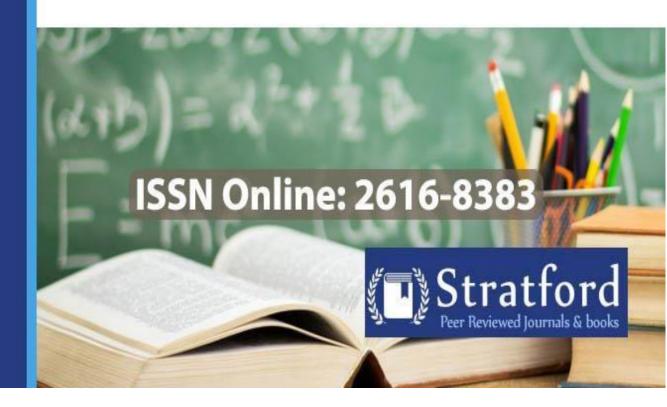
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Effect of Teacher Competence on Performance of Learners in Numeracy and Literacy in Rwanda: A Case Study of Public Primary Grade One of Bugesera District

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Effect of Teacher Competence on Performance of Learners in Numeracy and Literacy in Rwanda: A Case Study of Public Primary Grade One of Bugesera District

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Abstract

The main purpose of this research was to examine the effect of teacher competence on performance of P1 learners in numeracy and literacy in public primary schools in Rwanda. Specifically, this study also aims three objectives; to identify qualification levels of teachers in public primary schools, to assess the level of performance of P1 learners in Numeracy and Literacy in public primary schools, and to determine the relationship between teacher qualifications and performance of P1 learners in numeracy and literacy in public primary schools in Bugesera District, Rwanda. Interview guide and questionnaires were used as the primary instruments for data collection. The study, conducted in Bugesera District, Rwanda, involved 122 participants comprising 56 head teachers, 56 Directors of Studies, and 10 Sector Education Officers from public primary schools. The sample size was determined using the Slovene's formula for the study's statistical significance. The analysis of the data was performed using SPSS version 26, employing inferential statistics to ascertain correlations and regression between variables. Findings indicated a positive trend, with a mean qualification level of 4.35 for head teachers and Directors of Studies, showcasing their capacity to aid student learning. Moreover, the overall mean qualification level for teachers in Bugesera District was 4.26, suggesting a perceived impact on learners' performance. The study also revealed promising results for P1 learners in literacy and numeracy, with a mean of 3.84 signifying good grades, and a mean of 4.31 indicating their enthusiasm for science.

3.84 signifying good grades, and a mean of 4.31 indicating their enthusiasm for science. Overall, the participants indicated a mean of 4.06, suggesting satisfaction with the learners' performance. On correlation between qualification level of teachers and learners' performance in literacy and numeracy, the findings revealed that there was a statistical significance relationship between qualification level of teachers and learners' performance with P-value = .000 which was less than 0.05 as the level of significance. Pearson coefficient of correlation r = .891 which was high and indicated that there was a relationship between thequalification level of teachers and learners' performance in literacy and numeracy. The study concluded that that the qualification of teachers' successfully influences the learners' performance in literacy and numeracy. It recommended that The Ministry of Education

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should regularly verify the standards of qualification level of teachers to make sure that teachers are well equipped with suitable competence to support the learners.

Keywords: Teacher Competence, Performance of Learners, Numeracy and Literacy, Public Primary Grade One, Bugesera District, Rwanda

1. Introduction

The quality of education is crucial topic in education and all parameters related to it are always analyzed for the contribution of the quality of education improvement, which is also the key to the development of countries or nations. In education, the teacher plays a great role of transmitting knowledge. The experience, capacity, abilities, skills and qualifications might not be separated from the teacher because you cannot give what you do not have. Basing on this scenario the researcher will be interested to conduct research on the connectivity of the teachers' knowledge and how this might affect the outcome, which is learners' performance.

Basing on different conducted researches that the researcher will mention in the background of the study showing that the quality of education still need some improvement, for instance the one of UNICEF (2016), stated that the Obviously in primary, the score rate of learners is too low in literacy and numeracy summative assessments. In classroom types of teaching methodologies in use and English as a foreign language of instruction are also seen as some barriers, this gives a challenge to the MINEDUC to improve the quality.

