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INFLUENCE OF TEACHERS' PROFESSIONAL QUALIFICATIONS ON ACADEMIC PERFORMANCE OF LEARNERS WITH VISUAL IMPAIRMENT (VI) IN INTEGRATED PUBLIC PRIMARY SCHOOLS IN NAIROBI COUNTY, KENYA

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Abstract:
The purpose of this study was to influence teachers' professional qualifications on the academic performance of learners with visual impairment (VI) in integrated public primary schools in Nairobi County, Kenya. The research assumed an expressive survey design exploiting quantitative techniques. The targeted audience was 206 respondents, whereas the sample population would be 68 respondents comprising four head teachers, 31 teachers and 33 learners with VI. The research was conducted in integrated community primary schools in Nairobi municipality. Purposive sampling was employed to select 31 teachers from the four integrated public primary schools. For the learners with VI, convenience sampling was used to select 33 out of 98 available learners across the four schools. All 4 head teachers from the selected schools were included in the study using purposive sampling. Piloting allowed the researcher to test the clarity, relevance, and comprehensiveness of the questions and items included in the questionnaires and observation checklists. The research employed both qualitative and quantitative data collection techniques. Quantitative data was analyzed and coded using Statistical Package for Social Science (SPSS V 23.0). The findings showed that at least half of teachers had received training on special education; only about a third lacked formal training and had no training on special education. Most of them, followed by teachers with bachelor's degrees, Diploma education had certificate P1, master's degree, and diploma PGDE,

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while only a tiny fraction had PhD qualifications. The study concluded that professional qualification significantly influenced the academic performance of learners with VI, braille proficiency of teachers significantly influences the academic performance of learners with VI, and ICT integration has improved the quality of assessment in school, thus advancing the academic performance of learners with VI. The study recommended that the government needs to put down measures to ensure adequate assessment instruments for the learner and offer the necessary training to teachers on adequately using the instruments. Policymakers and education stakeholders should formulate policies ensuring that most teachers receive special education when dealing with learners with VI and other disabilities.

Keywords: academic performance, integrated public primary schools, learners with visual impairment (VI), teachers' professional qualifications

1. Introduction

Visual loss is a vision condition in an individual requires more support for the capability of seeing as a result of a substantial constraint of visual ability emanating from either trauma, disease, or degenerative or de-genital situations that may not be modified through predictable means (Pesudovs *et al.*, 2024). In the United States, educational assessment for learners with visual impairments (VI) remains a critical aspect of special education services. The Individuals with Disabilities Education Act (IDEA) mandates that students with disabilities, including those with VI, receive appropriate assessments to determine their educational needs and performance levels (U.S. Department of Education, 2021). In the United Kingdom, the assessment of learners with VI is guided by the Special Educational Needs and Disability (SEND) Code of Practice. Assessments are conducted using a range of tools, including Braille and large print materials, to accommodate the needs of visually impaired students (Department for Education, 2021). Sweden adopts a holistic approach to the assessment of learners with VI, focusing on both educational and social aspects. The Swedish National Agency for Special Needs Education and Schools (SPSM) plays a pivotal role in this process (SPSM, 2020). In India, the assessment of learners with VI is still evolving. The country faces significant challenges, such as limited access to specialized assessment tools and inadequate training for educators (Sharma & Gupta, 2021).

In the African context, South Africa has made significant strides in the assessment of learners with VI through policies such as the White Paper 6 on Inclusive Education. Assessments are often conducted using both traditional and modern tools, but challenges remain in ensuring equal access across different regions (Department of Basic Education, 2021). These assessments have played a crucial role in enhancing academic performance by providing data that inform targeted interventions (Mokoena, 2022). In Ethiopia, the assessment of learners with VI is primarily conducted through specialized schools and

programs. The major challenges include limited access to assessment tools and a lack of trained assessors (Tadesse & Mulugeta, 2020). Despite these issues, assessments have begun to improve academic performance by identifying learning needs and enabling personalized educational support (Gebre, 2021). Uganda faces significant challenges in the assessment of learners with VI, including inadequate resources and a lack of trained personnel (Ssekamanya & Obuku, 2020). In Tanzania, the assessment of learners with VI is overseen by the Ministry of Education, Science, and Technology. Challenges include limited access to Braille materials and trained teachers (Mwenda, 2021). Despite these challenges, assessments have helped improve academic performance by identifying specific learning needs and guiding educational interventions (Chuwa, 2022).

