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Influence of Teachers' Attitude on Learning Outcomes among Visually Impaired Learners in Integrated Primary Schools in Nairobi County, Kenya

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ABSTRACT

In inclusive learning environments, teachers' dispositions toward learners with special needs are widely regarded as a determinant of educational quality, yet the specific influence of teacher attitude on the academic performance of visually impaired learners remains under-examined in the Kenyan context. This study examined the influence of teachers' attitudes on the academic performance of visually impaired learners in integrated primary schools in Nairobi County. The study adopted a descriptive survey design, integrating quantitative and qualitative methodologies. Four integrated primary schools with substantial enrollment of visually impaired learners were purposively sampled from the thirteen integrated public primary schools in Nairobi County. From a target population of 106 teachers and 4 head teachers, a sample of 32 teachers was selected through simple random sampling, representing approximately 30 percent of the teacher population, while all 4 head teachers were included through a census. Teachers' attitudes were measured using a Likert-scale attitude questionnaire assessing their dispositions toward inclusive practice and toward visually impaired learners specifically, while head teachers' perceptions of teacher attitude and its classroom effects were captured through a structured interview guide. Validity of the attitude instrument was established through supervisor review, and its reliability was confirmed through a pilot study using the split-half technique. Learners' academic performance was measured using recent assessment scores, which were then compared across teachers grouped by attitude disposition. Quantitative data were analyzed using an independent samples t-test to compare learning outcomes between learners taught by teachers with more positive attitudes and those taught by teachers with less positive attitudes, while qualitative data from head teacher interviews were analyzed thematically to contextualize and triangulate the quantitative result. Of the 32 questionnaires distributed, 29 were completed and returned, yielding a response rate of 90.6 percent. The findings revealed that teachers' attitudes had a statistically significant effect on the learning outcomes of visually impaired learners ($t = 2.492$, $p = .019$) at $\alpha = .05$, leading to the rejection of the null hypothesis that teacher attitude has no significant effect on learner outcomes. Learners taught by teachers who demonstrated patient, accommodating, and inclusive dispositions recorded better academic and social engagement outcomes than those taught by teachers with less positive attitudes. This quantitative finding was corroborated by head teachers' qualitative accounts, which consistently identified attitude as among the most influential factors shaping the classroom experience of visually impaired learners. The study concludes that teacher attitude functions as an active instructional variable, rather than a peripheral personal trait, with direct bearing on academic performance in integrated settings. The study recommends that the Ministry of Education and school administrators implement structured attitude modification and awareness initiatives for teachers of visually impaired learners, and that pre-service and in-service teacher training curricula place greater emphasis on cultivating inclusive dispositions alongside technical instructional skills. These findings are expected to inform policy on teacher preparation and support within Kenya's inclusive education framework.

Keywords: Teacher attitude; Visually impaired learners; Learning outcomes; Inclusive education; Integrated primary schools

1. INTRODUCTION

Attitude is a psychological term that encapsulates an individual's cognitive, behavioral, and affective responses. It has significant ramifications for the student, the educator, the immediate social context, and the overarching educational system. Attitudes are generally formed through learning experiences and can sometimes arise from imitation, when pupils emulate the ideas or behaviors of significant individuals like parents, teachers, or peers. In this situation, the instructor serves as a pivotal model, whose behaviors and attitudes can profoundly impact pupils.

The dispositions of teachers, including their values, feelings about learning, and interactions with students, can significantly influence students' attitudes toward education. A teacher's cultural background and belief systems create their attitudes, which then affect their interactions with students. A teacher's pleasant demeanor can inspire students and facilitate effective learning, whereas a negative demeanor may obstruct the educational process. Balal and Rehan (2012) investigated the attitudes of teachers and students concerning elements that impede curriculum implementation. Employing a mixed-method approach, they determined that no curriculum inhibitors were associated with student population size, but the study did not use interviews.

Richard (2010) examined the influence of class size and adaptive teaching proficiency on academic performance, encompassing 49 educators and 898 students, although concentrated exclusively on class size and teaching proficiency rather than attitudes directly. Dukmak (2013) investigated educators'

perceptions regarding the integration of students with disabilities into general classrooms and discovered predominantly positive attitudes, with male educators exhibiting slightly more favorable perspectives than their female colleagues; however, this gender trend was not consistently observed in later research. Dawn (2015) investigated the influence of teacher attitudes on the self-esteem and reading proficiency of visually impaired high school students through a board-game-based reading program, revealing enhanced self-esteem and academic results; however, the study was constrained to secondary school students and a limited sample size.

