

Headteachers' Competences and Educational Achievement in Public Secondary Schools In Gatsibo District, Rwanda

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Abstract: This study examined the influence of headteachers' competences on educational achievement in public secondary schools in Gatsibo District, Rwanda. The research was guided by three specific objectives: (i) to establish the level of headteachers' competences in public secondary schools; (ii) to assess the level of educational achievement; and (iii) to determine the relationship between headteachers' competences and educational achievement. Guided by Instructional Leadership Theory, Systems Theory, and Accountability Theory, the study employed a descriptive correlational research design supported by a mixed-methods approach. The target population comprised 140 education stakeholders, including 126 headteachers, 13 Sector Education Officers (SEOs), and 1 District Education Officer (DEO). Using Yamane's formula, a sample of 104 respondents was selected, comprising 94 headteachers, 9 SEOs, and 1 DEO. Piloting of research instruments was conducted in one public secondary school outside Gatsibo District to refine clarity and cultural appropriateness. Validity was established through expert panel review, while reliability was confirmed via Cronbach's Alpha coefficient ($\alpha > 0.70$). Quantitative data were collected from headteachers using structured questionnaires, while qualitative insights were gathered from SEOs and the DEO through semi-structured interviews. Out of 94 questionnaires distributed, 90 were completed and returned, giving a response rate of 95.7%. Quantitative data were analyzed using SPSS version 26, employing descriptive statistics (frequencies, percentages, means, and standard deviations) and Pearson correlation analysis. Qualitative data were analyzed thematically to complement quantitative findings. Key findings revealed that headteachers demonstrated moderate to high levels of competences in instructional supervision (mean = 3.93), strategic planning (mean = 3.94), learner assessment oversight (mean = 3.90), stakeholder engagement (mean = 3.80), and leadership skills (mean = 3.99). However, human resource management (mean = 3.59) and external resource mobilization (mean = 3.53) required improvement. Educational achievement was generally moderate to good, with retention rates (mean = 3.96) and progression rates (mean = 3.78) rated more positively than national examination performance (mean = 3.67), digital literacy (mean = 3.37), and critical thinking skills (mean = 3.58). Pearson correlation results showed a strong positive and statistically significant relationship between headteachers' competences and educational achievement ($r = .753$, $p < .001$). The study concludes that headteachers' competences significantly influence educational achievement, and recommends regular leadership training for headteachers, strengthened instructional supervision, improved use of assessment data, enhanced teacher support, strengthened staff development, improved external resource mobilization, and greater stakeholder engagement to improve educational achievement in Gatsibo District.

Index Terms: Headteachers' competences, educational achievement, instructional supervision, strategic planning, human resource management, learner assessment, stakeholder engagement, leadership skills, Rwanda.

I. INTRODUCTION

Educational achievement in secondary schools continues to raise global concern, particularly in low- and middle-income countries where progress toward Sustainable Development Goal 4 remains uneven (UNESCO, 2020). According to UNESCO (2020), more than 250 million children and youth globally fail to acquire basic literacy and numeracy skills even after several years of schooling. Despite notable improvements in access, many education systems struggle to translate enrollment gains into meaningful learning outcomes

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(UNESCO, 2020). The OECD (2018) reports that student performance in international assessments such as PISA has plateaued in several countries, primarily due to weak instructional leadership and inefficient school management practices. In contrast, countries such as Finland and Singapore have maintained high educational outcomes by investing in structured leadership development programs and prioritizing the professionalization of school leadership (Tan et al., 2017).

In Sub-Saharan Africa, achieving quality secondary education remains a challenge, with only 43% of students completing lower secondary school on time and attaining minimum proficiency levels (UNESCO Institute for Statistics, 2021). Although public investment in infrastructure and teacher recruitment has increased, outcomes remain weak due to leadership gaps at the school level (UNESCO Institute for Statistics, 2021). The African Union's CESA 2016–2025 framework identifies school leadership as a foundational component in addressing learning deficiencies (African Union, 2016). Empirical evidence from Nigeria, Ghana, and Kenya indicates that schools led by untrained or ineffective headteachers consistently report lower examination pass rates and reduced student retention (Boateng, 2019; Tella, 2020; Wambua, 2021). For example, in Ghana, schools with competent headteachers recorded a 15% increase in national examination scores, while similar trends have been observed in Kenya's public school evaluations (Boateng, 2019; Muriithi & Wanyoike, 2020).

In East African countries such as Uganda and Tanzania, efforts to reform school leadership have produced mixed results (World Bank, 2021). Although frameworks for education management exist, implementation often lags behind policy intentions (World Bank, 2021). Kaggwa and Mugagga (2019) found that 62% of headteachers in Uganda lacked formal training in educational leadership, negatively affecting their ability to oversee curriculum delivery and promote accountability. In Tanzania, only 48% of headteachers reported receiving instructional leadership training, leading to inconsistent academic performance in national assessments (World Bank, 2021).

