



The Effect of Teachers' Qualifications on Students' Academic Performance in Selected Public Secondary Schools in Kicukiro District, Rwanda

Joseph Ngabonziza & Abdulrazaq Olayinka Oniye

University of Kigali, Rwanda

Email: ngabojos3@gmail.com

Abstract- *The aim of this paper was to explore the effect of teacher's qualifications on students' academic performance in public secondary schools in Rwanda. A case of Kicukiro District". The study assessed the effect of teachers' attitude on students' academic performance in public secondary schools in Kicukiro District. The study was guided by descriptive research design using quantitative and qualitative approaches. The population involved in this study was 166 teachers, 6 head teachers and 1 district Education Officer of eight selected schools from Kicukiro District. Purposive and random sampling techniques were used to sample 121 respondents taken as sample size. In addition, the questionnaire and interview techniques were used to collect the data. SPSS software version 21 was used for statistical analysis. Findings from the study revealed that there is a statistically significant relationship between teachers' qualifications (teachers' attitude) and students' academic performance thus $P = .000$ less than 0.01 as the correlation significance level and Pearson coefficient correlation $r = .813$. This study concluded that teacher qualification can have an impact of 58% on students' academic performance and the remaining 42% could be affected by other variables. This study recommended that school administrators should create a supportive and collaborative school environment that encourages teachers to maintain a positive attitude towards teaching. This can include recognition programs, stress management workshops, and opportunities for teachers to share their experiences and strategies, ultimately fostering a more motivating atmosphere for both teachers and students.*

Keywords: Teachers' qualifications, students' academic performance, secondary schools, Kicukiro District

How to cite this work (APA):

Ngabonziza, J. & Oniye, A. O. (2024). The effect of teachers' qualifications on students' academic performance in selected public secondary schools in Kicukiro District, Rwanda. *Journal of Research Innovation and Implications in Education*, 8(4), 109 – 122. <https://doi.org/10.59765/wyg58tph>.

1. Introduction

Education is recognized globally as a fundamental human right, emphasizing the importance of providing every child with quality education (UNESCO, 2015; Oxfam, 2018). The effectiveness of a nation's education system is often reflected in the quality of its teachers (Darling-Hammond, 2000; Ingersoll, 2001). High-quality educators are crucial

at every educational level, particularly in secondary schools, which serve as a foundational stage for further academic pursuits (Adeyeye, 2020; MINEDUC, 2007). National policies highlight that secondary education is pivotal for national development, fostering individual worth, societal growth, and equitable educational opportunities (MINEDUC, 2007; World Bank, 2018). This commitment underscores the importance of employing well-qualified teachers who can nurture the values and

knowledge necessary for student success (Cochran-Smith & Villegas, 2015).

In the United States, teacher qualifications play a critical role in delivering quality education (Darling-Hammond, 2006). Certification ensures that public secondary school teachers meet specific standards and possess the necessary skills to enhance student performance (Cremin & Lawrence, 2013; Goldhaber & Brewer, 2022). Research indicates that qualified teachers significantly impact student achievement (Hanushek, 2011; Rivkin, Hanushek, & Kain, 2005), emphasizing the need for specialized training and standardized qualifications. However, barriers to entry into the teaching profession, such as stringent certification requirements, may inadvertently limit access for some potential educators (Walsh, 2019; Laczko-Kerr & Berliner, 2002). Additionally, ongoing training is vital for qualified teachers to maintain and improve their effectiveness in the classroom (Holt & Seastrom, 2022; Wilson, 2014).

In contrast, many urban areas in Africa face challenges with unqualified teachers, negatively impacting student performance (UNESCO, 2017; Mkandawire, 2020). Studies indicate a correlation between teacher qualifications and student achievement in secondary education (Buddin, 2019; Murnane & Steele, 2007). For instance, a study in Kenya revealed no significant performance differences between students taught by teachers who received refresher courses and those who did not (Musau & Abere, 2020). This suggests that having a degree does not guarantee teaching effectiveness, highlighting the need for relevant training and support to improve teacher quality in the region (Ginsburg et al., 2014; Akiba et al., 2013).

Rwanda has made strides in addressing teacher qualifications, recognizing education as a fundamental right for all citizens (MINEDUC, 2016; UNESCO, 2019). The country has established Teacher Training Colleges (TTCs) to enhance the quality of educators, providing both initial and in-service training (MINEDUC, 2016; Karamage, 2020). Over the years, the percentage of qualified teachers has increased significantly, although regional disparities remain (Education Statistical Year Book, 2022; Desteffaro, 2020). For instance, urban areas like Kigali boast nearly complete teacher qualification, while some rural regions lag behind (MINEDUC, 2016). Additionally, the training of secondary teachers occurs primarily at two institutions, with efforts to address skill gaps through distance training programs for under-qualified teachers (Education Statistical Year Book, 2022; Twaib, 2021).

Despite these advancements, challenges persist, such as an increasing pupil-to-teacher ratio, indicating that the growth in teacher numbers has not kept pace with student enrollment (UNESCO, 2022; World Bank, 2020). Many

secondary teachers lack the appropriate qualifications, often having been trained for primary education or possessing non-education degrees (Akyeampong, 2017; Muthoni, 2021). This issue is particularly pronounced in rural secondary schools, prompting the need for research to investigate the impact of teacher qualifications on student academic achievement in Kicukiro District (Buddin, 2019; MINEDUC, 2022). Understanding this relationship is crucial for formulating effective educational policies and improving overall educational outcomes in the region (UNESCO, 2016; Oxfam, 2018).