According to MINEDUC (2017) the education sector analysis outlined five challenges, but one will be based on with this project. The challenge is the lacking teacher qualifications in pedagogic skills, mastery of the subject content as well as the medium of teaching impend to jeopardize teaching, non-discriminatory learning, which eventually affect in a negative way on learners learning ultimate results". While there is a meaningful improvement concerning the access, predominantly from P1 to P6 as well as in in 12 years basic education, some challenges still need to be addressed Vis a Vis the quality of education. For instance, in 2016 the rate of learners who completed the primary level back warded from 72.7% in 2012 to 65.2%. In addition, the rate of learners who repeated the same class galloped 12.7% in 2012to 18.4% in 2016. This also is hand in hand with dropout cases.

To complete primary level and go for the secondary and tertiary education, a relevant and effective base in literacy and numeracy strongly recommended. Student with low ability in literacy and numeracy will face challenges even in technical and vocational courses. (MINEDUC, 2016) declared that in 2017 only the rate of teachers who were qualified was 69.2% in total and male teachers were 71.2% of the total.

As Rwanda being progressively integrated into the EAC, has a challenge of making sure that schools, higher education graduates and TVET are supposed to complete their programs with global and regional recognized, competitive, and relevant skills and competencies. This shows how the beginning of schooling is a good source of information. With this problem, this study assessed the effect of teacher qualifications on performance of learners in numeracy and literacy in Rwanda a case study of public primary grade one of Bugesera District.

1.2 Research Objectives

1.2.1 General objective

The general objective of this study was to assess the effect of teacher competence on performance of P1 learners in numeracy and literacy in public primary schools in Bugesera District, Rwanda.

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1.2.2 Specific Objectives

The specific objectives of this study were the following:

- i. To identify competence levels of teachers in public primary schools involved in numeracy and literacy teaching in Bugesera District, Rwanda
- ii. To assess the level of performance of P1 learners in Literacy and Numeracy in public primary schools in Bugesera District, Rwanda
- iii. To determine the relationship between teacher competence and performance of P1 learners in Numeracy and Literacy in public primary schools in Bugesera District, Rwanda

1.3 Research questions

- i. What are the competence levels of teachers in public primary schools involved in numeracy and literacy teaching in Bugesera District, Rwanda?
- ii. What is the level of performance of P1 learners in Numeracy and Literacy in public primary schools in Bugesera District, Rwanda?
- iii. What is the relationship between teacher's competence and performance of P1 learners in Numeracy and Literacy in public primary schools in Bugesera District, Rwanda?

2.1 Empirical Review

2.1.1 Competence levels of teachers in public primary schools involved in numeracy and literacy teaching

Yhe study of Hill et al. (2005) conducted research on student achievement in mathematics related to teachers' knowledge, highlighting the critical role of teacher quality in enhancing learners' performance. Similarly, Heck (2007) emphasized the positive correlation between school resources, teacher quality, and students' proficiency in numeracy and literacy. Notably, certified teachers were found to significantly impact student achievement, with findings showing a 20% improvement when taught by certified educators compared to uncertified counterparts (Glass, 2002). Moreover, teacher certification and expertise were determined to be influential factors in student success, as demonstrated in studies by (Darling-Hammond, Berry, & Thoreson, 2001; Goldhaber & Brewer, 2000).

Additionally, the research of Matthias and Hastedt (2009) highlighted the significance of teachers' experience and expertise in subject-specific fields, indicating that learners benefit from teachers specialized in their instructional areas. (Rice, 2003) further supported these findings by illustrating the positive impact of teachers with advanced degrees on student performance, particularly at the secondary level. The study emphasized that teachers' subject-specific qualifications directly influenced students' academic outcomes, particularly in mathematics and science subjects.

Furthermore, the study conducted in Kenya by Musau and Abere (2014) underlined the importance of continuous professional development (CPD) and updated training for teachers of science, mathematics, and technology (SMT) subjects, indicating their significant influence on students' performance. Similarly, the study examined by Economic Education Review (2007) reinforced the positive effect of teachers' degree type and experience on reading achievement, although it found no significant impact for the level of certification. The research emphasized the crucial role of qualified and experienced teachers in fostering better student outcomes in reading and mathematics.