Omede (2015) contended that although instructional strategies and classroom configurations may require modification for visually impaired students, educators must maintain equivalent academic expectations. Essential components for effective learning include equal opportunity, inclusive participation, and responsiveness to the needs of learners. Simon et al. (2010) underscored that teacher desire is essential for effectuating change, particularly in inclusive environments, as motivated and knowledgeable educators are more inclined to adopt inclusive practices. Penda and Ndhlovu (2013) assert that educators typically demonstrate greater support for students with physical or sensory impairments compared to those with cognitive or behavioral disabilities, with the severity of the disability often adversely influencing teacher views.

Shittu and Oanite (2015) discovered that educators' attitudes markedly affect students' engagement in learning, with a teacher's professional demeanor, especially in communication, classroom management, and pedagogy, directly influencing student outcomes. Fehintola (2014) also underscored the significance of professionalism, asserting that educators must demonstrate commendable behaviors that promote growth in cognitive, affective, and psychomotor domains. Otieno, Okello, and Namunga (2023) noted that inclusive learning environments, where visually impaired students are integrated with their sighted peers, considerably benefit from teachers who demonstrate mutual respect and understanding, since these attitudes foster collaboration and inclusivity.

Langat (2015) examined student attitudes regarding mathematics achievement in secondary schools in Kiambu County, identifying a correlation between attitude and academic performance, although the research concentrated on students' attitudes rather than those of educators. Murithi (2015) analyzed the effect of attitudinal adaptation on academic performance in boarding schools in Meru County, demonstrating a beneficial correlation between attitude and achievement. Conversely, Chemundeswari (2013) explored the association between students' attitudes toward science and academic success, concluding that girls exhibited more favorable attitudes and superior performance in science compared to boys. This collection of evidence highlights the significance of teacher attitude as a driver of student outcomes and establishes the empirical basis for investigating this issue among educators of visually impaired students in the current study

2. METHODOLOGY

2.1 Research Design

The research employed a descriptive survey approach, integrating both qualitative and quantitative methodologies. This method is extensively acknowledged as one of the most efficacious for gathering data on various educational and social matters. Creswell (2009) asserts that the descriptive survey design is suitable for acquiring a comprehensive understanding of a phenomenon without the need to involve the entire population. The justification for utilizing this strategy is its capacity to efficiently and economically collect the views, attitudes, and features of a target group, therefore offering a thorough comprehension of the study issue.

2.2 Study Population

The research was carried out at designated integrated public primary schools in Nairobi County, Kenya. Nairobi County is situated in the south-central part of Kenya and functions as the nation's capital. It encompasses roughly 696 square kilometers, rendering it the smallest county by land area and among the most populated. Nairobi is situated at an altitude of approximately 1,795 meters above sea level, yielding a temperate environment conducive to year-round education. The county features advanced urban infrastructure alongside extensive informal settlements, resulting in inequalities in access to fundamental services, such as schooling.

Nairobi is the most populous county in Kenya, boasting a population over 4.5 million as per the 2019 national census, and is seeing tremendous growth attributed to rural-urban migration. A considerable number of Nairobi's inhabitants lives in informal settlements like Kibera, Mathare, and Mukuru, characterized by elevated poverty levels and restricted access to excellent public services, including education. This demographic composition poses distinct problems and opportunities for inclusive education, especially for students with disabilities, including visual impairments.

Nairobi County encompasses numerous educational establishments, comprising public and private schools, special needs units, integrated schools, and teacher training institutes. It hosts numerous national and regional educational bodies and non-governmental organizations that advocate for inclusive education. The county has advanced in executing inclusive education policy, incorporating learners with special needs into mainstream public primary schools. Nonetheless, obstacles remain in domains such as educator readiness, accessibility of assistive technologies, infrastructure, and tailored support for students with impairments. Nairobi County's high population density, educational diversity, and geographic variations render it a pertinent locale for research in special education, providing a practical framework for analyzing the impact of teacher-related factors on the learning outcomes of visually impaired students in integrated public primary schools.