Kenya's government ratified Article 26 of the Universal Declaration of Human Rights in 1948, pledging to uphold every child's right to an education (UNESCO & UNICEF, 2007). By 2015, the government had signed and ratified several international policy frameworks, including the United Nations Convention on the Rights of the Child (CRC), the Salamanca Statement (1994), the Millennium Development Goals (MDGs), the 1990 African Charter on the Rights and Welfare of the Child, the Framework for Action on Special Needs Education (1999), and Education for All (EFA). The Kenya Society for the Blind (KSB) has been instrumental in advancing the education of visually impaired students in Kenya. KSB conducts comprehensive assessments for visually impaired students to determine their specific educational needs. These assessments include vision tests, functional vision assessments, and educational assessments to identify the appropriate learning tools and strategies for each student (KSB, 2022).

KSB offers training programs for teachers to equip them with the skills needed to effectively assess and teach visually impaired students. This includes training on the use of Braille, assistive technologies, and other specialized teaching methods (Mwangi, 2023). The training ensures that educators are well-prepared to conduct accurate assessments and provide appropriate educational interventions (Otieno, 2022). By providing these technologies, KSB ensures that visually impaired students have access to the necessary resources to perform well academically (Kamau, 2023). Sight Savers International is a global organization that works to prevent avoidable blindness and promote equal opportunities for people with disabilities, including those with visual impairments. Assessments for learners with VI in Kenya typically involve the use of Braille materials, large print books, and assistive technologies. These assessments help in determining the specific educational needs of visually impaired students and in providing data that inform tailored interventions (Njuguna & Murungi, 2021).

Despite significant advancements in inclusive education policies and practices, the academic performance of learners with visual impairment (VI) in Nairobi County, Kenya, remains suboptimal. This underperformance can be attributed to various factors, including inadequate assessment instruments, insufficiently qualified teachers, limited Braille proficiency, and the scarcity of assistive technology. While the Kenyan government and non-governmental organizations like the Kenya Society for the Blind

(KSB) and Sight Savers International have made strides in providing educational resources and support, critical gaps persist. One primary concern is the effectiveness of assessment instruments used to evaluate the academic capabilities of learners with VI. Traditional assessment tools often fail to accommodate the unique needs of these learners, leading to inaccurate evaluations and hindering their academic progress. Additionally, the professional qualifications of teachers play a crucial role in the educational outcomes of learners with VI. Many teachers lack specialized training in inclusive education and assessment for visually impaired students, which negatively impacts their ability to deliver effective instruction and support. Moreover, Braille proficiency is a fundamental skill for learners with VI, yet many students struggle with its mastery due to inadequate training and resources.

1.1 Objective of the Study

To assess the influence of teachers' professional qualifications on the academic performance of learners with visual impairment (VI) in integrated public primary schools in Nairobi County.

2. Literature Review

2.1 Theoretical Review

The study was guided by the systems theory that regards schools as systems and gives weight to the purpose of schools as the prerequisite for analyzing these systems (Silver, 1983). A system is a complex composite of interdependent and interrelated natural or artificial fragments. A system is pronounced by its functioning, distinct by its purpose and structure, and is influenced by its environment (Lai & Huili Lin, 2017; Nicolescu, 2017). Systems Theory emphasizes the importance of analyzing schools as holistic systems rather than isolated entities. It posits that the interaction between different components—such as assessment instruments, teacher qualifications, Braille proficiency, and assistive technology affects overall performance outcomes (Silver, 1983). In the context of this study, understanding how each component interacts within the educational system of integrated public primary schools in Nairobi County is crucial.

Systems Theory includes a focus on the input-output dynamics of systems. In educational settings, this translates to analyzing how inputs such as assessment tools and teacher qualifications affect the outputs, which are the learners' academic achievements (Silver, 1983). By using this framework, the study can assess how specific inputs (e.g., various types of assessment instruments and Braille proficiency) impact the output (academic performance of learners with VI). This approach helps to identify which factors are most influential and how they contribute to or detract from successful academic outcomes (Gergen & McNamee, 2022). By incorporating functional assessment into the study, it becomes possible to evaluate not just the outcomes of assessments but their functionality and relevance to the learners' educational needs (Kozma *et al.*, 2021). The

study's focus on various components of the educational system aligns with this tenet, as it aims to identify and address the ways in which the current system can be improved to better support learners with VI (Miller, 2022).