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2.1.2 Level of performance of P1 learners in Literacy and Numeracy in public primary school

According to Langsajo (2014), true understanding encompasses the fusion of intellectual thought and competencies, allowing learners to tackle the complexities of daily life. The author emphasizes the importance of students perceiving themselves as capable individuals, equipped to structure information, interpret literature, apply mathematical skills to problem- solving, and critically analyze real-world issues and policies. Langsajo posits that a teacher's comprehensive understanding of the subject matter, extending beyond the prescribed curriculum, significantly enhances students' comprehension and mastery of the material.

Marissa et al. (2008) contribute to the discourse by discussing the critical role of subject matter knowledge in pedagogical content knowledge. While many developed countries assume teachers possess adequate subject matter knowledge, the study highlights the significance of teachers' additional knowledge in addressing potential teaching challenges, especially within the context of South Africa. The authors stress that understanding the dynamics of teachers' subject matter knowledge is crucial in comprehending the intricacies of effective teaching, particularly in contexts where subject matter difficulties arise.

The complex nature of teachers' knowledge, as outlined by Marissa et al. (2008), comprises various dimensions, including knowledge of subject matter, contextual factors influencing the teaching environment, knowledge of students, raw subject matter knowledge, and general pedagogical knowledge. This multi-faceted understanding underscores the depth of expertise required for effective teaching, considering diverse classroom conditions, student backgrounds, and curriculum demands.

2.1.3 Relationship between teacher competence and performance of P1 learners in Numeracy and Literacy

Jennifer and Nomie (2019) explored the significance of developing social-emotional competence and language acquisition strategies in Head Start programs, particularly for dual language learners. The qualitative research highlighted the teachers' beliefs in the pivotal role of social-emotional development, indicating the importance of nurturing these skills, especially for children acquiring English as a second language. Emphasizing the value of utilizing the students' native language, the study underscored its facilitative role in the acquisition of English language skills. Furthermore, it advocated for a comprehensive preparation of prospective teachers, focusing on linguistic diversity and early childhood education.

On a similar note, Estelle Zeeman and Marena Lotriet (2012) delved into the restructuring of traditional learning environments, transforming them into engaging and empowering platforms for learners. Employing the 'mantle of the expert' approach and three educational theories, the case study showcased a dynamic learning atmosphere, fostering active engagement and motivation among the students. Through qualitative data analysis from successive learner cohorts, the study demonstrated the effectiveness of the new methodology, enlivening the learning experience and producing successful outcomes.

Maria Liakopoulou (2011) focused on the qualifications and attributes that contribute to a teacher's professional competence. Drawing from a national survey of secondary education teachers in Greece, the study documented the multifaceted qualities deemed essential for effective pedagogical practice. Aligning with existing literature, the research highlighted the interconnectedness of personal traits and pedagogical skills in defining the profile of an effective teacher.



2.2 Research Gap

By way of many research were led, to prove the connection between teachers' quality and student performance which is very important; Researchers have not deepened in student performance specifically in literacy and numeracy of beginners and primary schools were not a common discussion. UNICEF (2006) based on the global standards of reading of 60 words student in Rwanda can only read 23 words in a meeting. While a teacher can read 90 in 120 as the average based on global standards. These results show how far with extra miles that Rwanda education is supposed to run and it is obvious that e deep research need to be done to find out the cause (relation between the teacher and learners levels in numeracy and literacy).KT Press (2021), with a headline of "Gov't to Recruit 9000 New Teachers". Leon Mugenzi Ntawukuriryayo, one of the Rwanda education board heads affirmed that Rwanda education board is about to hire 9000 new teachers and head teachers based on the identified gaps to reduce classes' overpopulation. Based on this Headline of recruiting teachers in bulk, shows the interest to conduct research for the results of this shortage of teachers and the qualification of recruited teachers.

2.3 Conceptual Framework

Independent variable

The Conceptual framework shows independent variables, dependent variables and extraneous variables.

