support

and learner-centred communication practices. The dependent variable is retention of learners who are hard of hearing. According to the conceptual framework, effective communication enhances learners' comprehension, engagement, and classroom participation which in turn reduce the likelihood of dropout. On the other hand, inadequate communication practices result in limited understanding, frustration, and disengagement which in turn leads to low retention. The relationship between the independent and dependent variable is moderated by intervening factors such as teacher training in special needs education, availability of instructional resources, and institutional support. These factors either strengthen or constrain the effectiveness of communication practices in inclusive classroom settings.

Figure 1: Conceptual Framework



Empirical Review

Effective communication is widely recognized as a central pillar in the successful implementation of inclusive education, particularly for learners who are hard of hearing. Across global, regional, and local contexts, empirical studies consistently demonstrate that the ability of teachers to communicate effectively using appropriate modes such as sign language, gestures, visual cues, and adapted verbal instruction significantly determines the level of participation, comprehension, and educational success of learners with hearing impairments (Bintoro et al, 2023). However, despite growing recognition of inclusive education, many education systems continue to experience persistent communication barriers that hinder meaningful inclusion (Bindhani & Gopinath, 2024).

Existing research has shown that teacher communication competence plays a critical role in promoting inclusive education success. Alanazi (2021), in a study conducted among faculty members at a Saudi University, established that effective instructor communication significantly enhanced the learning experience of students with hearing impairments. Sign language was the most preferred and effective communication mode, as it allowed students to easily understand instructional content without requiring extensive supplementary support. The study emphasized that instructors who were proficient in sign language created more interactive and inclusive classrooms, where learners with hearing difficulties were able to participate actively in learning activities. The study highlighted that

communication ability does not only involve speech delivery but also about the capacity of teachers to utilize alternative communication systems that bridge the gap between spoken language and visual understanding.

Similarly, Ntinda and Tfungi (2019) explored the experiences of teachers handling learners who are hard of hearing in a special needs educational setting in Nigeria and concluded that a significant proportion of teachers lacked adequate competencies in deaf communication systems, especially sign language. This skills gap was identified as a major barrier to effective inclusive education. Many teachers reported feeling poorly-prepared to communicate effectively with learners who are hard of hearing due to insufficient training in teacher education programs. As a result, communication between teachers and learners was limited which reduced classroom participation and engagement. The study concluded that without adequate professional preparation in communication strategies for hearing-impaired learners, inclusive education cannot be effectively implemented, as learners remain excluded within the classroom environment despite physical inclusion.

Desalegn and Worku (2016) conducted another study in a study conducted in Nigeria to examine the challenges faced by hearing-impaired students in integrated public school classrooms. The study identified that oral communication was the dominant mode of instruction in most classrooms and this had significant disadvantages to learners who were hard of hearing. Since these learners depended largely on visual communication and alternative instructional methods, the overdependence on spoken instruction created a major communication gap between teachers and learners. As a result, learners were unable to fully participate in lessons, ask questions, or contribute meaningfully to classroom discussions. Further, the study noted that this communication barrier negatively affected the academic achievement of the learners and their overall educational progression.

In another study conducted in Uganda, Kisakye (2021) examined classroom communication techniques and cognitive learning outcomes among learners with hearing impairment in primary schools within Kampala Capital City Authority and identified that that multiple communication strategies contributed positively to learning outcomes for learners who are hard of hearing. These strategies included sign language, facial expressions, finger spelling, writing, and gestures. The study concluded that sign language and visual communication methods were particularly effective because they were easily interpretable by learners with hearing impairments. Consistent use of a combination of verbal and non-verbal communication techniques by teachers was more successful in engaging learners and enhancing comprehension. The study concluded that the integration of multimodal communication strategies led to significant improvement in the cognitive learning and classroom participation for learners with hearing impairments. This reinforced the importance of teacher communication ability in inclusive education settings.

Nyambere and Okatch (2022) conducted a study to investigate the influence of manual communication on the academic performance of learners with hearing impairment in inclusive schools in Kisumu County, Kenya. The findings revealed that communication barriers significantly hindered effective interaction between teachers and learners who were hard of hearing. Many teachers lacked adequate skills in manual communication systems such as sign language, which limited their ability to deliver instruction effectively. As a result, classroom interaction was often slow and inefficient, requiring additional time for learners to grasp basic concepts. The study concluded that inadequate teacher communication skills negatively affected academic performance and participation, thereby limiting the effectiveness of inclusive education practices in Kenyan schools.