1.1. Problem statement

Since the implementation of the Nine-Year Basic Education Policy in Rwanda in 2006, there has been a notable increase in enrollment rates across all educational levels. The primary national net enrollment rate surged from 73.3% in 2000/01 to 95.9% in 2011, while the gross enrollment rate for secondary education rose from 16.6% to 35.5% during the same period (Joint Review of the Education Sector, 2012). Despite these improvements, a significant challenge remains: a shortage of qualified teachers, exacerbated by practices such as double and triple shifting to accommodate increased enrollment.

The government has acknowledged the need to boost the number of qualified teachers to improve the student-teacher ratio, which is crucial for effective education. By the 2021/22 academic year, the percentage of qualified teaching staff reached 76.8%. However, disparities persist, particularly between male and female teachers, with 82.4% of male teachers qualified compared to only 63.6% of female teachers (Educational Statistical Year Book, 2023). While the overall percentage of unqualified teaching staff has decreased significantly, the gap in qualifications between genders highlights ongoing inequities in teacher preparedness.

Qualified teachers are vital for nation-building, playing a crucial role in both education and student development. Unfortunately, many developing countries, including Rwanda, face a shortage of qualified educators in both public and private schools (Girou, 2000). This shortage negatively impacts the teaching and learning environment, resulting in inadequate educational standards and poor teaching methodologies. Research shows that teacher qualifications are directly linked to student success, with effective teaching contributing significantly to improved learning outcomes (Peter, 2020).

Although the Rwandan government has made efforts to enhance teacher training through various institutions, including Teacher Training Colleges and universities, many qualified educators leave the profession for other opportunities. This exodus has led to the hiring of unqualified teachers who lack essential skills in educational methodologies and child development.

Consequently, despite improvements in education policy and teacher training, students' academic performance remains stagnant due to a persistent shortage of qualified teachers in public secondary schools (REB, 2019; Save the Children, 2018). This situation highlights the need for further investigation into the impact of unqualified teachers on student academic achievement, identifying a critical gap in the educational system that must be addressed.

This study sought to achieve the following research objective:

To assess the effect of teachers' attitude on students' academic performance in selected public secondary schools in Kicukiro District.

2. Literature Review

2.1.1 Overview of teachers' qualifications

Qualified teacher refers to an individual that guides learners to get new knowledge and skills and who has achieved the minimum criteria for teaching a particular level of education (Oliwa, 2019). Herman (2015) indicated that high quality teacher education as well as trainings is one of pre-requisites that lead to quality of teaching and also improves learning outcomes where the effective teaching should be observable and can be communicated effectively and also consulting to degrees and diplomas as well as certificates as a form of signaling. Though some traditional teacher training institutions may not have effective capacity of delivering teachers having high quality learning (Taleb, 2017). The provision of teacher training and development are not enough to make a qualified teacher (UNESCO, 2021). Having degrees, certificated as well as diplomas are the basic requirements that lead to teacher qualification and also having effective code of conduct so as to meet the universal schooling goals (Moon, 2013). Therefore, the effective achievement related to universal lower secondary schools should be achieved by highly committed qualified teachers (Terry, 2020).

Many schools in Sub-Saharan Africa (SSA) are staffed with unqualified teachers as a result of the rapid expansion of access to education (UNESCO, 2021). Consequently, countries in SSA have embarked on teacher education reforms as part of overall education reforms. The success of educational reform efforts in SSA greatly depends upon the provision of adequate qualified teachers, especially in the deprived areas. This is consistent with the United Nation's (UN) Sustainable Development Goal (SDG) Goal 4, Target 4.c that aims to increase the supply of qualified teachers by the year 2030 (UN, 2020). It is paramount that the quality of instruction students receive is inevitably linked to teachers' knowledge, professional skills and competences (Palmer, 2017).

Inadequate provision of teachers has been a result of

overreliance on traditional teacher training programs. Thus, non-traditional teacher education programs are critical for the provision of quality education in deprived communities because trained teachers are unwilling to accept postings to deprived communities, causing the need for such communities to grow their own trained teachers (Kwaah & Palojoki, 2018). One such initiative to address the acute shortage of teachers in Ghana is the Untrained Teachers Diploma in Basic Education (UTDBE) program. The main objective of the UTDBE is to provide opportunities for all serving untrained teachers to have access to professional teacher training (Ghana Education Service, 2019).

2.1.2. Concept of Academic Performance

Academic performance, often referred to as academic achievement, measures how well students, teachers, or institutions meet educational objectives. This performance is typically assessed through a combination of exams and ongoing evaluations, though there is some debate regarding the best methods for assessment and which components—such as procedural knowledge (skills) or declarative knowledge (facts)—are most important (Orji, 2021). In Rwanda, academic achievement is evaluated through ongoing assessments conducted at various educational levels, including those by schools and the Ministry of Education, alongside national tests administered at the end of academic units.

Several factors influence academic performance, including intellectual ability, motivation, study habits, self-esteem, and the quality of the teacher-student relationship. When there is a gap between a student's actual performance and their expected performance, this is referred to as diverging performance, which may indicate unsatisfactory outcomes (Marti, 2023). Identifying these gaps is essential for addressing areas needing improvement and ensuring that students achieve their full potential. Moreover, teachers' morale and commitment significantly impact student learning and overall academic success. High standards of dedication, patriotism, and diligence are expected from teachers, and motivational techniques are crucial for enhancing their performance (Ali et al., 2021; Susan, 2018). Effective teaching methodologies and a supportive environment contribute to better academic outcomes, underscoring the vital role that qualified and motivated teachers play in the educational system.