2.2 Empirical Studies and Knowledge Gaps

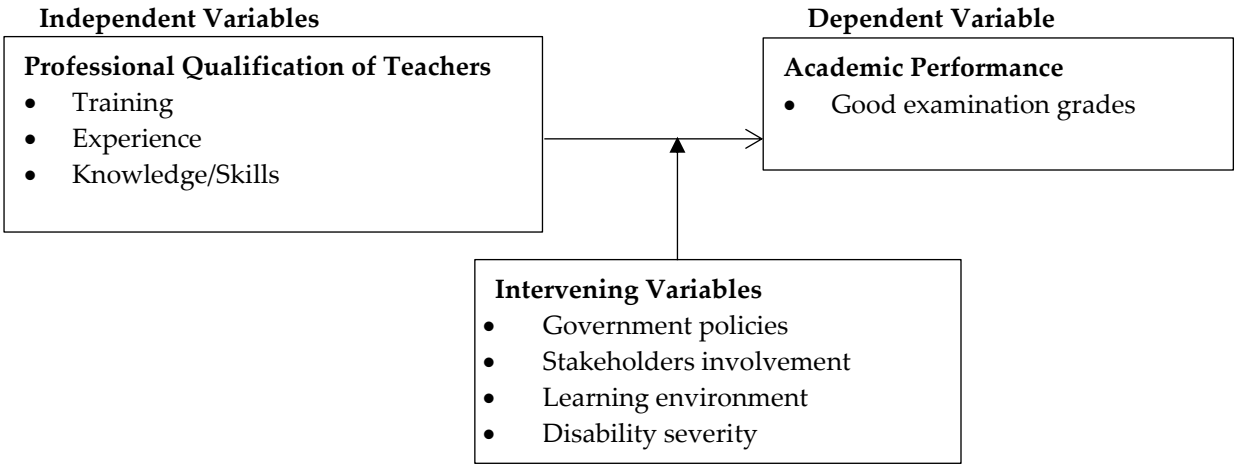
In inclusive settings, appropriately trained professionals are critical in providing meaningful educational services to learners with special needs (Kang & Martin, 2018). In a study by Davis and Williams (2022), the impact of teachers' professional qualifications on the academic performance of visually impaired students in the USA was examined. The study employed a quantitative research design, using a sample of 300 teachers and 450 students across various states. The study found that teachers with advanced degrees and specialized certifications in special education significantly impacted students' academic achievements. However, the study revealed a methodological gap, as it did not include a control group of teachers without specialized training for comparison. To enhance the robustness of the findings, future studies should incorporate control groups to provide a clearer comparison between qualified and non-qualified teachers (Smith & Green, 2023).

Patel and Singh (2024) examined the role of teachers' qualifications in influencing the academic performance of visually impaired students in India. The study used a comparative approach, analyzing data from 200 teachers and 300 students across various regions. In a study by Hassan and El-Sayed (2022), the effect of teachers' qualifications on visually impaired students' academic performance in Egypt was explored. A significant empirical gap was identified in the study's lack of longitudinal data to assess the long-term impact of teachers' qualifications on student performance.

Ndegwa and Maina (2022) employed a comparative study design with a sample of 80 teachers and 150 students from integrated and non-integrated schools in Kenya. The researchers used a combination of surveys and academic performance records to evaluate the impact of teachers' qualifications on students' academic achievements. The study demonstrated that teachers with advanced qualifications in special education and experience in teaching visually impaired students had a noticeable positive effect on students' academic performance. An evidence gap was identified in the study related to the longitudinal effects of teachers' qualifications on students' performance over time. Future studies should examine how sustained exposure to qualified teachers influences long-term academic success and skills development.

2.3 Conceptual Framework

Figure 1: Conceptual Framework



Source: Author's Conceptualization (2023)

3. Methodology

3.1 Study Locale

The study was conducted in selected integrated public primary schools in Nairobi, the capital of Kenya. Furthermore, the schools were integrated public primary schools. The location was chosen because examination records from the county education office indicated that Nairobi is among the worst performing academically for learners with VI. Recent examination records from the Nairobi County Education Office have highlighted a concerning trend where Nairobi ranks among the lower-performing counties in terms of academic outcomes for learners with visual impairments (VI). This makes Nairobi a crucial site for studying educational assessment influences, as understanding and addressing the factors contributing to this poor performance could have significant implications for policy and practice (Kenya National Examination Council, 2022). Nairobi offers better accessibility and availability of educational data compared to other regions in Kenya.