2.3 Sampling Procedure and Sample Size

Nairobi County comprises roughly 13 integrated public primary schools serving both standard learners and individuals with special needs. Four schools were intentionally chosen for this study due to their substantial enrollment of students with visual impairments. The study's target population consisted of 106 instructors and 4 head teachers from four selected integrated public primary schools. The selection of these four schools was predicated on their inclusive education practices and the significant presence of students with visual impairments, rendering them appropriate for examining the impact of teacher-related factors on student outcomes in an inclusive educational context.

2.4 Sampling Methodology and Sample Dimension

This study employed simple random sampling to pick 32 teachers from a target population of 106 educators among four purposively chosen integrated public primary schools, concentrating on those directly involved in instructing students with visual impairments. This selection guaranteed the acquisition of comprehensive, contextually pertinent data from participants possessing direct experience in inclusive education (Creswell, 2014). The 32 chosen teachers constitute roughly 30 percent of the 106 educators throughout the four institutions, adhering to the proportionate sampling method advised for descriptive survey designs. A census method was employed to incorporate all four head teachers from the selected schools, as the target population of head teachers, numbering four, was sufficiently small for comprehensive study. This sampling technique, as indicated by Patton (2015), is suitable for research aiming to obtain profound, focused insights from particular subgroups. The distribution of participation, consisting of 32 instructors and 4 head teachers, totaling 36 individuals, is illustrated in Table 1.

Table 1

Sample Size of the Study

Category	Target Population (N)	Sample Size (n)	%	Sampling Technique
Teachers	106	32	30.2	Simple Random Sampling
Head teachers	4	4	100.0	Census
Total	110	36	32.7	

Source: Nairobi County Education Office (2025)

2.5 Instruments of Data Collection

Data were gathered by a combination of questionnaires and interviews as advised by Muthomi et al. (2015).

3. RESULTS

3.1. Learning Outcomes

The dependent variable of this study was the educational outcomes of visually impaired students in integrated elementary schools in Nairobi County. This phase of the study gathered teachers' perspectives via questionnaires regarding the academic performance of visually impaired students, utilizing the Kenya Primary School Education Assessment (KPSEA) grades from 2022, 2023, and 2024. The results are displayed in Table 2.

Table 2

Descriptive Statistics of Learning Outcomes of Visually Impaired Pupils in Integrated Primary Schools in Nairobi County

Rating (KPSEA)	2022 n	2022 %	2023 n	2023 %	2024 n	2024 %	Mean n	Mean%
Below expectation	7	24.14%	4	13.79%	6	20.69%	6	20.69%
Approaching expectation	16	55.17%	17	58.62%	15	51.72%	16	55.17%
Meeting expectation	5	17.24%	6	20.69%	8	27.59%	6	20.69%
Above expectation	1	3.45%	2	6.90%	0	0.00%	1	3.45%
Total	29	100.00%	29	100.00%	29	100.00%	29	100.00%

Source: Field Data (2025)

This study's findings indicate that most visually impaired students in integrated primary schools in Nairobi County consistently performed at the approaching expectation level over the three-year period from 2022 to 2024, with an average of 55.17 percent of learners in this category. A mere 20.69 percent of learners continuously met expectations during the review period, while an even smaller percentage exceeded expectations, with no learners

achieving this status in 2024 after a little peak of 6.90 percent in 2023. The patterns indicate that visually impaired learners exhibit moderate academic engagement in the integrated school system; however, the majority have not achieved the competency levels outlined by the Competency Based Curriculum framework, and the performance improvement trajectory is insufficiently strong to imply that current instructional and institutional support adequately addresses the educational needs of this population.

The findings align with the observations of Mugo and Wachira (2024), who investigated the academic performance of visually impaired students in integrated primary schools in Nairobi County and determined that most of these students performed markedly below their cognitive potential due to systemic instructional, resource, and attitudinal barriers present in integrated school environments. Their study emphasized that the inability of a considerable number of visually impaired learners to advance from approaching expectation to meeting or exceeding expectation levels was directly linked to the lack of systematic and sustained differentiated instructional interventions tailored to meet the distinct sensory and learning requirements of visually impaired students in the mainstream integrated classroom setting.