Similarly, Owuor (2020) undertook a study within Nairobi City County to examine influence of socialization on academic performance among learners with hearing impairment. The study highlighted that effective communication between teachers and learners played a significant role in promoting social integration and participation in learning activities. Learners who experienced better communication support from teachers demonstrated improved confidence, classroom interaction, and academic engagement. However, the study also noted that communication barriers still existed in many inclusive classrooms, limiting the full realization of inclusive education goals. Although the study emphasized the importance of communication in enhancing socialization and academic performance, it did not extensively explore how communication ability influences learner retention, which presents a gap addressed by the current study.

Further empirical evidence was obtained by Kigotho (2016), who analyzed barriers faced by students with hearing impairment in inclusive learning environments in Kenya and identified that the students faced numerous challenges. The key communication barriers identified included overreliance on oral instruction, lack of trained interpreters, and insufficient use of visual communication aids in classrooms. These barriers significantly limited the ability of learners to fully engage in the learning process. The study further noted that the absence of appropriate communication support systems resulted in reduced participation and increased frustration among learners who are hard of hearing. As a result, learners experienced difficulties in academic achievement and classroom integration.

The reviewed studies have shown a consistent pattern that indicates that teachers' communication ability is a critical determinant of the success of inclusive education for learners who are hard of hearing. The studies have revealed that where teachers were proficient in sign language, gestures, and other visual communication methods, learners showed improved participation and understanding. On the other hand, where teachers relied predominantly on oral instruction without adequate adaptation, learners experienced exclusion within the classroom setting.

RESEARCH METHODOLOGY

The study used a descriptive research design. The design is suitable for exploring the differences in opinions, attitudes, and experiences of respondents in large sample sizes. The results generated from the samples help to represent the conditions that exist in the entire population (Siedlecki, 2020). The design helped to reveal the true perceptions of the respondents concerning the influence of the ability of the teachers to communicate with learners who are hard of hearing on the retention of learners who are hard-of-hearing learners in regular secondary schools in Siaya County.

The study was conducted in 5 selected secondary schools in Siaya County that have inclusive education for learners who are hard of hearing. The target population comprised the head of institutions from the five schools, the teachers, and learners who are hard of hearing. The heads of secondary schools were included as they are directly involved in the implementation of inclusive education in the schools. Teachers were included as they are directly involved in handling and teaching learners who are hard of hearing and therefore, they were in a better position to give reliable data. Learners who are hard of hearing were included because Learners who are hard of hearing were included in the study in order to give firsthand account of their experiences as far as inclusive education for learners who are hard of hearing is concerned.

The study sought to collect data from 5 secondary schools in Siaya County that have inclusive education for learners who are hard of hearing. In this study, the target population comprised the head of institutions from the five schools, the teachers, and learners who are hard of hearing. The rationale for choosing the heads of institutions is that they are directly involved in the implementation of inclusive education in the schools. The purpose of choosing teachers is that they are directly involved in handling and teaching learners who are hard of hearing and therefore they are in a better position to give reliable data. The purpose of including learners who are hard of hearing was to get a firsthand account of their experiences as far as inclusive education for learners who are hard of hearing is concerned. The sample is presented on table 3.

Table 3: Sample Frame for Target Population

Category of respondents	Population (N)
Heads of Institutions	5
Teachers	20
Learners who are hard of hearing	47

Schools were selected purposively to ensure inclusion of those implementing inclusive education practices. Given the relatively small population, a census sampling approach was applied, allowing all identified learners, teachers,

and heads of institutions to participate in the study. Learners who are hard of hearing were identified with the support of class teachers, who confirmed students with known hearing impairments and identified others based on observable learning challenges. Teachers from Form One to Form Four were purposively selected due to their direct and continuous interaction with learners, enabling them to provide reliable insights on communication practices and learner participation. Heads of institutions were also purposively included to provide information on school-level policies, resources, and support systems for inclusive education.