3.2 Research Design and Target Population

The study used a descriptive survey design with qualitative and quantitative methods. This is the most common method for gathering data on various educational and social issues. The rationale for using a survey design is that it allows you to get a general picture of a situation without using the entire population (Creswell, 2009). According to recent data, Nairobi County has approximately 13 integrated public primary schools that cater to both standard learners and those with special needs. However, the study focused on four of these schools because they have a significant number of learners with VI. The

school composition includes 104 teachers, 4 head teachers, and an approximated population of 98 learners (Table 1).

Table 1: Target Population for the Study

Category	Population size	Sample size	%
Schools	13	4	30%
Headteachers	13	4	30%
Teachers	104	31	30%
Learners with VI.	98	33	34%

Source: Nairobi County Education Office (2024).

3.3 Sampling Techniques and Sample Size

Purposive sampling was employed to select 31 teachers from the four integrated public primary schools. This approach allows the study to gather detailed information from those who are directly engaged in the educational process for learners with VI. For the learners with VI, convenience sampling was used to select 33 out of 98 available learners across the four schools. This method was chosen due to practical constraints, such as time and resource limitations, which made it challenging to include all 98 learners. All 4 head teachers from the selected schools were included in the study using purposive sampling. The sample in this paper used 30% per cent of the target population. This research relied on this to come up with the sample size. The sample size for the study was twenty-eight per cent (33%) of a population size of 206 comprising four head teachers, 104 teachers and 98 learners with VI.

Table 2: Target Population and Sample Size for the Study

Subject	Kilimani		Shauri Moyo		Muthaiga		State House		Total	
	Target	Sample	Target	Sample	Target	Sample	Target	Sample	Population	Sample
Headteachers	1	1	1	1	1	1	1	1	**4**	**4**
Teachers	32	11	17	3	26	7	29	10	**104**	**31**
Learners with VI	48	14	12	4	18	6	20	9	**98**	**33**
Total	**81**	**26**	**30**	**8**	**45**	**14**	**50**	**20**	**206**	**68**

Source: Author computations.

3.4 Research Instruments

Data was collected through questionnaires, interviews and observation (Muthomi *et al.*, 2015). This study used quantitative data collection techniques. The questionnaire was founded on the variables and objectives as laid out in the literature review. Observation checklists are a systematic tool used to collect data by observing and recording specific behaviors, actions, or conditions.

3.4 Pilot Study

A pilot study was conducted in Tumaini integrated primary school in Nairobi County. The pilot school was not part of the primary research. The respondents were one head

teacher, 12 teachers and 10 learners with VI. A test-retest method was used to determine the instrument's reliability. The research used Spearman rank order to measure the correlation coefficient. This will assist in determining the consistency of the contents of the instruments. This consistency is measured by how it elicits similar responses each time the instruments are administered. Upon calculation, a reliability coefficient of 0.77 was obtained and thus deemed excellent.

3.5 Data Collection Procedures

The researcher sought approval from Kenyatta University to apply for a research permit from The National Commission for Science, Technology, and Innovation. Before commencing the data collection, the researcher conducted a preliminary tour to familiarize themselves with the schools under investigation. Firstly, the researcher prepared the necessary materials, including questionnaires and observation checklists. The researcher, along with the research assistants, visited the selected schools and administered the questionnaires to the head teachers. The respondents were given one to two days to complete the questionnaires, based on their convenience and prior agreement with the researcher. This flexible approach helped in accommodating the busy schedules of the head teachers, ensuring a higher response rate. After the agreed period, the researcher and the research assistants returned to the schools to collect the completed questionnaires. Any incomplete or ambiguous responses were clarified with the respondents on the spot, ensuring the data's integrity and completeness. All collected data were systematically recorded and organized for analysis.

3.6 Data Analysis

Data cleansing came next to identify any missing, irrelevant, or inaccurate data for the objective of raising the quality. Errors and omissions were changed, replaced, or removed to make the data compatible with other sets that are comparable to it. Statistical Package for Social Sciences (SPSS) was used to process and organize the data. Both descriptive and inferential statistics were used to process the gathered data. Measures such as mean, median, mode, standard deviation, and frequency distributions are computed. Statistical tests, such as t-tests, chi-square tests, or ANOVA, are used to determine if there are significant differences or relationships between variables. Tables, graphs, such as bar charts and pie charts, are used to compare frequencies or percentages and to show the proportion of different categories within a whole. Line graphs are employed to illustrate trends over time if relevant. Tables are also used to display frequency distributions and summary statistics, providing a clear overview of key numerical data. In this study, data triangulation was employed, which involves combining multiple data sources or methods to cross-verify results.