In Rwanda, the government has undertaken deliberate reforms to strengthen school leadership, beginning with the Teacher Development and Management Policy of 2013 and followed by the Education Sector Strategic Plan (2018–2024), which emphasizes leadership as a pillar for educational quality (MINEDUC, 2018). The introduction of the Competency-Based Curriculum in 2016, along with school-based mentorship programs, aimed to build the capacity of headteachers to supervise instruction and support teachers effectively (MINEDUC, 2018). Despite these reforms, disparities in educational achievement persist across districts (REB, 2022). According to the Rwanda Education Board (REB, 2022), the national average pass rate for Ordinary Level secondary school examinations was 58.3% in 2021. However, Gatsibo District recorded only 42.6% during the same period, placing it among the lowest-performing districts (REB, 2022). Historical trends further indicate that Gatsibo has remained below the national average for five consecutive years despite receiving similar infrastructural and policy support as other districts (REB, 2022).

Several factors may contribute to this persistent underachievement, including poverty, teacher shortages, and limited instructional materials (MINEDUC, 2018). However, research suggests that headteachers' competences represent a critical yet often overlooked determinant of school performance (Bush & Glover, 2016; Stronge et al., 2018). Uwizeyimana and Niyonkuru (2021) found that poorly performing schools in Eastern Rwanda frequently lacked headteachers with adequate skills in instructional supervision, strategic planning, and stakeholder coordination. Headteachers' competences encompass the integrated knowledge, skills, attitudes, and behaviors that enable school leaders to manage learning environments effectively (Bush & Glover, 2016; Stronge et al., 2018). These competences include instructional leadership, teacher evaluation, staff development, community engagement, and resource management (Bush & Glover, 2016; Stronge et al., 2018). UNESCO (2020) emphasizes that such competences are essential for transforming schools into learner-centered institutions.

At the local level, in Gatsibo District, although headteachers are expected to demonstrate competences in instructional supervision, strategic planning, human resource management, learner assessment oversight, stakeholder engagement, and leadership skills, the implementation of these competences varies significantly across schools. Some schools assign trained headteachers who effectively supervise instruction and coordinate stakeholder engagement, while others rely on leaders with limited training and provide minimal supervision, resulting in limited educational achievement (REB, 2022). Low educational achievement in public secondary schools in Gatsibo District remains a persistent challenge, undermining the overall learning environment and educational goals. Despite the government's emphasis on strengthening school leadership to promote quality education, many schools in Gatsibo report persistent academic underperformance, including low examination pass rates, high dropout rates, and insufficient student competency development. These concerns have raised questions about how headteachers' competences are being managed in terms of planning, delivery, and evaluation. Ineffective leadership practices appear to limit the potential impact of headteachers on educational achievement, thus weakening one of the core pillars of Rwanda's education quality reform (REB, 2022; MINEDUC, 2023). If these issues are not addressed, the role of headteachers' competences in shaping learner outcomes will remain largely unfulfilled in this district.

The specific objectives of the study were:

- i. To establish the level of head teachers' competences in public secondary schools in Gatsibo District.
- ii. To assess the level of educational achievement in public secondary schools in Gatsibo District.
- iii. To determine the relationship between head teachers' competences and educational achievement in public secondary schools in Gatsibo District.

II. REVIEW OF RELATED LITERATURE

Empirical Literature

This empirical review examined studies on headteachers' competences and their influence on educational achievement, focusing on instructional supervision, strategic planning, human resource management, learner assessment oversight, stakeholder engagement, and leadership skills. The studies spanned various countries and educational contexts, providing insights relevant to public secondary schools in Gatsibo District, Rwanda.

Headteachers' Competences in Secondary Schools

Empirical research into headteachers' competences highlights how instructional supervision, strategic planning, human resource management, learner assessment oversight, stakeholder engagement, and leadership skills influence institutional performance and student outcomes. Studies on leadership and school management emphasize that the instructional identity of a school often guides management decisions and leadership practices. For example, Hallinger (2011) found in a study of effective schools that school leaders' understanding of leadership was deeply influenced by values derived from the school's instructional ethos. These leaders prioritized relational management, pastoral care, and teacher support over purely administrative functions. Similarly, research in South Africa indicates that principals in effective schools adopt servant-leadership styles, focusing on staff well-being, student guidance, and relational practices, which strengthen institutional culture (McKendrick & Walker, 2020). Such findings suggest that instructional leadership fosters school environments that emphasize moral and ethical development alongside academic achievement.