Dependent variable

P1 learner's performance: **Teacher Competence** -Knowledge and understanding of -Improved in numeracy skills subject mater - Improved in literacy skills -Strategy for facilitating in teaching -Good performance in national -Designing learning experiences for exam learners -Professional qualification with skills -Discipline referrals **Intervening variables:** -Government education policy -Teachers and learners' attitude

Figure 1: Conceptual framework

Source: Researcher, (2022)

The conceptual framework of this research is grounded on the guess that writing, reading, and Arithmetic skills are results from an effective curriculum implementation; qualifications of the Teacher as the one to put it into action plays a paramount role in the process toward negative or positive results of learners. Type and level of certification once a teacher is academically certified seems to be well equipped with knowledge. Nevertheless, other education approaches, methodologies, experience, grow professionally, motivation, and collaboration is considered as teacher's personal accomplishment, which will expand as the

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teacher follow other programs teacher and keeps changing as the teacher goes through the CPD.

3. Materials and Methods

The research design, which serves as a roadmap for conducting scientific studies, was implemented with the aim of minimizing external influences on the validity of the results (Cohen et al., 2000). This study utilized a descriptive research survey design, encompassing both qualitative and quantitative approaches. Employing a correlation research design, the study sought to determine the extent to which teacher qualifications, as an independent variable, correlate with the performance of P1 learners in numeracy and literacy, the dependent variables (Fraenkel, 2003).

The target population, consisting of 175 individuals including 80 Head Teachers, 80 Directors of Studies or Responsibles from 80 public primary schools, and 15 Sector Education Officers of Bugesera District, was determined through information provided by the District's Education Office (Lemeshow, 2008). The sample size was determined using the Slovene formula, resulting in 122 selected respondents, comprising 56 Head Teachers, 56 Directors of Studies, and 10 Sector Education Officers, who were chosen through simple random sampling techniques (Bugesera District, 2022).

Data collection methods included the administration of questionnaires and interview guidesby the researcher, who collected primary data from the head teachers and directors of studies. Secondary data were obtained from District education department records and school archives for the past three years (2019-2021) (Paula E, 2014). The reliability and validity of the research instruments were tested, with content validity determined by expert reviewers, ensuring that the instruments accurately measured the intended variables. Reliability was established through various methods, indicating the consistency and stability of the research instruments (Gall et al., 2007).

The collected data were analyzed using SPSS version 26.0, with statistical techniques such as percentages, frequencies, and correlation analyses applied for interpretation. Ethical considerations were strictly followed, with the research conducted in line with the policies of Mount Kenya University's School of Education. An emphasis on confidentiality and anonymity for the participants was maintained, and ethical principles guided the entire research process (Fraenkel, 2003).

4.1 Presentation of findings

This subsection presents the findings collected form respondents basing on the specific objectives. The specific objectives were; to identify qualification levels of teachers in public primary schools involved in numeracy and literacy teaching to assess the level of performance of P1 learners in Literacy and Numeracy, to determine the relationship between teacher qualifications and performance of P1 learners in Numeracy and Literacy in public primary schools in Bugesera District, Rwanda. Therefore, the data was analyzed and findings were presented by using tables using frequencies.

4.1.1. Competence Levels of Teachers in Primary Schools Involved in Numeracy and Literacy Teaching

This study examined the level of teachers' qualification in public primary schools in Bugesera District, Rwanda. The total number of head teachers & DOS sampled in this study was 112 participated in this study. The 112 questionnaires responded, and data recorded. These mentioned respondents of this research supported with their feedback in relation with research objective. SPSS version 26 was served to perform data analysis. Results were presented in table 4.2 as follow.

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Table 4. 1 Competence Level of teachers and learners' performance (112)

Statements	SD		D		U		A		SA			Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	N	-	
To suitably know to prepare lesson plan	0	0	0	0	0	0	68	60.7	44	339.3	112	4.34	0.98
To creatively know the methods that encourage all learners	0	0	6	5.4	0	0	78	69.6	28	25	112	418	0.91
Knowledge of the entire curriculum	0	0	6	5.4	8	7.1	87	77.8	11	9.7	112	4.06	0.99
Adequate teaching aids	0	0	0	0	6	5.4	81	72.3	25	22.3	112	4.15	1.04
Using test or exam effectively	0	0	0	0	5	4.5	91	81.3	16	14.2	112	4.21	0.85
Encouraging leaners to participate	0	0	0	0	0	0	89	79.5	23	20.5	112	4.72	0.81
To know how to conduct Practical lessons	0	0	0	0	11	9.8	76	67.8	25	22.4	112	4.09	0.86
Capability to help studentsto perform lessons	0	0	0	0	0	0	99	88.4	13	11.6	112	4.35	0.95
Overall Mean												4.26	