4. Results and Discussions

Data obtained from the field were analyzed using descriptive statistics with the aid of the Statistical Package for Social Science (SPSS). The sample size for the review contained four headteachers, 31 instructors, and 33 students with VI. Of 68 respondents, four headteachers, 31 teachers, and 32 learners responded. The return rate is summarized in Table 3 below.

4.1 General Information

The researcher first sought to document the demographic characteristics of the studied participants based on the collected and analyzed data.

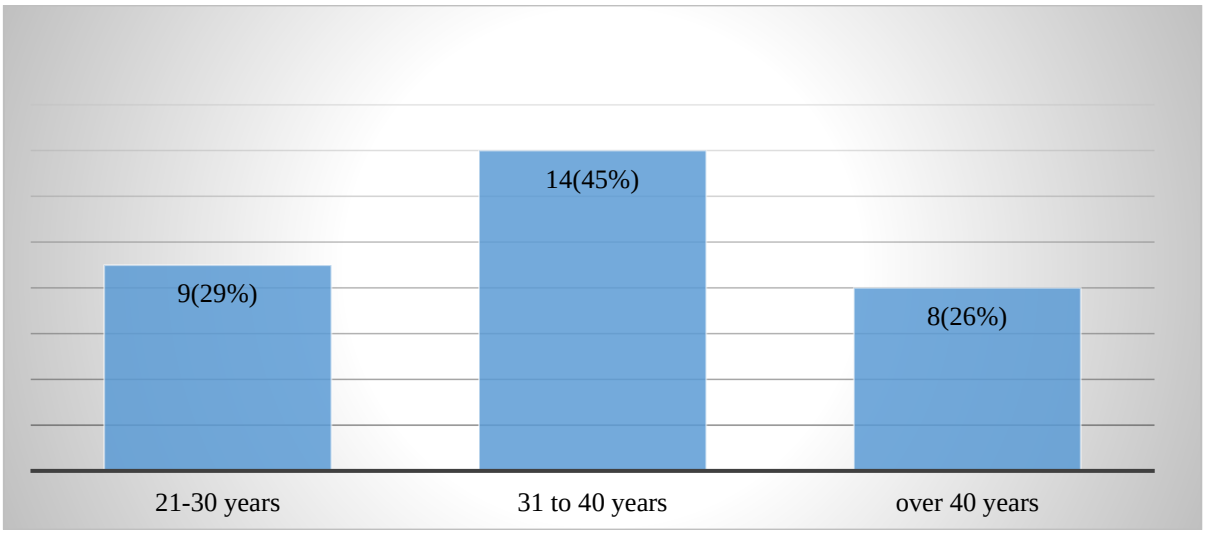


Figure 2: Distributions of Teachers by Age

Figure 2 shows that about 50 percent of teachers aged between 31-40 years. Only about a quarter of ages above 40 and between 21-30 years. About three-quarters of headteachers were male, while only a quarter were females. Findings from learners with VI also showed that slightly above half were male, while about half were female learners. The study, therefore, ensured that all sexes were equally represented in the study. The researcher also sought to document the distribution of Learner participants by their ages; the results are tabulated in Table 3.

Table 3: Distribution of Learners with VI by Age

Age In Years	Frequency	Percentage
10 and Below	7	22%
11 to 14	12	37.5%
15 and above	13	40.5%
Total	32	100%

Table 3 shows the distribution of learners with VI who participated in the study by age. Most participants, about a two-fifths (13), were 15 years and above. Slightly below two-fifth (12) were between 11 and 14 years. However, slightly below a quarter (7) were aged ten years and below. These results imply that the study participants were all in their teenage and below and still within constitutionally entitled essential minimum educational attainment.

4.2 Use of Computer-assisted Instruction and Academic Performance among Learners with HI

The key aim of this study was to assess the impact of the professional qualifications of assessing teachers on visually impaired learners' academic performance in Nairobi County. The results are summarized below.