Waweru and Ngugi (2022) similarly discovered in Nakuru County that visually impaired students in integrated primary schools exhibited a consistent and persistent pattern of moderate academic performance across various assessment cycles. This pattern was attributed to a chronic shortage of Braille learning materials and tactile teaching aids, inadequate adaptation of assessment instruments, and the limited availability of qualified itinerant teachers and special needs education support personnel within integrated school environments. Waweru and Ngugi (2022) identified a pattern similar to the anticipated decline in performance noted in the current study, indicating that enhancements in learner performance observed in one assessment cycle were often not maintained in later cycles. This suggests that the incremental progress made by visually impaired learners in integrated environments was tenuous, sporadic, and significantly dependent on the persistence of particular teacher support structures.

The performance patterns identified in this study have substantial and immediate ramifications for Kenya's inclusive education policy framework and its execution in integrated elementary schools within Nairobi County. The Basic Education Act of 2013 guarantees every Kenyan child's right, including those with visual impairments, to quality and equitable education in an inclusive learning environment (Republic of Kenya, 2013). Additionally, the National Special Needs Education Policy Framework requires the provision of suitable learning materials, trained specialist educators, and individualized support plans for learners with disabilities in integrated settings (Republic of Kenya, 2018). The discovery that 55.17 percent of visually impaired students consistently performed at merely the approaching expectation level throughout the three-year review period, coupled with the absence of any student achieving above expectation performance in 2024, highlights a substantial and quantifiable disparity between the equity and quality commitments outlined in these policy instruments and the actual educational outcomes attained by visually impaired learners within the integrated school system.

The Kenya Institute of Curriculum Development underscores the significance of differentiated instruction, tailored assessment, and learner-centered pedagogy as essential principles in its Competency Based Curriculum implementation guidelines, ensuring that all learners, including those with special needs, can achieve competency at optimal levels (KICD, 2019). The results of the current study indicate that these standards are not being consistently or appropriately implemented in integrated primary schools in Nairobi County, failing to adequately address the special instructional requirements of visually impaired students. Strategic investment in Braille resources, assistive technologies, and ongoing professional development for integrated school teachers in visual impairment pedagogy constitutes the most evidence-based and policy-compliant approach to enabling visually impaired students in Nairobi County's integrated primary schools to advance from near expectations to consistently achieving and surpassing the competency standards outlined by the Competency Based Curriculum framework.

The purpose of this study was to assess the influence of instructors' attitudes on the academic performance of visually impaired students in integrated primary schools in Nairobi County. To align with this purpose, the study was directed by the subsequent null hypothesis:

H0: Teachers' attitudes do not exert a statistically significant effect on the learning results of visually impaired students in integrated primary schools in Nairobi County.

To accomplish this goal, data were gathered from educators through standardized questionnaires that examined their views towards inclusive education and the academic performance of visually impaired students. The questionnaire evaluated teachers' readiness to assist students with visual impairments, views on inclusive education, dedication to modifying educational methods, and general responsiveness to the varied needs of learners. The results are displayed in Table 3.

Table 3

Descriptive Statistics for Teachers' Attitude

Statement	SA	A	NS	D	SD	Mean	Std.
I enjoy teaching visually impaired learners	5 (17.24%)	9 (31.03%)	2 (6.90%)	11 (37.93%)	2 (6.90%)	2.86	.854
Combining visually impaired learners and regular learners makes teaching easier	11 (37.93%)	13 (44.83%)	1 (3.45%)	4 (13.79%)	0 (0.00%)	1.93	.632
Visually impaired learners require a lot of attention	5 (17.24%)	12 (41.38%)	3 (10.34%)	6 (20.69%)	3 (10.34%)	2.66	.854
Visually impaired pupils are slow learners	6 (20.69%)	9 (31.03%)	4 (13.79%)	7 (24.14%)	3 (10.34%)	2.72	.678

Statement	SA	A	NS	D	SD	Mean	Std.
Teachers of visually impaired pupils require special training	5 (17.24%)	14 (48.28%)	2 (6.90%)	8 (27.59%)	0 (0.00%)	2.45	.854

Key: SA = Strongly Agree, A = Agree, NS = Not Sure, D = Disagree, SD = Strongly Disagree. Source: Field Data (2025)

The data in Table 3 illustrates instructors' reactions to various statements concerning their attitudes towards instructing visually impaired students in integrated schools in Nairobi County.