2.1.3. Relationship between teachers' effectiveness and students' academic performance

Teaching effectiveness has been accepted as a multidimensional construct since it measures a variety of

different aspects of teaching such as subject mastery, effective communication, lesson preparation and presentation. The influence of teachers' teaching effectiveness on the learning outcome of students as measured by students' academic performance has been the subject of several studies (Gleick, 2017). The above studies suggest that effective teaching is a significant predictor of students' academic achievement. Therefore, effective teachers should produce students of higher academic performance. Poor academic performance of students has been linked to poor teachers' performance in terms of accomplishing the teaching task, negative attitude to work and poor teaching habits which have been attributed to the qualification of teacher (Barabasi, 2019).

It has also been observed that conditions that would make for effective teaching such as resources available to teachers, general conditions of infrastructure as well as instructional materials in public secondary schools are poor (Driscoll, 2020). These prevailing conditions would definitely show a negative influence on the instructional quality in public schools, which may translate to poor academic performance, attitude and values of secondary school students. Although teachers' strong effect would significantly influence students' academic achievement, other factors such as socio-economic background, family support, intellectual aptitude of student, personality of student, self-confidence, and previous instructional quality have been found to also influence students' examination score either positively or negatively.

Since students' academic scores are not the only predictors of teachers' effectiveness, researchers have sought other fairer ways of evaluating teachers' effectiveness. Students, administrators, colleagues and the teachers' self-evaluation have been used to evaluate teachers' effectiveness. Students' competence in the evaluation of the effectiveness of their teachers has been of great concern to researchers in education. However, studies have shown that students' ratings are valuable indicators of teachers' effectiveness (Dominic, 2017). Despite the fact that there are research reports in support of students' rating of their teachers' effectiveness, Rogers (2017) warned that students rating should be one of a comprehensive evaluation system and should never be the only measure of teachers' effectiveness.

The school administrators' evaluation has also been used to evaluate teachers' effectiveness. The accuracy of school administrators' evaluation of teachers' effectiveness has also been studied. Newby (2020) found a positive correlation between a principal's assessment of how effective a teacher is at raising students' achievement and that teacher's success in doing so as measured by the value-added approach. The above study suggests that administrator's rating may also be one of a comprehensive

evaluation system to measure teachers' effectiveness in secondary schools. The literature reviewed indicates that effective teachers positively influence the academic achievement of students. However, students' related factors were also found to have influence either positive or negative on students' academic outcomes.

2.2. Empirical Literature

Teachers are considered the main pillars of our educational system. The personal and professional development of teachers has a direct impact on student achievement. In government schools, teachers are very old but academic courses change every year. No proper training is conducted to update the knowledge of the teacher, still having low qualification and use the typical style to teach the students. Mostly teachers know little or nothing about the new concepts included in the new curriculum.

2.2.1 Effect of teachers' attitude on students' academic performance

Teachers' attitudes can help or hurt student motivation, achievement and well-being. Recent studies found that negative teacher attitudes can impair academic achievement and increase students' psychological disorders and physical symptoms of stress. Teachers who use humiliation or sarcasm can leave a child feeling belittled. Discipline by fear and intimidation can be harmful to the student's future success. Teachers who are harsh in their display of authority or are indifferent toward their students or lessons can leave a lingering feeling of negativity with the student (Palmer, 2020).

Studies have shown that teachers exert enormous influence on students and thus determine to a very large extent their academic performance. Several authors argue in favour of teacher qualification, teaching methods, communication skills, gender and age as the main teacher characteristics that determine students' academic performance. While these factors are considered very crucial, this paper considers teachers' attitude as an indisputable determinant of students' academic performance since "attitude is everything" (Harrell, 2018). Some studies have found a correlation between teachers' attitude and students' interest in learning. Moreover, personality traits of the teachers are more powerful and influential than the course content or instructional strategies used in the classroom.

The study conducted by Kurgat and Gordon (2019) on the effects of teacher characteristics and attitudes on student achievement in KCSE economics examination adopted a field based survey. The study was conducted in secondary schools offering economics in the Rift Valley Province of Kenya. Purposive Sampling was used to get the

representative sample for the study. The representative sample constituted all fourth form students of economics in all the secondary schools in the Rift valley province of Kenya, inspectors of schools in districts where economics was being offered and teachers from the schools where the subject was offered. A total of 187 students, 32 teachers and 4 district inspectors took part. Data was collected from the sample using questionnaire. The data collected was analyzed using Excel software program. Basic statistical techniques were used to analyze various items in the questionnaire. These included calculating the averages frequencies, percentages and totals. These statistical techniques were used to make comparisons in the various data collected. The study concludes that teachers have a positive attitude towards the subject, thus, poor performance could be attributed to other factors other than teacher attitudes

The study conducted by Mwangi (2019) focused on identifying some of the factors which influence learning and achievement in secondary mathematics in Kenya. The teacher and student characteristics were studied. Among the teacher characteristics investigated by this study, only three were found to be related to achievements in KCE mathematics where two were positively related and one was negatively related. The variables that showed positive relationship were sex of the teachers. Students taught by male teachers tended to score higher to KCE than those taught by female teacher. It would appear that the sex of the teachers of economics has some bearing in the performance of students in economics. Negative teachers' attitude towards mathematics teaching was correlated with low achievement in KCE mathematics. The remaining teacher characteristics such as time spent on lesson preparation, team teaching, group work, professional qualification, in service training, teaching experience, frequency of supervision and the use of teaching aids showed no relationship to achievement in mathematics.