4.2.1 Teachers Training in Special Education

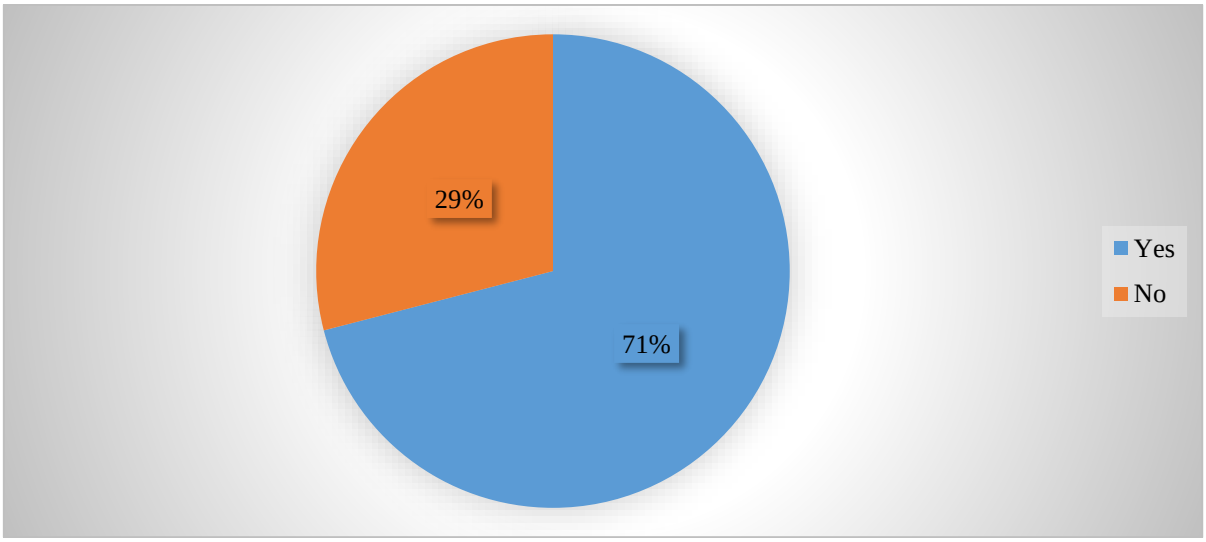


Figure 3: Teachers Training in Special Education

Figure 3 shows that most teachers had received training in special education, while slightly above a quarter had no training in special education. Most admitted to learning most of their skills while interacting with students. They learn while working, which eventually affects how they deliver content and assess their learners. Therefore, Special education is fundamental for teachers interacting with visually impaired students in Nairobi County. These students are not allowed to pursue their education and often return to the classroom or repeat a year. Therefore, this creates a gap in their abilities and increases the gap between them and those in class. The results confirm our hypothesis that the more qualified the teacher is, the more likely they are to positively influence learners' knowledge attainment. This finding is consistent with the findings of Maryanti *et al.* (2021), which confirms that special education is essential to help teachers interact with visually impaired students and other learners. The majority of teachers in the study

had training in special education, which is fundamental for effectively teaching visually impaired students. This aligns with Maryanti *et al.* (2021), who emphasize the necessity of special education training for teachers to interact effectively with visually impaired students. Biggs, Gilson, and Carter (2019) also noted the importance of teachers' skills, whether acquired or taught, in influencing teaching efficacy and operational activities. The lack of training often results in students being unable to progress academically, consistent with findings by Haegele *et al.* (2019), who reported that general education teaching certificates without specialized training do not adequately support.

4.2.2 Teachers Training in Special Education

It is essential to explore how teachers' professionalism affects learners with VI academic performance further, and the professional qualification was studied and summarized in Table 4 below.

Table 4: Teacher's Highest Level of Professional Qualification

Professional Education	Frequency	Percentage
Certificate P1	5	16.12
PGDE	2	6.45
Diploma	7	22.58
Bachelor's Degree	12	38.71
Master's Degree	4	12.90
PhD	1	3.23

According to Table 4, most teachers held Bachelor's degrees (38.71%), followed by Diplomas (22.58%), with fewer holding Certificate P1, Master's degrees, PGDE, and PhDs. This distribution underscores the need for higher qualifications among teachers to improve student performance, as evidenced by Chen *et al.* (2020), who stressed the inadequacy of support for learners with VI due to insufficient teacher qualifications. The lack of professionalism among school teachers affects the success of visually impaired learners in schools as they have limited opportunities to interact with other teachers and experienced teaching professionals who can provide necessary guidance and assistance.

4.2.3 Teachers Training in Special Education

Teachers' experience in assessing learners with VI was also assessed, and the results are tabulated in Table 5.