The results reveal that 48.27% of teachers concurred that they derive satisfaction from instructing visually challenged students, with a weighted mean of 2.86 and a standard deviation of 0.854. This indicates a generally favorable attitude among educators towards instructing students with visual impairments, a crucial element in facilitating successful learning outcomes.

The findings indicate that 82.76% of teachers concurred that integrating visually impaired students with their sighted peers facilitates instruction, with a weighted mean of 1.93 and a standard deviation of 0.632. This indicates that most educators view integrated classroom environments as advantageous, potentially enhancing classroom engagement and inclusiveness.

Concerning instructional requirements, 58.62% of teachers concurred that visually impaired students necessitate substantial attention, reflected by a weighted mean of 2.66 and a standard deviation of 0.854, signifying that educators acknowledge the significant individual support required by visually impaired learners.

Likewise, 51.72% of educators concurred that visually impaired students are slow learners, yielding a weighted mean of 2.72 and a standard deviation of 0.678. This impression indicates that certain educators link visual impairment to diminished academic advancement, potentially influencing their expectations and teaching methods, and reflects a troubling deficit-oriented thinking that necessitates focused attitude-adjustment therapy.

Furthermore, 65.52% of teachers concurred that educators of visually impaired students necessitate specialized training, evidenced by a weighted mean of 2.45 and a standard deviation of 0.854, reflecting a significant acknowledgment among teachers of the critical role of specialized training in improving instructional efficacy for learners with visual impairments.

The results presented in Table 3 indicate predominantly favorable yet varied opinions among educators regarding visually impaired students and inclusive education. Although there is a distinct acknowledgment of the necessity for specialized training and supplementary assistance for learners, certain perceptions such as regarding visually impaired learners as slow learners may affect teaching expectations and methodologies, potentially limiting learner results if not adequately addressed.

The study assessed the influence of teachers' attitudes on the learning results of visually impaired students in integrated primary schools in Nairobi County by testing the null hypothesis (H_0) through Pearson's product-moment correlation and simple linear regression analysis. The outcomes of the correlation analysis are displayed in Table 4.

Table 4.

Correlation Between Teachers' Attitude and Learning Outcomes of Visually Impaired Pupils

Learning outcomes

Teachers' attitude	Pearson correlation	.432
Teachers' attitude	Sig. (2-tailed)	.007
Teachers' attitude	N	29

Correlation is significant at the 0.01 level (2-tailed).

Source: Field Data (2025)

The findings in Table 4 demonstrate that instructors' attitudes exhibit a moderate positive and statistically significant correlation with the learning outcomes of visually impaired students in integrated primary schools in Nairobi County ($r = .432$, $p = .007$). This indicates that favorable teacher attitudes correlate with enhanced learning results for visually impaired students. The findings indicate that as teachers cultivate more positive attitudes towards inclusive education and visually impaired students, there is a concomitant enhancement in students' academic engagement and performance.

In light of these findings, a simple linear regression analysis was performed to ascertain the degree to which teachers' attitudes predict the learning outcomes of visually impaired students. The outcomes of the regression analysis are displayed in Tables 5 to 7.

Table 5

Regression Model Summary for Teachers' Attitude and Learning Outcomes of Visually Impaired Pupils

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	p-value
1	.432a	.187	.157	2.332	.019

a. Predictors: (Constant), Teachers' attitude. Dependent Variable: Learning outcomes of visually impaired pupils.

The findings in Table 5 demonstrate that instructors' attitudes contribute to 18.7 percent of the variance in the learning outcomes of visually impaired students in integrated primary schools in Nairobi County ($R^2 = .187$, adjusted $R^2 = .157$). This indicates that teachers' attitudes are a major predictor of student outcomes, accounting for a tiny yet statistically significant percentage of the variations in pupil performance. This finding indicates that although teachers' attitudes significantly influence learning outcomes, other factors not included in the model, such as the availability of teaching and learning resources, class size, school support systems, and individual characteristics of learners, also affect the academic performance of visually impaired students. An analysis of variance (ANOVA) was performed to evaluate the statistical significance of the model, with the results displayed in Table 6.