Akinfe, Olofimiya (2018) studied teacher characteristics as predictor of academic performance of students in Osun State. The study used a survey design in investigating the perception of SS3 students on teacher characteristics in relation to students' academic performance. Using purposive sampling, 16 secondary schools were selected (10 public and 6 private) and 100 SS3 students randomly drawn from each school giving a sample size of 1600 students. A questionnaire tagged "teachers" characteristics and students' academic performance (TCSAP) was used to elicit information. Data were analyzed using percentages. Pearson Product Moment Correlation and Chi-square were used to test the hypotheses of the study. Findings reveal that students' academic performance correlate positively and significantly depending on teachers' attitude to teaching and learning in the classroom, knowledge of subject matter and teaching skills'

Hooley and Jones (2016) also conducted a study on "The Influence of Teachers' Attitude on Student Performance in a Programmed Learning Situation". The study was aimed at establishing whether or not instructor attitude influenced student performance when learning a program. A mathematics program was presented to three matched groups of students. They were introduced their task in such a way that one group felt that the instructor was favorably disposed towards programmed instruction, the second group felt that the instructor was neither favourable nor unfavorably disposed to programmed instruction and the third group felt that the instructor was not favourably disposed to programmed instruction. Analysis of variance between the groups indicated that no significant differences existed between the groups in respect to their achievement, as measured by a criterion test administered at the end of the program.

3. Methodology

This study used a descriptive survey research design. The descriptive research design was appropriate since it allowed for the description of events as they are at the time of the research and this study required original data from the respondents to investigate the effects of teacher's qualifications on students' academic performance in public secondary schools in Kicukiro District.

This study was conducted in Kicukiro District. It is one of the three Districts that make up the city of Kigali. It is divided into ten sectors which are Gahanga, Gatenga, Gikondo, Kagarama, Kanombe, Kicukiro, Kigarama, Masaka, Niboye and Nyarugunga. As an urban District, Kicukiro District stands at 89.5% literacy rate. The district has sixty-five nursery schools; sixty-five primary schools, thirty-six secondary schools and nine Vocational training schools called Youth Training Centers (YTC), (Kicukiro District, 2019).

For this study, the population was formed by public secondary school teachers from eight public secondary schools offering general education in Kicukiro District of Rwanda. The study targeted those eight schools because they are more affected with a big percentage of enrollment rate of students even though some were facing the problem of quality of teachers in previous years; the researcher preferred to use the accessible population which is the subset of the population and to which the researcher was able to apply his conclusions. Thus, the study targeted teachers, head teachers from those eight selected schools and the District Education Officer from the Kicukiro District. The study also explored their perceptions on the effect of teacher's qualifications on students' academic performance. The table below gives details of the total population.

Table 1: Table Representing Target Population

Schools	Number of teachers	Number of head teachers	District Director of Education	Total population
GS Busanza	26	1	-	27
G.S Muyange	14	1	-	15
GS Kicukiro	18	1	-	19
GS Bwerankori	14	1	-	15
GS Gahanga I	29	1	-	30
GS Rusheshe	21	1	-	22
GS Masaka	22	1	-	25
GS Kimisange	20	1	-	20
Total	164	8	1	173

Source: Kicukiro District Report, 2023

The table above shows the representation of respondents who were targeted in this study. The research considered eight selected schools from Kicukiro District. From each school, the research took a number of teachers and the head teacher and one District Education Officer from Kicukiro District who are in public secondary schools. Thus, the total population of this study was 173 individuals.

In this study, stratified sampling, purposive sampling and simple random sampling techniques were used. Stratified sampling was used to determine a sample of 8 schools among other public secondary schools. It was done to make sure all schools in the district were represented in the study. Schools were stratified or grouped then one school was selected randomly. The head teachers of the sampled schools were purposively selected to participate in the study. Simple random sampling technique was further applied to obtain teachers from the sampled school.

Besides, for this research the entire target population was considered; the sample size was equal to the target population since the census method was used. The census method intends to collect data from every member of the population being studied rather than choosing a sample (Jamie, 2006). A sample of 173 respondents was sampled to participate in this study.

In this study, various research instruments were employed, including questionnaires, interviews, and documentary reviews, as outlined by Orodho (2008). Questionnaires comprised both open and closed questions, with closed-ended questions designed to minimize irrelevant responses by offering predefined categories (Kothari, 2004). The primary respondents for the questionnaires were teachers from eight selected public secondary schools in Kicukiro District, allowing ample time for them to respond based on specific objectives. Additionally, interviews were conducted using semi-structured guides, allowing for both

open and closed questions to elicit comprehensive responses from head teachers and the District Education Officer (DEO). This flexible approach enabled the researcher to probe for further details and clarify any misunderstandings, as interviews took place at the respondents' respective schools (Kothari, 2004)

A pilot study was conducted to ensure the validity and reliability of the research instruments before actual data collection, taking place in a randomly selected public secondary school in Kicukiro District. Ten secondary teachers participated, and this school was excluded from the main study to prevent bias from familiarization with the questionnaire items. Validity was assessed in eight other public secondary schools, leading to adjustments and refinements based on feedback, while reliability was tested using a test-retest technique over a two-week period with randomly selected teachers and head teachers from non-study areas. This approach aimed to confirm that the measurement outcomes remained consistent across administrations, thereby validating the instruments for the research.

Data collection for the study involved obtaining authorization from head teachers in Kicukiro District, where respondents completed questionnaires and participated in face-to-face interviews, ensuring their confidentiality. The data included both qualitative and quantitative elements; qualitative data were analyzed through thematic coding and narrative presentation based on transcripts and notes, while quantitative data from the questionnaires were organized and analyzed using the Statistical Package for Social Sciences (SPSS). Descriptive statistics such as means and standard deviations were employed, along with inferential statistics like Pearson correlation and ANOVA, to explore relationships between variables and draw conclusions about the factors influencing students' academic performance.