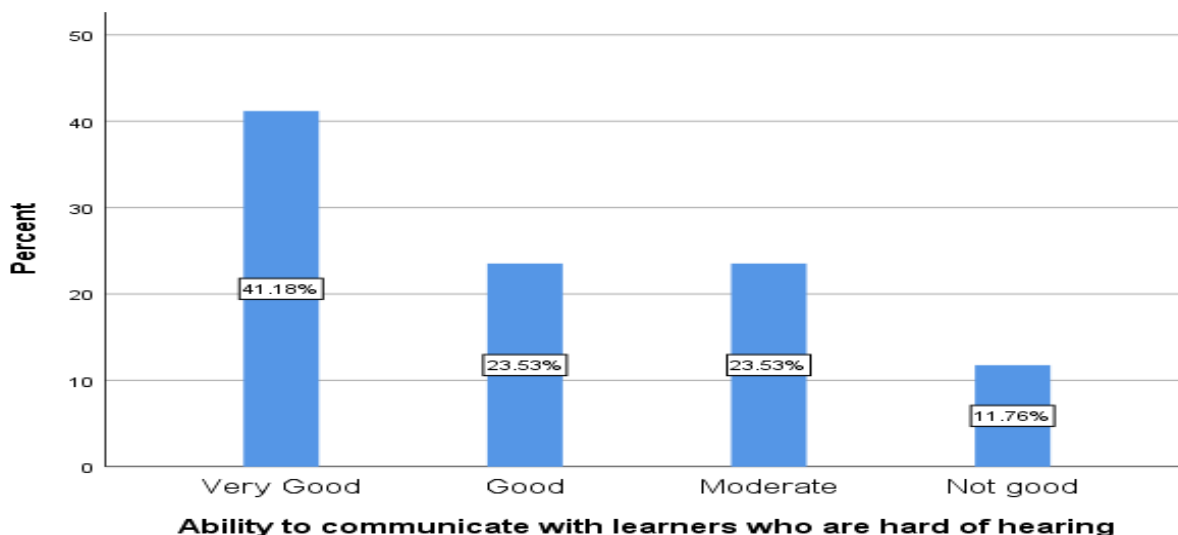
Questionnaires were used to collect data from teachers and learners while interview guides were used to collect data from the parents. In addition to the questionnaires and interview guides, observation method was used to determine the extent to which the schools have implemented inclusive education for students who are hard of hearing. In addition, document analysis was done to supplement the primary data. This involved analysis of various secondary sources that were relevant to inclusive education for students with hearing impairments.

Mixed methods of data analysis were used. Data collected using a questionnaire was analyzed using the Statistical Package for Social Sciences (SPSS version 28). This was done using both descriptive analysis and frequency counts, percentages and mean. Descriptive analysis helped to describe the respondents and their perceptions on the various inclusive education practices and the retention in school by learners who are hard of hearing. Data collected using the interview guide was analyzed using qualitative analysis. This was done using thematic analysis.

RESULTS

Effective communication is a key factor that determines the success of inclusive education for learners who are hard of hearing, given their reliance on visual cues, written materials, and adapted oral instruction. The findings presented in figure 1 indicates that a large proportion of teachers perceived themselves as competent in communicating with learners who are hard of hearing with 41.18% rating their ability as very good, 23.53% as good, and 23.53% as moderate. Only 11.76% reported low ability to communicate with learners who are hard of hearing. The findings demonstrate a generally high level of self-efficacy among teachers. However, a notable proportion of teachers who reported low confidence demonstrated existing gaps in communication competence. This shows that although teachers may feel adequately prepared, confidence does not necessarily translate into consistent or effective practice. This emphasize the need for targeted professional development to strengthen communication skills.

Figure 2: Ability of teachers to communicate with learners who are hard of hearing



Further insights into the specific communication strategies used by teachers, as shown in Table 1, indicated a mixed pattern of practice. Gestures were reported as the most widely utilized strategy with a mean of 4.2353 which indicated a strong inclination toward visual communication. Similarly, verbalizing instructions with a mean of 3.8235), lip reading with a mean of 3.9412, and body language with a mean of 3.5294 were moderately applied. However, the use of facial expressions (mean=2.5882) and nonverbal cues (mean=2.4706) was relatively low. The overall mean of 3.4393 demonstrated that communication strategies were applied only to a moderate extent which limit the effectiveness of instruction for learners who depend on diverse modes of communication. The findings indicated an imbalance in communication approaches, where some effective strategies are adopted while others remain underutilized.

Learners’ perspectives, as presented in Table 4.5, reinforced the insights obtained from the teachers as the highlighted specific areas of strength and weakness. A majority (63.8%) reported that teachers write key points on the board which indicated strong support through written communication. However, only 21.4% acknowledged loud voice projection, and an even smaller proportion of 14.8% indicated that teachers deliver instruction at a pace they can follow. The findings indicated that although written support is relatively strong, other key aspects such as pacing and auditory support remain inadequate, which hinder comprehension and participation among learners who are hard of hearing.