Instructional Supervision and Educational Achievement

Hallinger and Wang (2021) asserted that instructional monitoring is the most direct way leaders affect classroom practice. Al-Harthy (2022) documented the shift from "inspection" to "coaching" models, reflecting global trends in developmental supervision. Mugisha (2022) found similar patterns in regional studies from Uganda, where systematic observations and reflective dialogue improved teacher performance. Wambua (2021) investigated the influence of school leadership on students' academic performance in Kenya and found that headteachers with high levels of competence in instructional leadership, effective delegation, and teacher support practices were able to improve teaching effectiveness and student performance. The study recommended targeted training for school heads to improve leadership quality.

Strategic Planning and Educational Achievement

Robinson, Lloyd, and Rowe (2008) conducted a meta-analysis that linked goal setting with improvements in student ethical judgment and academic performance. The study revealed that schools using participatory goal-setting methods fostered stronger understanding among learners. Investment in collaborative goal development programs was recommended. Boateng (2019) in Ghana found that headteachers who exhibited strong competence in planning, supervision, and motivation of staff significantly enhanced student pass rates in national exams. The study concluded that improving the competences of headteachers was essential for enhancing educational achievement.

Human Resource Management and Educational Achievement

Ngcobo and Tikly (2017) emphasized that school heads must ensure that staff are qualified, motivated, and continuously trained. Leaders who support teacher professional development tend to foster more committed and effective teaching teams, which enhances the quality of instruction (Stronge et al., 2018). Mugenzi and Uwitonze (2023) explored how teacher professional development influenced peace education implementation in Rwandan secondary schools. The survey findings indicated that continuous, practice-based training improved ethical decision-making and classroom discipline. The study recommended increased investment in professional development.

Learner Assessment Oversight and Educational Achievement

UNESCO (2020) and Townsend (2021) emphasized that headteachers are responsible for managing learner assessment processes, including setting performance benchmarks, analyzing academic data, and initiating remedial actions. Competence in assessment oversight allows school leaders to detect learning gaps and support evidence-based instruction (Leithwood et al., 2020). In Rwanda, Mugiraneza (2021) observed that schools prioritizing "positive peace" and effective assessment practices achieve higher levels of student social-emotional development and academic achievement.

Stakeholder Engagement and Educational Achievement

Komba et al. (2020) and Lumby (2019) emphasized that stakeholder engagement involves collaboration with teachers, parents, communities, and education authorities. Inclusive leadership practices that foster transparency and participation are associated with improved accountability and school performance (Bush, 2021; OECD, 2021). Headteachers who build strong community ties also tend to secure additional resources and generate collective ownership over school goals (Ngcobo & Tikly, 2017).

Headteachers' Competences and Educational Achievement in Secondary Schools

Tsegay, Asfaw, and Abebe (2022) conducted a study in Ethiopia exploring how the competences of headteachers influence student learning outcomes. The researchers employed a correlational research design and sampled 300 teachers from 30 public secondary schools. The study revealed a strong positive relationship between managerial competence in curriculum oversight and student performance and retention. The authors concluded that effective school leadership was a major determinant of academic success, particularly in low-resource settings.

Kaggwa and Mugagga (2019) carried out a study in Uganda to assess how school heads' capabilities affect school effectiveness. Using a qualitative case study design, the study found that schools with competent headteachers demonstrated improved staff motivation, better planning, and higher consistency in student achievement. The researchers emphasized that leadership training and ongoing professional development were necessary to improve school performance in rural contexts.

Uwizeyimana and Niyonkuru (2021), in their Rwandan-based study, examined how headteachers' competences affect academic outcomes. Results indicated that schools led by headteachers lacking competencies in planning, supervision, and community involvement consistently underperformed. The authors concluded that targeted interventions to improve school manager competences were essential for raising the quality of education in Rwandan schools.

Muriithi and Wanyoike (2020) studied the influence of school managerial practices on education quality in Kenya. Results showed a significant linear relationship between managerial effectiveness and learner outcomes. Schools where principals conducted regular classroom observations and coordinated teacher professional development consistently reported better student performance.