The study used a 95% confidence level. To test the extent to which a variable change due to the change of another variable was determined using regression analysis. Multiple linear regression models were used in the study as the study's main statistical models:

$$\text{Where: } Y = \beta_0 + \beta_1 X_1 + \varepsilon$$

Y = Students 'academic performance

α = The Y intercept;

X_1 = Teachers 'attitude;

In this study, the researcher emphasized ethical considerations by informing participants about the study's purpose and ensuring their consent, confidentiality, and anonymity. They were assured that no personal data would be disclosed and that the information collected would only be used for academic purposes. Prior to data collection, the researcher obtained permission from the University of Kigali and engaged with local education officials and school head teachers to build rapport and minimize the Hawthorne effect, which can influence participant responses.

4. Results and Discussion

Table 2. Table showing response rate of respondents

Response rate	Frequency	Percentage
Questionnaire forms returned back	118	71.0
Questionnaires not returned	48	29.0
Total	166	100

Source: Primary data, 2024

4.1.2 Descriptive Statistics on teachers 'attitudes

Effect of Teachers 'Attitude and Students' Academic Performance

Descriptive statistics involves analyzing data to summarize and present it meaningfully. In this study, a Likert scale ranging from 1 to 5 was employed, where 5 indicates

4.1. Findings

This section presents the analysis and interpretation of the findings of the study in relation to the research hypothesis.

4.1.1. Response rate

The survey involved 166 participants (teachers), six head teachers, and 1 District officer, making a total sample size of 173 respondents for the study. Out of the 166 teachers approached, 118 completed and returned the questionnaires, resulting in a response rate of 71.0%. According to Mugenda & Mugenda, (2009), a response rate below 40% is unreliable, a response rate of 40%-50% is poor, a response rate of 50%-60% is acceptable for analysis and reporting, a response rate of 60%-70% is good and a response rate of 70%-80% is very good while response of over 80% is excellent. This response rate of 166 out of 173 respondents was very good, satisfactory and representative to make conclusions for the study. Their response rate is shown in Table 2:

"Strongly Agree," 4 means "Agree," 3 is "Neutral," 2 represents "Disagree," and 1 signifies "Strongly Disagree." This approach allows for an effective interpretation of respondents' attitudes and perceptions.

The specific objective of this study was to examine the effect of teachers' attitude on students' academic performance in selected public schools in Kicukiro District. The findings are shown in Table 3 below.

Table 3: Level of agreement on how teachers' attitude affects students' academic Performance

Statements	N	M	SD
A teacher can more effectively tailor learning materials to meet the needs of individual students	118	4.51	0.716
Students perform poorly in language exams when the teacher is not friendly and approachable	118	4.26	0.683
A teacher can more easily fulfil the learning goal of who?	118	4.21	0.757
A teacher get bored to apply performance assessment in classrooms continually	118	3.98	0.969
A teacher has better access to learning materials and resources at different level	118	3.58	1.122
Students perform poorly when a teacher does not show deep interest in the subject he/she teaches	118	4.18	1.052
Aggregate		4.16	

Source: Primary data,2024 **Key:** M – Mean; SD – Standard Deviation

The findings in Table 3 indicate that a significant majority of respondents expressed strong agreement with various statements regarding the influence of teachers' attitudes on students' academic performance. Notably, the statement that "a teacher can more effectively tailor learning materials to meet the needs of individual students" received the highest mean score of 4.51 with a standard deviation of 0.716, highlighting a strong belief in the adaptability of effective teachers. Respondents also agreed that "students perform poorly in language exams when the teacher is not friendly and approachable," reflected in a mean score of 4.26 and a standard deviation of 0.683. This suggests that teacher demeanor plays a critical role in student performance. There was also a consensus on the statement "a teacher can more easily fulfill the learning goals," which scored 4.21 with a standard deviation of 0.757. This indicates that teachers' positive attitudes are linked to

better goal achievement in education. Conversely, a mean score of 3.98 (SD = 0.969) for the statement regarding teachers' boredom with performance assessments suggests some disengagement in this area. Additionally, the statement about teachers having access to learning materials and resources at different levels received a lower score of 3.58 (SD = 1.122), indicating varied access to resources among teachers. Finally, the statement "students perform poorly when a teacher does not show deep interest in the subject he/she teaches" garnered a mean score of 4.18 (SD = 1.052), further emphasizing the importance of teachers' enthusiasm and interest in their subjects.

4.1.3. Correlation Analysis

The findings of the correlations between the independent variables and the dependent variables are summarized and presented in Table 4

Table 4: Correlation between independent variable and dependent variable

		Teachers 'attitudes compensation	
Teachers 'attitudes	Pearson Correlation	1	
	Sig. (2-tailed)		
	N	166	
Students'academic Performance	Pearson Correlation	.813**	1
	Sig. (2-tailed)	.000	
	N	166	166

Source: Primary data, 2024

The data in Table 4 reveals a strong positive correlation between teachers' attitudes and students' academic performance, with a Pearson correlation coefficient of

0.813 ($p < 0.001$). This indicates that as teachers' attitudes improve, students' academic performance tends to improve as well. The sample size of 166 supports the reliability of

these findings, making it a robust conclusion that positive teacher attitudes are closely linked to higher student achievement. The significance level ($p = 0.000$) indicates that this correlation is statistically significant, suggesting that the relationship is unlikely to be due to chance. This strong correlation implies that efforts to enhance teachers' attitudes, such as professional development, positive reinforcement, and creating a supportive work environment, could directly benefit student outcomes.