Table 4: Learners Perspective on the communication methods used by teachers

Learners Perspective	Frequency	Percent
Pace of instructions	7	14.8
Loud projection of voices	10	21.4
Teachers write important information on the board	22	63.8
Total	39	100.0

The insights obtained from schools’ heads further revealed inconsistencies in practice. One of the school heads noted that;

“Yes, some of our teachers have good communication ability to handle learners who are hard of hearing, especially on students who require more attention, however it’s not always systematic as most of these modifications are often informal and not documented.” (Head of institution 1, 2025)

This observation highlighted the informal and unsystematic nature of many communication adaptations, which limits their effectiveness. Similarly, concerns about the inconsistent implementation of Individualized Education Programs (IEPs) were raised and one key informant noted that

"In our school, we do not have a consistent system for using Individualized Educational Programs for learners who are hard of hearing. While some teachers may use IEPs when they are available, it’s not a widespread practice. We have some learners with hearing impairments, but the individualized plans are not consistently implemented across all classrooms. There’s a need for better training and resources to make this a regular part of our teaching strategy." (Head of institution 4, 2025)

These insights suggested that although teachers make efforts to adapt instruction, such efforts are often fragmented and lack institutional support.

Analysis of instructional methods indicated that task modification (82.4%) and gestures (70.6%) are the most commonly used strategies among teachers. Written handouts (58.8%), verbalizing (58.8%) and visual aids (52.9%) were used to a moderate extent as shown in Table 3. These findings demonstrated that although teachers are relatively adept at adapting content and using gestures, other essential strategies especially those involving visual and written reinforcement are not consistently applied.

Table 5:Instructional method

Instructional method	Category	Frequency	Percentage
Modification of tasks	Yes	14	82.4%
	No	3	17.6%
Gestures	Yes	12	70.6%
	No	5	29.4%
Written handouts	Yes	10	58.8%
	No	7	41.2%
Verbalizing	Yes	10	58.8%
	No	7	41.2%
Visual Aid	Yes	9	52.9%
	No	8	47.1%

The insights of the learners largely corroborated the teachers’ findings, with 76.9% acknowledging task modification and 64.1% recognizing the use of gestures. However, lower proportions reported the use of written handouts (56.4%), verbalizing (51.3%), and visual aids (53.8%). This demonstrated variability in instructional delivery.

Table 6: Instructional Method-Learner’s Perspectives

Instructional Method	Yes (Frequency)	Yes (%)	No (Frequency)	No (%)
Modification of tasks	30	76.9%	9	23.1%
Gestures	25	64.1%	14	35.9%
Written handouts	22	56.4%	17	43.6%
Verbalizing	20	51.3%	19	48.7%
Visual Aid	21	53.8%	18	46.2%

Generally, the analysis findings demonstrated that although teachers show a reasonable level of confidence and utilize certain effective communication strategies, their practices remain inconsistent and inadequately comprehensive. The limited use of diverse communication methods and the informal implementation of individualized support mechanisms such as IEPs, limited the effectiveness of inclusive education. As a result, learners who are hard of hearing may experience reduced engagement and limited access to learning, which can ultimately affect their retention in regular secondary schools.

Inferential Analysis

Inferential analysis was conducted to determine the relationship between teachers’ communication ability and retention of learners who are hard of hearing in secondary schools in Siaya county. This was done using correlation analysis and regression analysis. Correlation analysis was done to determine the relationship between the teachers’ communication ability and retention of learners who are hard of hearing. The correlation analysis results indicated a statistically significant relationship between the teachers’ communication ability and retention of learners who are hard of hearing ($r = 0.630$, $p = 0.000 < 0.05$). This implies that better communication ability of teachers contributes to retention of learners who are hard of hearing.

Table 7:Correlation Analysis

		Retention of learners who are had of hearing
Teachers’ Communication ability	Pearson Correlation	.630*
	Sig. (2-tailed)	.000
	N	39

Regression analysis was done to determine the influence of the teachers' communication ability on the retention of learners who are hard of hearing. The model summary results indicated a strong positive relationship between teachers' communication ability and learner retention ($R=0.630$). The coefficient of determination ($R^2 = 0.397$) shows that approximately 39.7% of the variation in the retention of learners who are hard of hearing can be explained by teachers' communication ability.