Source: Primary data, (2023)

SD= strongly disagree, D= Disagree, U = Not sure, A= Agree, and SA = Strongly Agree

Table 4.1 presents the results responded by head teachers and DOS/Responsible to identify qualification levels of teachers in public primary schools involved in numeracy and literacy teaching in Bugesera. From 112 teachers and head teachers who participated, the mean of 4.34 showed that for all lessons they teach, teachers appropriately make ready lesson plan; the mean of 4.18 indicated that creatively teachers know the methods that encourage all learners. The mean of 4.06 indicated that learners' works are corrected, and results are sharedon time as a motivation to learners following the course. The mean of 4.15 presented that teachers in Bugesera District have the adequate teaching aids and the mean of 4.21 presents that teachers use the text or exam effectively. The mean of 4.72 indicated that All learners are motivated to be engaged in the lesson of the day by their teachers for developing their performance.

The mean of 4.09 indicated that teachers knew how to conduct practical lessons. The mean of 4.35 indicated that teachers were capable to help learners to perform lessons. The overall mean on the qualification levels of teachers in public primary schools involved in numeracy and literacy teaching in Bugesera District, Rwanda. The overall mean was 4.26 that was between Agree (4) and Strongly Agree (5), indicated that the teachers competence levels gave

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a significant impact on learners' performance. Teacher professional standards in Rwanda are grouped under three domains: professional attitudes and values; understanding Professional and knowledge and professional qualifications (REB 2020).

4.1.2 Level of learners' performance in literacy and numeracy

This study assessed the level of performance of P1 learners in literacy and numeracy in public primary schools in Bugesera District, Rwanda. The total number of teachers and head teachers sampled in this study was 112 and participated in this study. The 112 questionnaires responded, and data recorded. The mentioned participants of this research given their replies connected to objective of the study. SPSS software version 26 was used to execute data analysis. The results were presented in table 4.3 as follow:

Table 4. 2 Level of learners' performance in literacy and numeracy

Statements	SD		D		U		A		SA			Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	N	=	
Sufficient level of knowledge	0	0	6	5.4	9	8.1	79	70.5	18	16.0	112	4.04	0.89
Enough teaching aids	0	0	9	8.1	13	11.6	82	73.2	8	7.1	112	4.01	0.96
Group for discussion	0	0	0	0	7	6.25	98	87.5	7	6.25	112	4.19	1.01
Learners are given chance	0	0	0	0	0	0	91	81.3	21	18.7	112	4.24	0.94
learners in school are happy to learn science	0	0	0	0	4	3.6	79	70.5	29	25.9	112	4.31	1.08
Perform highly with good differences	0	0	0	0	11	9.8	86	76.7	15	13.5	112	4.08	0.97
Learners pass with good grade	0	0	7	6.3	9	8.1	63	56.3	33	29.3	112	3.84	0.92
Instructional techniques used, enable learners to perform well	0	0	12	10.7	6	5.4	73	65.2	21	18.7	112	3.79	0.91
Overall Mean												4.06	

Source: Primary data, (2023)

SD= strongly disagree, D= Disagree, U= Not sure, A= Agree, and SA= Strongly Agree

Table 4.2 presents the results on the level of performance of P1 learners in literacy and numeracy in public primary schools in the Bugesera; researcher collected the data from teachers and head teachers in public primary schools in Bugesera, Rwanda coded and analyzed for assessing the level of performance of P1 learners in literacy and numeracy. Out of 112 participated teachers and head teachers, the mean of 4.04 the teachers and HTs confirmed that they had sufficient level of knowledge in teaching which promote learners' performance? With the mean of 4.01, they agreed that they had enough teaching aids to



influence learners' performance. The more the teacher acquires skills, the more likely students will improve their academic performance. School facilities are among key resources that are very important for Schools and teachers to achieve the desired target which is better learners' performance (Jean Paul, 2013).