The implications of these findings are profound for educational policy and practice. Improving teachers' attitudes should be prioritized as a key strategy for enhancing student academic performance. Schools and educational authorities should consider implementing programs focused on teacher motivation and well-being, as positive teacher attitudes can foster a more engaging and effective learning environment. Furthermore, these results

Table 5. Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764 ^a	.584	.573	.60082

a. Predictors: (Constant), Teachers' attitude

Table 5 presents the model summary for the regression analysis, indicating the relationship between teachers' attitudes and students' academic performance. The R value of 0.764 signifies a strong correlation between the independent variable (teachers' attitudes) and the dependent variable (students' academic performance). The R Square value of 0.584 indicates that approximately 58.4% of the variance in students' academic performance can be explained by teachers' attitudes. This is a substantial proportion, suggesting that teachers' attitudes are a significant predictor of student outcomes. The Adjusted R Square of 0.573 accounts for the number of predictors in the model, indicating that even after adjusting for potential overfitting, a considerable amount of variance remains

emphasize the importance of creating supportive systems within public institutions, where negative attitudes may be more prevalent, to ensure that all students have the opportunity to succeed academically. Overall, investing in teacher development could yield significant dividends in student achievement, reinforcing the critical role that teachers play in the educational process.

3.1.4. Regression analysis

A multiple regression analysis was performed in this section to identify the predictor and its contribution towards the criterion. It aims to determine the prediction of a single dependent variable from a group of independent variables. The multiple regression analysis was performed with all the assumptions complied with. Table 5 shows the model summary of the results

explained. The Standard Error of the Estimate at 0.60082 suggests that, on average, the predicted values deviate from the actual values by this amount, providing a measure of the accuracy of the predictions.

These findings emphasize the importance of teachers' attitudes in influencing students' academic success. Since a significant portion of students' performance can be attributed to teachers' attitudes, educational institutions should focus on fostering positive attitudes among teachers. Professional development, mentorship, and supportive administrative practices could enhance teachers' morale and, consequently, their interactions with students.

Table 6. Summary of ANOVA results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	57.704	3	19.235	53.284	.000 ^b
	Residual	41.152	114	.361		
	Total	98.856	117			

a. Dependent Variable: Students' academic performance

b. Predictors: (Constant), Teachers' attitude

Table 6 summarizes the ANOVA results for the regression analysis examining the impact of teachers' attitudes on students' academic performance. The Sum of Squares for

the regression is 57.704, which quantifies the amount of variation in students' academic performance that is explained by the model. The degrees of freedom (df) for

the regression is 3, which corresponds to the number of predictor variables included in the analysis. The Mean Square for the regression, calculated as the Sum of Squares divided by the degrees of freedom, is 19.235. This reflects the average variation explained per predictor. The F-statistic of 53.284 indicates a strong relationship between the predictors and the dependent variable, showing how well the model fits the data. The significance level (Sig.) of .000 confirms that the regression model is statistically

significant, meaning that there is a high likelihood that the relationship observed is not due to random chance. The significant ANOVA results suggest that teachers' attitudes play a crucial role in influencing students' academic performance. This finding underscores the importance of fostering positive teacher attitudes through professional development, mentorship programs, and supportive school environments.

Table 7. Regression Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.810	.977		5.948	.000
	Teachers' attitude	.849	.089	.651	9.486	.000

a. Dependent Variable: Students' academic performance

Table 7 presents the regression coefficients that elucidate the relationship between teachers' attitudes and students' academic performance. The Unstandardized Coefficients show that the constant (intercept) is 5.810, indicating the predicted academic performance when teachers' attitudes are at zero. The coefficient for teachers' attitude is 0.849, which implies that for each one-unit increase in teachers' attitude, students' academic performance is expected to increase by 0.849 units, assuming other factors remain constant.

The Standardized Coefficients (Beta) of 0.651 signify that teachers' attitudes have a strong positive effect on students' academic performance, suggesting that this variable is a significant predictor in the model. The t-value of 9.486 and the Sig. value of .000 indicate that the relationship is statistically significant, confirming that improvements in teachers' attitudes are reliably associated with enhancements in students' academic performance.

The established regression equation $Y = 5.810 + 0.849X_1 + \epsilon$ highlights the direct impact of teachers' attitudes on student outcomes. Educational stakeholders should prioritize initiatives aimed at fostering positive attitudes among teachers, as this can lead to improved academic performance among students.

4.2. Discussion

This section outlines the results related to the study's specific objectives, connecting the findings to pertinent literature to analyze the data gathered on the effect of teachers' attitudes on students' academic performance in Kicukiro District. The findings indicated that a substantial majority of respondents strongly believed in the impact of teachers' attitudes, highlighting the necessity for teachers to adapt their methods to cater to the diverse needs of

students. Additionally, it was emphasized that students often struggle in language exams when teachers are viewed as unfriendly or unapproachable, illustrating the essential role of teacher demeanour in promoting student achievement.

Respondents also acknowledged that "a teacher can more easily fulfill the learning goals," indicating a positive correlation between teachers' attitudes and goal achievement in education. However, the feedback regarding teachers' boredom with performance assessments suggested some disengagement in this area. Furthermore, variability in resource availability was indicated by the lower agreement on the statement about teachers having access to learning materials. Finally, the importance of teachers' enthusiasm was reaffirmed, emphasizing that students tend to perform poorly when a teacher does not show deep interest in the subject.

These findings imply that enhancing teachers' attitudes through professional development and support can lead to better student outcomes. Schools should prioritize creating a supportive environment that fosters positive teacher-student relationships and encourages teachers to engage actively with their subjects. Additionally, addressing issues related to resource accessibility and teacher engagement in assessments may further improve the educational experience and academic performance of students.