Table 5: Teachers' Teaching Experience in Assessing Learners with VI

Teaching Experience	Frequency	Percentage
Less than five years	5	16.13
6-10 years	10	32.26
11-15 years	8	25.81
16-20 years	4	12.90
21-25 years	3	9.68
Above 26 years	1	3.23

Slightly over a quarter had 6 to 10 years of experience assessing learners with VI. Sliglighly above a quarter had 11 to 15 years of experience, slightly above an eighth had less than five years of experience, and about a quarter had over 16 years of experience. Interacting with visually impaired students in Nairobi County may be challenging for the teacher if done incorrectly. Teachers will succeed when they use all available resources, including school staff and external agencies, to provide support, advocacy, and assistance when needed (Hagaman & Casey, 2018). They learn while working, which eventually affects how they deliver content and assess their learners.

4.2.4 Teachers Training in Special Education

The experience in assessing learners with VI matters a lot in influencing the delivery of knowledge by the teachers.

Table 6: Learners with VI Academic Performance

Marks	Frequency	Percentage
Below 200	4	12.5
201-250	12	37.5
251-300	10	31.25
301-350	4	12.5
350 and above	2	6.25

Table 6 shows the learners with VI average academic performance; the majority, slightly above a third of the learners, attained between 201 and 250 marks. Slightly below a third scored between 251 and 300 marks, about tenth attained 301 to 350 marks, and a similar percentage attained below 200. However, a few learners achieved 350 marks and above. The study revealed varied academic performance among learners with VI, with the majority scoring between 201 and 250 marks.

In an open-ended question, learners with VI were asked to state what made them not achieve the marks they desired in the examination. The following were the responses from different participants;

> *"Sometimes the exam papers are not available in Braille or large print in time. It is hard to answer questions if I cannot read them properly."*

Learners identified issues with the accessibility of examination formats as a major barrier to achieving desired marks. The lack of timely availability of adapted exam papers affects their ability to perform well.

> *"I find it hard to complete the exams on time because reading takes longer for me compared to other students."*

Time management difficulties were highlighted, indicating that the time allocated for exams may not be sufficient for learners with visual impairments to complete their work effectively. Further, the participants were asked to state whether they required extra time to complete an academic task:

> *"Yes, I definitely need extra time to finish tasks because it takes longer for me to read and write. Extra time during exams is crucial. I think it is less important during regular teaching, but essential during tests."*

Learners generally felt that extra time is particularly critical during examinations rather than regular classroom activities, where the pace might be more manageable with the current teaching strategies.

> *"It would be great to have extra time both during lessons and exams. It helps me keep up and perform better."*

4.3 Correlation between Teachers' Experience and Academic Performance

The researcher sought to examine whether the performance had any relationship with the professional qualification of the assessing teachers; the results are summarized in Table 7.

Table 7: The Relationship between Professional Qualification of Assessing Teachers and Academic Performance of Learners with VI

Marks	**Below 200**	**201-250**	**251-300**	**301-350**	**351 and above**	**Total**
Professional Qualification	**F/%**	**F/%**	**F/%**	**F/%**	**F/%**	**F/%**
Certificate P1	4(12.9%)	1(3.2%)	0(0%)	0(0%)	0(0%)	5(16.1%)
PGDE	0(0%)	2(6.5%)	0(0%)	0(0%)	0(0%)	2(6.5%)
Diploma	0(0%)	6(19.4%)	1(3.2%)	0(0%)	0(0%)	7(22.6%)
Bachelor's Degree	0(0%)	3(9.7%)	7(22.6%)	2(6.5%)	0(0%)	12(38.7%)
Master's Degree	0(0%)	0(0%)	2(6.5%)	2(6.5%)	0(0%)	4(12.9%)
PhD	0(0%)	0(0%)	0(0%)(0%)	0(0%)	1(3.2%)	1(3.2%)
Total	4(12.9%)	12(38.7%)	10(32%)	4(12.9%)	1(3.2%)	31(100%)

Table 7 shows the relationship between the teacher's professional qualification and the learners with VI academic performance. Slightly above a fifth scored between 251 to 300 marks had teachers with bachelor's degrees. Learners with the highest marks, an insignificant number of teachers, had PhD education. The researcher sought to establish any significant relationship between the teacher's professional qualifications and the learners with VI academic performance; the regression analysis shows the results below.

4.3.1 Regression Analysis

Regression analysis is a form of statistical modelling that aids the estimation of the relation between a dependent variable and one or more independent variables. Statistical significance (denoted by p) varies between 0-1. A P-value below 0.05 denotes statistical significance. The smaller the number, the higher the significance. The researcher conducted a linear regression analysis to test the connection between the teacher's professional qualifications and the learners with VI academic performance. This study is vital in answering objective II. Regression analysis, in this case, seeks to represent the correlation between an independent variable and a dependent variable, which would ultimately help to confirm or disconfirm H2.