The mean of 4.19 indicated that many teachers and head teachers agreed that group discussion promote the learners' performance and the mean of 4.24 presents that teachershead teachers agreed that chance of learning was given to the learners. The mean of 4.31 indicates that teachers and head teachers agreed that learners in schools are happy to learn science. Then the outcome of the study demonstrated that there is a positive effect forteachers' degree type and experience on reading achievement nevertheless no significant impact for the level of certification was informed. Also, realized that learners first grade in primary demonstrate a better level in reading and mathematics when learners got moreexercises in concerned two subject and where teachers are reported to be well qualified (MINEDUC, 2013).

The mean of 4.08 indicated that learning science perform highly with good differences and the mean of 3.84 presented that learners get pass with grade. The mean of 3.79 indicated that instructional techniques used, enable learners to perform well. The overall mean of 4.06 was between Agree (4) and Strongly Agree (5) which indicates that high number of teachers and head teachers agreed that the learners' performance was good. According to Abe (2014) studied the 'effect of teacher qualifications on students' performance in Mathematics in secondary schools' by which 300 students of 10 schools were selected by random and by purpose. The study come up with evidence that there is a big and clear difference with learners' teachers who was qualified and learners without qualified teachers.

4.1.3 Relationship between teacher competence and learners' performance Table 4.3 Relationship between teacher competence and learners' performance

		Teacher qualification	Learners' performance
Taraham malification	Pearson Correlation		.891**
Teacher qualification	Sig. (2-tailed)		.000
	N	112	112
I	Pearson Correlation	.891**	1
Learners' performance	Sig. (2-tailed)	.000	
	N	112	112

^{**.} Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data, (2023)

Table 4.3 presents the results of relationship between teachers 'qualification and learners' performance in public primary schools in Bugesera District, Rwanda. Realized that a statistical significance great level of positive linkage between teachers' qualifications and learners' performance thus P-value = .000 which less than 0.01 as the level of significance and Pearson coefficient of correlation r = .891 which was high. This also indicated that there is a relationship associated with the teacher qualification and learners' performance. The qualification of teaching staff is a crucial aspect of learners' results and Headteachers should ensure that their teachers are affiliated with the subject that are delivering, and learners obtaingood clarifications of lessons that drive to a learner's results. John (2016), in his book entitled

"Teacher Quality and Student Achievement: Evidence from a Sample of Dutch Twins" indicated that the teachers' excellence is an important factor to produce human resource. To improve the quality of education, policy maker should take into consideration and understand the key factors of teacher quality and then an important problem for the policy of education.

Table 4.4 Model summary of teacher competence and learners' performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.891ª	.754	.763	.418

a. Predictors: (Constant), Teacher qualification

Source: Primary data, (2023)

Table 4.4 presents the results of R Square of teacher competence and learners' performance in literacy and numeracy lessons. The results presented that R Square = .754 This means that the variables that make teachers qualifications are able to give an influence on learners' performance in literacy and numeracy at the level of 75.4% and the remaining 24.6% the influence can be provided by other variables. The qualification of teachers has a favorable influence on learners' progress performance of their level of qualifications and experience (John, 2016).

Table 4. 5 ANOVA^a of Teacher competence and learners' performance

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	38.669	1	38.669	341.625	.000 ^b
1	Residual	15.164	110	.161		
	Total	53.833	111			

a. Dependent Variable: Learners' performance

Source: Primary data, (2023)

The Table 4.5 presents the results that point out a significant level with the p value of .000 that is less than 0.05 which means that there is a significant correlation between teacher competence and learners' school results. Thus, teacher qualification significantly give any impact on learners' performance. According to Shamim, Rashid, and Rashid (2013), conventional empirical evidence has revealed the existence of positive correlations between student achievement and knowledge of content given by Teacher. Moreover, according to Akiba (2007), a teacher's effectiveness plays a significant role in increasing students' performance because credentials reveal a lot about their quality.

b. Predictors: (Constant), Teacher competence

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Table 4. 6 Coefficients^a of teacher competence and learners' performance

Model			ndardized fficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta	-	
1	(Constant)	.038	.257		.146	.884
1	Teacher competence	.958	.062	.891	15.482	.000

a. Dependent Variable: Learners' performance

Source: Primary data, (2023)

Table 4.6 shows the coefficients^a, it was shown that the teacher competence can give an influence on the learners' performance. It was shown that there is a significant influence of teacher competence to the learners' performance with P value = .000.