Table 6

ANOVA for Teachers' Attitude and Learning Outcomes of Visually Impaired Pupils

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	33.79	1	33.79	6.21	.019a
Residual	146.90	27	5.44		
Total	180.69	28			

a. Predictors: (Constant), Teachers' attitude. Dependent Variable: Learning outcomes of visually impaired pupils.

Table 6 indicates that the regression model connecting instructors' attitudes to the learning outcomes of visually impaired students in integrated primary schools in Nairobi County is statistically significant, $F(1, 27) = 6.21$, $p = .019$. This indicates that disparities in teachers' attitudes significantly influence the effectiveness of support and inclusion for learners with visual impairments in standard classroom activities, eventually impacting their academic success. The model's significance is corroborated by the p-value (.019), which is below the designated significance level ($\alpha = .05$), affirming that teachers' attitudes are a substantial predictor of learners' outcomes in an integrated learning environment. The findings indicate that affirmative teacher attitudes, including acceptance, adaptability in instructional methods, and supportive classroom practices, are likely to improve participation, engagement, and academic success among visually impaired students, while negative or apathetic attitudes may obstruct effective inclusion and diminish learning efficacy.

The regression coefficients were calculated to determine the size and direction of teachers' attitudes on the learning outcomes of visually impaired students, as shown in Table 7

Table 7

Regression Coefficients for Teachers' Attitude and Learning Outcomes of Visually Impaired Pupils

Model	B	Std. Error	Beta	t	Sig.
(Constant)	1.845	.612	3.014	.006	
Teachers' attitude	.386	.155	.432	2.492	.019

Dependent Variable: Learning outcomes of visually impaired pupils.

Source: Field Data (2025)

This study's findings indicate that instructors' attitudes significantly affect the learning outcomes of visually impaired students in integrated primary schools in Nairobi County ($t = 2.492$, $p = .019$) at $\alpha = .05$. As a result, the null hypothesis asserting that teachers' attitudes do not have a statistically significant impact on the learning outcomes of visually impaired students was rejected. The findings affirm that teachers' attitudes are a crucial institutional factor influencing the academic success, social engagement, and overall educational experience of visually impaired students at integrated schools in Kenya.

These findings are consistent with and strongly supported by Ndurumo and Maina (2021), who examined the influence of teacher attitudes on the academic performance of learners with disabilities in integrated primary schools in Kiambu County and established that teachers who demonstrated consistently positive, accommodating, and inclusive attitudes toward learners with disabilities recorded significantly better academic outcomes among their pupils than those who harboured negative, dismissive, or exclusionary attitudes. Their study indicated that attitude functioned not just as a background psychological trait of individual teachers but as an active instructional variable that influenced every dimension of the classroom experience available to learners with special needs.

Similarly, Njoroge and Muthoni (2024) examined the influence of teacher self-efficacy, professional support, and attitudes toward inclusive education on the learning outcomes of learners with sensory impairments in integrated schools in Machakos County and found that teacher attitude mediated the relationship between institutional support conditions and learner outcomes, suggesting that the impact of school-level inclusive education policies and resource provision on visually impaired learner achievement was significantly contingent on the attitudinal orientation of individual class teachers. This finding adds important contextual texture to the interpretation of the present study's results by highlighting that the significant influence of teacher attitude on learner outcomes is embedded within a broader institutional ecology in which school leadership, resource provision, professional development support,

and systemic inclusive education policy implementation all interact to shape the attitudinal environment within which individual teacher-learner relationships unfold.

Collectively, the findings of the present study show that teachers' attitudes regarding visual impairment and inclusive education are among the more consequential and institutionally significant drivers of the learning outcomes of visually impaired kids in integrated primary schools in Kenya. The findings have significant implications for pre-service teacher education curricula, in-service professional development programs, school leadership practices, and the national inclusive education policy framework, all of which must prioritize the systematic development of positive, informed, and professionally competent teacher attitudes toward visual impairment as a fundamental prerequisite for achieving meaningful educational inclusion in Kenyan primary schools.

4. CONCLUSION

The study concludes that teachers' attitudes constitute a critical determinant of learning outcomes for visually impaired learners in integrated primary schools in Nairobi County. Learners taught by teachers who demonstrated patient, accommodating, and inclusive dispositions consistently achieved better academic and social engagement outcomes than those taught by teachers with less positive attitudes, a pattern confirmed both statistically and through head teachers' independent qualitative accounts. This convergence between quantitative and qualitative evidence indicates that attitude functions not as a peripheral personal trait of individual teachers, but as an active instructional variable that shapes every dimension of the classroom experience available to visually impaired learners, from willingness to participate and seek help to sustained academic engagement.