Table 8: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.840[a]	.706	.695	.549

The regression analysis (Table 4.8) indicated a significant relationship between teacher qualifications and student performance, confirming the hypothesis that professional qualifications positively influence academic outcomes. This is consistent with findings from Smith and Green (2023) and Patel and Singh (2024), who found that specialized training and advanced degrees significantly impact student achievement.

Table 9: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	20.941	1	20.941	69.518	.000[b]
	Residual	8.736	29	.301		
	Total	29.677	30			
a. Dependent Variable: learners with VI academic performance						
b. Predictors: (Constant), Professional qualification of teachers						

In ANOVA data analysis, an independent variable is usually a noteworthy predictor of the dependent variable if the absolute t-value of the regression coefficient connected with that independent variable is greater than the absolute critical t-value. The regression analysis also yields an F-statistic where the prediction will be rejected if the calculated F-value exceeds the critical or tabled F-value. This study's significance value is .0.00, less than 0.05; thus, the overall model is statistically significant. This means there is a robust direct correlation between the variables of teachers' professional experience and learners' academic performance.

Table 10: Coefficient of Determination

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	.480	.267		1.799	.083
	Professional qualification	.617	.074	.840	8.338	.001

The researcher did a linear regression analysis to determine the nexus between the teacher's professional qualifications and the learners with VI academic performance. At 0.5% level of significance and 95% level of confidence, the professional qualification of teachers had a 0.001 level of significance, indicating that it significantly influences the academic performance of learners with VI. Visually impaired learners are an essential audience to reach to ensure that no child is left behind. This study aimed to assess the impact of the professional qualifications of assessing teachers on visually impaired learners' academic performance in Nairobi County. The study aimed to determine whether there is evidence that PET positively affects VIL achievement. This study identified a strong relationship between professional training and educational performance, which suggests the need for teachers' continuous career training.

5. Conclusions

The study concludes that the professional qualifications of teachers are a critical predictor of the academic performance of learners with VI in Nairobi County. Teachers with higher educational qualifications and specialized training in special education are better equipped to support the academic success of visually impaired students. The findings underscore the need for continuous professional development and specialized training programs to enhance the quality of education for visually impaired learners. The professional qualification of teachers significantly influences the academic performance of learners with VI.

6. Recommendations

1. All teachers should undergo specialized training in special education to teach and assess learners with VI effectively. This is crucial as it directly impacts student performance by equipping teachers with the necessary skills and knowledge.
2. The Ministry of Education should provide continuous professional development to keep teachers updated on the latest Braille teaching techniques and tools, thereby improving their proficiency and effectiveness in the classroom.

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Conflict of Interest Statement
The authors declare no conflicts of interest.

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Dr. Jessina J.M. Muthee is a Senior Lecturer in Early Childhood and Special Needs Education at Kenyatta University, specializing in Special Needs Education and Psycho educational Assessment. Her academic journey includes a Ph.D. in Educational Psychology from the University of Kerala, a Master of Education in Psychology, and a Bachelor of Education (Honors) in Special Needs Education from Kenyatta university, all underscoring her commitment to improving educational experiences for children with diverse needs. With over two decades of professional experience, Dr. Muthee has served as a tutor and lecturer, shaping future educators through innovative curricula and teaching methodologies. At Kenyatta University, she has developed a Ph.D. curriculum. Dr. Muthee's research interests span learning disabilities, psycho educational assessment, dyscalculia, dyslexia, dysgraphia dyspraxia, inclusive education. Her studies on instructional resources and teacher preparedness have yielded valuable insights for enhancing educational outcomes, particularly for students with visual impairments. She has authored numerous articles and books that advance knowledge in the field and promote effective strategies for supporting learners with special needs. Recognized for her contributions, Dr. Muthee has played a pivotal role in shaping the academic landscape for special education in Kenya. Through her advocacy for inclusive practices, she continues to inspire educators and positively impact the lives of countless individuals with special needs, leaving a lasting legacy in the field.
Dr. Alice Olewe is a lecturer in the Department of Early Childhood & Special Needs Education. I hold a PhD in Special Education from Kenyatta University, a Master of Education in Special Education USA (1982 – 1984) and a Master of Education in Business Education USA (1980-1982), Bachelor of Science in General Business Administration

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