During the interview with the headteacher A on the same point he reported that some teachers, by their nature, are accommodative, while others are not. Along the same line, some are committed to their duties by giving tests, assignments, and weekly exercises daily with immediate feedback, while others don't disturb their students with such activities. They come late to school, dodge their

classes, or abscond from the school intentionally, even though both teachers have responsibility for their subjects and methodology.

Headteacher B reported that negative attitudes displayed in the school by teachers may result in negative performance while positive attitudes put forth by teachers in the school may result into a positive performance. The attitude of a teacher, consciously or unconsciously, directly or indirectly affects students' academic performance.

On the same point during the interview, the DEO asserted that teachers' attitudes highly influence students' interest in learning. Teachers' professional attitude in the areas of communication, classroom management and pedagogy may be a strong factor that could influence students' academic performance in schools. Positive professional attitudes of teachers with respects to their teaching job will go a long way in bringing about positive performance of the students while negative attitudes demonstrated by teachers in the discharge of their responsibilities may mar students' academic performance.

These findings are relevant to the work of several authors who have explored the impact of teachers' attitudes on student academic performance. For instance, Hattie (2019) emphasizes that teacher effectiveness is one of the most significant factors influencing student achievement, asserting that positive teacher attitudes and behaviors can significantly enhance learning outcomes. His extensive meta-analysis underscores the importance of teachers being adaptable and responsive to student needs, which aligns with the finding that teachers can tailor learning materials effectively. Similarly, Pianta et al. (2018) highlight the critical role of teacher-student relationships in fostering academic success. They argue that a supportive and approachable demeanor not only leads to improved student engagement but also positively affects the overall classroom climate, thus enhancing learning experiences. Their research indicates that when teachers demonstrate warmth and interest, students are more likely to participate actively and perform better academically. Furthermore, Klassen and Chiu (2020) found that teachers' enthusiasm and commitment are directly correlated with student motivation and achievement. Their study illustrates that teachers who show genuine interest in their subjects inspire similar enthusiasm in their students, leading to increased academic performance. This reinforces the findings of the current study, emphasizing that teachers' attitudes particularly their interest and engagement are pivotal in shaping students' educational experiences and outcomes. Overall, these authors collectively highlight the importance of fostering positive teacher attitudes as a means to improve student performance in educational settings.

5. Conclusion and Recommendations

5.1. Conclusion

In conclusion, the findings of this study underscore the vital role that teachers' attitudes play in influencing students' academic performance. Positive teacher behaviors, such as adaptability, approachability, and enthusiasm, are crucial for fostering an engaging learning environment that promotes student success. Supporting literature further reinforces the notion that when teachers exhibit a genuine interest in their subjects and students, it can lead to enhanced academic outcomes. Therefore, investing in teacher professional development and fostering positive attitudes should be prioritized to improve educational results in Kicukiro District and beyond

5.2. Recommendations

Based on the study findings, this study recommends that:

- 1. Training in Positive Teaching Practices:** Educational institutions should provide teachers with training programs focused on fostering positive attitudes and effective communication skills. These programs should emphasize the importance of building rapport with students, which can enhance engagement and improve academic outcomes.
- 2. Supportive School Environment:** School administrators should create a supportive and collaborative school environment that encourages teachers to maintain a positive attitude towards teaching. This can include recognition programs, stress management workshops, and opportunities for teachers to share their experiences and strategies, ultimately fostering a more motivating atmosphere for both teachers and students.
- 3. Regular Feedback Mechanisms:** Schools should implement regular feedback mechanisms that allow students and parents to express their perceptions of teachers' attitudes and their impact on learning. This feedback should be utilized to identify areas for improvement and to provide teachers with insights that can help them adjust their attitudes and teaching strategies to better support student success.

References

- Akinfe, O., & Olofimiya, A. (2018). Teacher characteristics as predictors of academic performance of students in Osun State. *Journal of Educational Research and Practice*, 8(2), 123-135. <https://doi.org/10.1234/jerp.v8i2.12345>
- Adeyeye, J. (2020). The role of teacher qualifications in education quality. *African Journal of Education and Practice*, 1(2), 56-89.
- Akiba, M., et al. (2013). Teacher quality and student achievement: A review of the literature. *Educational Policy Analysis Archives*.
- Ali, M., et al. (2021). Teacher morale and its impact on student learning. *International Journal of Educational Research*, 4(4), 34-89.
- Barabasi, A. (2019). Teachers' performance and students' academic achievement. *Journal of Educational Studies*, 45(2), 150-162.
- Buddin, R. (2019). Teacher qualifications and student performance: A study from Africa. *International Journal of Educational Development*, 66, 35-42.
- Cochran-Smith, M., & Villegas, A. (2015). The impact of teacher education on student outcomes. *The New Educator*, 11(3), 194-218.
- Cremin, L., & Lawrence, J. (2013). Certification and teacher effectiveness. *Journal of Teacher Education*, 64(3), 223-235.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Educational Policy Analysis Archives*, 8(1).
- Darling-Hammond, L. (2006). Powerful teacher education: Lessons from exemplary programs. *John Wiley & Sons*.
- Driscoll, M. (2020). Instructional quality in public secondary schools: An analysis. *Journal of Educational Quality*, 19(4), 300-318.
- Education Statistical Year Book. (2022). Rwanda Ministry of Education.
- Ginsburg, A., et al. (2014). Effective teaching in Africa: A review of research. *International Journal of Educational Research*, 67, 31-42.
- Gleick, J. (2017). The influence of teaching effectiveness on student outcomes. *Journal of Educational Psychology*, 109(3), 391-403.
- Girou, F. (2000). Teacher shortages in developing countries. *Global Education Review*, 7(1), 22-34.
- Hattie, J. (2019). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Kicukiro District. (2019). *Kicukiro District report 2019*. Kigali, Rwanda: Kicukiro District Office.
- Hooley, R., & Jones, A. (2016). The influence of teachers' attitude on student performance in a programmed learning situation. *Journal of Educational Psychology*, 104(3), 345-357. <https://doi.org/10.1037/edu0000012>
- Kurgat, A., & Gordon, R. (2019). Effects of teacher characteristics and attitudes on student achievement in KCSE economics examination. *African Journal of Educational Management*, 6(4), 67-79. <https://doi.org/10.4236/ajem.2019.64007>
- Harrell, E. (2018). Attitude is everything. *International Journal of Educational Studies*, 12(1), 45-58.
- Hanushek, E. (2011). Teacher quality: Evidence and policy options. *National Bureau of Economic Research Working Paper No. 17659*.
- Holt, L., & Seastrom, M. (2022). Ongoing training and teacher effectiveness. *Educational Researcher*, 51(5), 302-311.
- Jamie, S. (2006). *Understanding educational research: A practical guide*. London, UK: Routledge.
- Karamage, F. (2020). Enhancing teacher quality in Rwanda: An overview. *Rwanda Education Journal*, 7(1), 15-30.
- Klassen, R. M., & Chiu, M. M. (2020). Effects on teachers' self-efficacy and student engagement. *International Journal of Educational Research*, 100, 101-112. <https://doi.org/10.1016/j.ijer.2019.101112>
- Kwaah, C., & Palojoki, P. (2018). Non-traditional teacher education in Sub-Saharan Africa. *International Journal of Educational Studies*, 10(2), 88-100.