Table 8: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.630 ^a	.397	.380	.698

The ANOVA table results showed that the model was statistically significant, $F(1, 37)=24.312$, p value <0.001 . This indicated that teachers' communication ability significantly predicts the retention of learners who are hard of hearing

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.855	1	11.855	24.312	.000 ^b
	Residual	18.042	37	.488		
	Total	29.897	38			

The regression coefficients showed that teachers' communication ability had a positive and statistically significant effect on retention of learners who are hard of hearing since p value 0.000 was less than 0.05. The coefficient 0.781 indicated that a one-unit increase in teachers' communication ability leads to an increase of 0.781 units in learner retention.

Table 10: Model Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.958	.683		1.401	.169
	Communication	.781	.158	.630	4.931	.000

The following model was fitted:

$$Y = .958 + .781X_1$$

Where;

Y= Retention of learners who are hard of hearing

X_1 = Teachers' communication ability

DISCUSSION

The study established that although teachers in regular secondary schools in Siaya County have foundational qualifications in Special Needs Education, their ability to communicate with learners who are hard of hearing remains inconsistent and insufficiently specialized. Although teachers reported that they have confidence in using strategies such as gestures, task modification, and individualized education programs, they did not apply these practices consistently across classrooms. They less frequently use key strategies such as written handouts, structured multimodal communication, and visual aids and this limit effective learner engagement. The study

identified that teacher preparation programs largely offer general training without sufficiently equipping teachers with specialized communication competencies for hearing impairment.

The results are consistent with Ntinda and Tfusi (2019), who identified that gaps in teachers' competencies and inadequate training in deaf communication significantly hinder inclusive education. Similarly, Desalegn and Worku (2016) observed that the use of oral communication excludes learners who are hard of hearing from meaningful participation, a pattern also evident in this study. The results are contrary to the findings of Kisakye (2021) who emphasized that strategies such as sign language, gestures, facial expressions, and writing improved learning. In this study, the findings show that these approaches are not applied comprehensively.

The study further supports the findings of Owuor (2020), who highlighted that effective communication promotes socialization and positive learning outcomes, and Kigotho (2016), who identified systemic barriers such as lack of interpreters and overreliance on oral instruction. The findings demonstrate that inclusive education remains largely superficial, where placement of learners who are hard of hearing does not guarantee meaningful participation. Duse of inconsistent communication practices, learner engagement is undermined which in turn leads to dropout and low retention. This emphasize the need for targeted teacher training and improved communication resources.

CONCLUSIONS

This study assessed the implementation of inclusive education practices for the retention of learners who are hard of hearing in regular secondary schools, focusing on how the ability of teachers to communicate with learners who are hard of hearing on retention. The findings indicated that although many teachers possess foundational training in special needs education and demonstrate effort in supporting inclusive learning, their communication practices remain inconsistent and insufficiently comprehensive. While strategies such as gestures, verbal cues, and occasional use of individualized education programs are applied, there is limited and uneven use of essential approaches such as visual aids, structured written support, and other multimodal communication techniques. Due to this inconsistency, effective classroom interaction of learners who are hard of hearing and their full engagement is limited. A conclusion is made that teachers' communication ability, although present, is not adequately developed to fully support inclusion and retention of learners who are hard of hearing. Gaps in specialized training and inadequate instructional resources further constrain effective implementation of inclusive practices. These challenges reduce learner participation, comprehension, and retention in school. The study recommends enhanced teacher training in specialized communication

RECOMMENDATIONS

The Ministry of Education, in collaboration with teacher training institutions is recommended to strengthen both pre-service and in-service training programs in Special Needs Education with a specific focus on hearing impairment. The study has identified that, although teachers have basic knowledge, there are significant gaps in specialized communication competencies required to effectively support learners who are hard of hearing. There is a need to review and enrich training curricula to include practical components such as the use of sign language, multimodal communication strategies, and classroom-based simulations that reflect real inclusive learning environments.

In addition, there is a need to institutionalize continuous professional development programs in order to make sure that teachers remain updated on emerging inclusive education practices and technologies. There is a need for regular seminars, workshops, and mentorship programs in order to enhance teachers' confidence and competence in applying diverse communication strategies. Through such initiatives, the instructional effectiveness of the teachers will be improved and structured communication practices will be promoted. This will in turn enhance learner engagement and retention in inclusive secondary school settings.

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