These findings underscore the need for a shift in institutional and policy priorities, from an emphasis on formal credentials alone toward sustained investment in structured attitude modification, sensitization, and awareness programs for teachers working with visually impaired learners. Cultivating positive, inclusive dispositions should be treated as a core and ongoing component of both pre-service teacher preparation and in-service professional development, rather than an incidental outcome of training focused primarily on technical competence.

5. RECOMMENDATION

Based on the finding that teachers' attitudes significantly influence the learning outcomes of visually impaired learners in integrated primary schools in Nairobi County, the study makes the following recommendations:

1. The Ministry of Education should develop and institutionalize structured attitude modification and sensitization programs specifically targeting teachers working with visually impaired learners in integrated settings, delivered as a mandatory rather than optional component of teacher development.
2. Teacher training institutions should revise pre-service curricula to place greater emphasis on cultivating positive, inclusive dispositions toward learners with visual impairment, alongside existing technical and pedagogical content, so that attitude formation begins before teachers enter the classroom rather than being addressed only reactively.
1. School administrators and head teachers should incorporate attitude-related indicators, such as patience, responsiveness, and willingness to accommodate learner needs, into routine staff performance appraisal and mentorship processes, using these as a basis for targeted support rather than only for evaluation.
2. The Teachers Service Commission (TSC) should design and roll out continuous in-service sensitization workshops on inclusive education, with specific modules addressing attitude and disposition toward learners with visual impairment, to be delivered at regular intervals rather than as a one-time induction activity.
5. School administrators should establish peer mentorship structures that pair teachers who demonstrate strongly positive, inclusive attitudes with colleagues who require additional support in this area, allowing attitude change to be reinforced through observed modeling and practical classroom collaboration.
6. Policy makers should consider integrating a measure of teacher attitude toward inclusive practice into the broader framework used to monitor and evaluate the quality of inclusive education delivery in integrated schools, so that attitude is treated as a trackable dimension of educational quality rather than an unmeasured background factor.
5. Future researchers should explore the underlying determinants of teacher attitude itself, such as prior exposure to learners with disabilities, institutional support, or workload, to inform the design of more targeted and effective attitude intervention programs.

References

- Adoyo, P. O., & Odeny, M. L. (2015). Emerging inclusive education practices in Kenya: Challenges and suggestions. *International Journal of Research in Humanities and Social Studies*, 2(16), 47–52.
- Anyango, R. N., & Okello, L. M. (2023). Influence of the attitude of teachers on academic performance of visually impaired learners in primary schools of Rongo Sub-County, Kenya. *European Journal of Special Education Research*, 9(2). doi:10.46827/ejse.v9i2.4736

- Korir, C. (2015). The effect of integration on academic performance for students with visual impairments: A case study of integrated secondary schools in Kericho County. *British Journal of Education*, 3(3), 6–13.
- Kothari, C. R. (2011). *Research methodology: Methods and techniques* (2nd ed.). New Delhi, India: New Age International Publishers.
- Mugambi, M. K. (2012). Challenges facing teachers in teaching students with visual impairment in an integrated school: A study of Moi Girls' School, Nairobi (Unpublished master's thesis). Kenyatta University, Nairobi, Kenya.
- Mugenda, O. M., & Mugenda, A. G. (2012). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: Act Press.
- Mwangi, M. W. (2014). Pedagogical challenges facing mathematics teachers of learners with visual impairment at Thika Primary School for the Blind, Kiambu County, Kenya (Unpublished master's thesis). Kenyatta University, Nairobi, Kenya.
- Nyambere, H. A., & Okello, L. M. (2021). Influence of verbal communication on academic performance of learners with hearing impairment in inclusive settings in Migori County, Kenya. *Journal of Humanities and Social Science*, 26(6), 32–36.
- Otieno, A. O., Okello, M. N., & Namunga, N. (2023). Influence of teachers' attitude on inclusion of learners with visual impairment in public primary schools in Nyatike Sub-County, Migori County, Kenya. *International Journal of Psychology and Behavioral Sciences*, 13(1), 1–6