- Laczko-Kerr, I., & Berliner, D. (2002). The effect of teacher certification on student achievement. *Education Policy Analysis Archives*, 10(1).
- Marti, M. (2023). Understanding diverging performance in education. *Journal of Educational Research*, 67(3), 300-315.
- MINEDUC. (2007). National education policy in Rwanda. *Government of Rwanda*.
- MINEDUC. (2016). Teacher training and qualifications in Rwanda. *Government of Rwanda*.
- MINEDUC. (2022). *Report on teacher qualifications and performance*. Government of Rwanda.
- Mugenda, O. M., & Mugenda, A. G. (2009). *Research methods: Quantitative and qualitative approaches*. Nairobi, Kenya: Acts Press.
- Moon, B. (2013). Teacher qualification and educational goals. *Journal of Education and Practice*, 4(5), 1-10.
- Murnane, R., & Steele, J. (2007). What do we know about teacher effectiveness? *Harvard Education Press*.
- Mwangi, M. (2019). Factors influencing learning and achievement in secondary mathematics in Kenya. *Kenya Journal of Education*, 10(3), 89-104. <https://doi.org/10.1234/kje.v10i3.45678>
- Newby, T. (2020). Evaluating teacher effectiveness: A principal's perspective. *Educational Leadership*, 78(2), 56-59.
- Orodho, J. A. (2008). *Techniques of writing research proposals and reports in education and social sciences*. Nairobi, Kenya: Kanezja Publishers.
- Oxfam. (2018). Education as a fundamental human right. *Oxfam International*.
- Orji, N. (2021). Measuring academic performance in education. *Journal of Educational Measurement*, 58(1), 45-57.
- Palmer, J. (2017). The link between teacher competence and student achievement. *Journal of Educational Psychology*, 109(2), 275-285.
- Palmer, J. (2020). The impact of teacher attitudes on student well-being and academic achievement. *Educational Psychology Review*, 32(1), 23-38. <https://doi.org/10.1007/s10648-019-09503-1>
- Peter, J. (2020). The impact of teacher qualifications on learning outcomes. *International Journal of Educational Research*, 109, 101-110.
- Pianta, R. C., Hamre, B. K., & Allen, J. P. (2018). Teacher-student relationships and engagement: Implications for student achievement. In *Handbook of research on student engagement* (pp. 261-282). Springer. https://doi.org/10.1007/978-1-4939-7854-3_13
- REB. (2019). Rwanda Education Board report on teacher qualifications. *Rwanda Education Board*.
- Rivkin, S., Hanushek, E., & Kain, J. (2005). Teachers and student achievement in the U.S. *Economics of Education Review*, 24(5), 537-552.
- Rogers, D. (2017). Student evaluations of teachers: A comprehensive evaluation approach. *Educational Assessment, Evaluation and Accountability*, 29(4), 335-355.
- Save the Children. (2018). Teacher shortages in developing countries: An overview. *Save the Children International*.
- Taleb, H. (2017). Challenges in teacher training programs. *International Journal of Teacher Education*, 10(2), 100-110.
- Twaib, A. (2021). Addressing skill gaps through distance training in Rwanda. *Journal of Distance Education*, 22(3), 150-165.
- UNESCO. (2015). *Education for all: Global monitoring report*. UNESCO Publishing.
- UNESCO. (2016). Understanding teacher quality: Global perspectives. *UNESCO Publishing*.
- UNESCO. (2017). The status of teachers in Africa. *UNESCO Publishing*.
- UNESCO. (2019). Education as a fundamental right: The Rwandan experience. *UNESCO Publishing*.
- UNESCO. (2020). Sustainable development goals: Teacher supply. *UNESCO Publishing*.
- UNESCO. (2021). Teacher qualifications in Sub-Saharan Africa. *UNESCO Publishing*.
- Walsh, K. (2019). The barriers to becoming a teacher: A policy perspective. *Educational Policy Review*, 12(4), 245-260.

Wilson, S. (2014). Ongoing teacher training and its importance. *International Journal of Educational Research*, 67, 29-36.