4.2.1 Interview guide for the Sector Education Officers on Learners' performance

In this study, the researcher utilized an interview guide to gather insights from Sector Education Officers in Bugesera District. Among the officers interviewed, all confirmed that teachers of P1 may hold qualifications in teaching sciences and languages. When asked about he high scores of P1 learners in mathematics and English, 70% attributed the success to positive learning environments, effective teaching methodologies, and various training programs for teachers. The remaining 30% expressed uncertainty about the learners' high scores. Regarding the relationship between teachers' qualifications and learners' performance in numeracy and literacy, all officers acknowledged that well-qualified teachers contribute to improved learner outcomes.

Identified challenges in enhancing the quality of teaching and learning included the lack of trained teachers at the primary level, barriers in the teaching-learning process, inadequate teaching materials, large class sizes, and families with limited awareness of the importance of education. The Rwanda Education Board emphasized the importance of continuous professional development and the adherence to professional standards among teachers. Moreover, UNESCO emphasized the crucial role of teachers in ensuring quality education, urging nations and education stakeholders to prioritize teacher recruitment, training, and monitoring to achieve Sustainable Development Goal 4 (SDG 4).

5.1 Conclusion

This study was directed by general objective that was to assess the effect of teacher competence on performance of P1 learners in numeracy and literacy in public primaryschools in Bugesera District, Rwanda. The study concluded that the competence of teachers influences the performance of learners in literacy and numeracy.

5.2 Recommendations

The research findings led to several recommendations for different stakeholders. Firstly, the Ministry of Education should implement regular assessments to ensure teachers possess the necessary competencies for effective education and student development. Secondly, schools should prioritize the recruitment of qualified teachers and provide adequate teaching aids to enhance the learning process and improve student performance. Thirdly, head teachers and teachers should actively engage in continuous professional development to enhance thequality of education and promote student achievement. Lastly, learners are advised to actively participate in their daily learning activities and adhere to guidance provided by their schools for improved academic outcomes.



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References

- Abe, T.O. (2014). Effect of Teachers' Qualifications on Students' Performance in Mathematics. Sky Journal of Education, Volume 2(1)
- Aram, D., & Besser-Biron, S. (2017). Parents' support during different writing tasks: A comparison between parents of precocious readers, preschoolers, and school-age children. *Reading and Writing: An Interdisciplinary Journal*, 30, 363–386.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: *A review of state policy evidence*. Educational Policy Analysis and Archives, 8(1).
- Darling-Hammond, L. (2000). Teacher quality and student achievement: A review of state policy evidence. *Educational Policy Analysis Archives*, 8 (1). Retrieved from http://epaa. asu.edu/epaa/v8n1.
- Darling-Hammond, L. (2001). *The challenge of staffing our schools*. Educational Leadership, 58(8), 12–17.
- Darling-Hammond, L., Berry, B., & Thoreson, A. (2001). Does teacher certification matter? Evaluating the evidence. Educational Policy Analysis, 22(1), 52–57.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: *A review of state policy evidence*. Retrieved October 1, 2006 from http://epaa.asu.edu/epaa/v8n1/on, Education Policy Analysis Archives, 8(1).
- Cohen, L., Manion, L. & Morrison, K. (2007). *Research Methods in Education*, Sixth Edition, Routledge 2 Park Square, Milton Park, Abingdon, Oxon OX14 4RN.
- Liakopoulou, M. (2011) The Professional Competence of Teachers: Which qualities, attitudes, skills and knowledge contribute to a teacher's effectiveness. *International Journal of Humanities and Social Science*, 11(21), 23-40.
- Musau, L.M, &Abere, M.J. (2014). Teacher Qualification and Students' Academic Performance in Science Mathematics and Technology Subjects in Kenya, *International Journal of Educational Administration and Policy Studies*, Retrieved from http://academicjournals.org/journal/IJEAPS/article/BAD736653197 on 28th August
- REB (2019). Teacher Development and Management Policy in Rwanda. Kigali, Rwanda.
- UNESCO (2015). Improving School Effectiveness. Paris France. UNESCO/International Institute for Educational Planning.
- Wallace, C. (2015). Do School Accountability Systems Make it more Difficult for low Performing Schools to Attract and Retain High- Quality Teachers? Journal of Policy Analysis and Management, 23(2): 251-271.