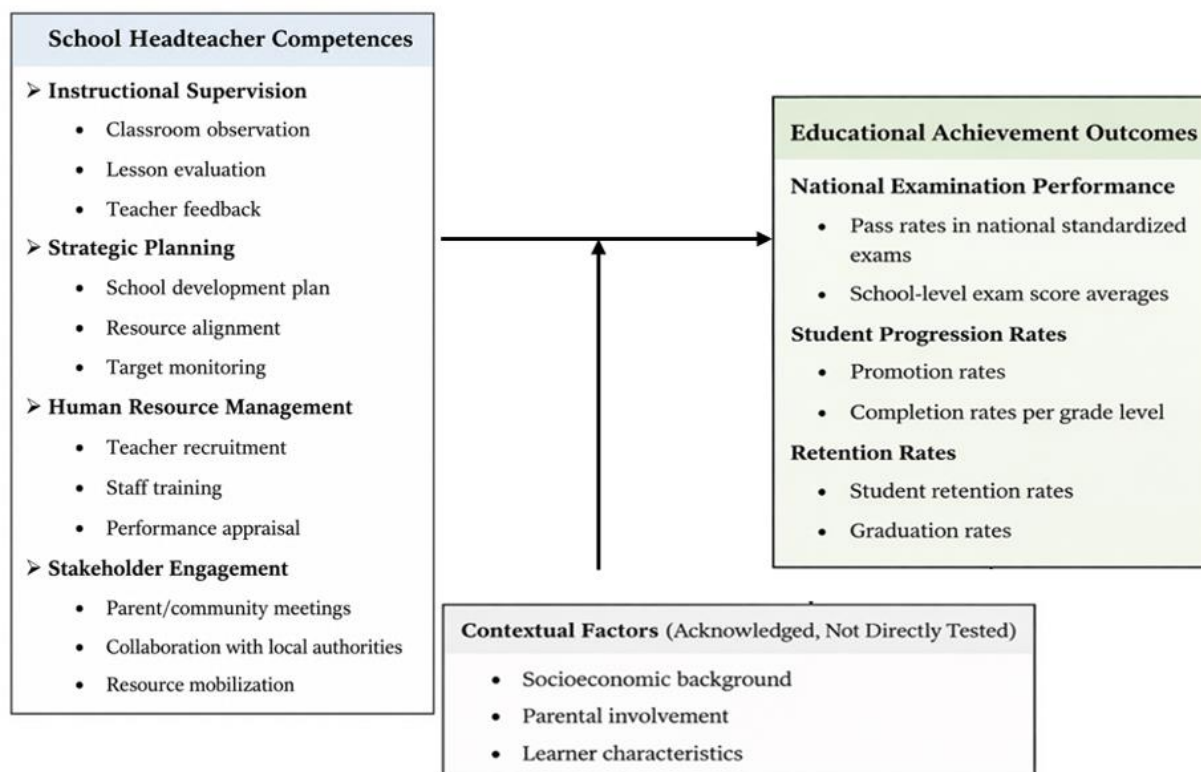
Theoretical Literature Review

This study was guided by theoretical perspectives that explain how school management practices influence teaching processes and student academic development. Since the study examined how headteachers' competences shape educational achievement, it was

essential to apply theories that account for both instructional guidance and institutional effectiveness. Instructional Leadership Theory was used to explain how school leaders guide and supervise the delivery of instruction, while Systems Theory was used to explain how schools function as interconnected systems where leadership coordination affects overall performance. Accountability Theory was also applied to explain how performance expectations and monitoring contribute to improved outcomes. Together, these theories provide a basis for understanding how headteachers' competences can influence educational achievement in public secondary schools in Gatsibo District.

Conceptual Framework

Figure 1 indicates the conceptual framework for this study, which explored the influence of headteachers' competences on educational achievement in public secondary schools. It identified five independent variables, namely instructional supervision, strategic planning, human resource management, learner assessment oversight, stakeholder engagement, and leadership skills, each with respective indicators. The dependent variable focused on educational achievement (progression rates, examination performance, skill competency, and retention rates). Intervening variables consisted of teacher motivation, learner commitment, school culture, and peer support, all of which could have influenced the relationship between headteachers' competences and educational achievement in public secondary schools in Gatsibo District, Rwanda.



Source: researcher (2025)

III. RESEARCH METHODOLOGY

This study employed a mixed-methods research methodology to examine the influence of headteachers' competences on educational achievement in public secondary schools in Gatsibo District, Rwanda. The mixed-methods approach, as outlined by Creswell and Creswell (2018), integrates both quantitative and qualitative techniques, enabling researchers to capture measurable trends alongside deeper insights into complex social phenomena. This methodology was particularly appropriate for exploring how school-level leadership practices, such as instructional supervision, strategic planning, human resource management, learner assessment oversight,

stakeholder engagement, and leadership skills, affect educational achievement, including progression rates, examination performance, skill competency, and retention rates. By combining numerical data with narrative accounts, the study provided a comprehensive understanding of the relationships and mechanisms underlying these educational practices.

Target Population

This study focused on a total target population of 140 participants in public secondary schools in Gatsibo District, comprising 126 headteachers, 13 Sector Education Officers (SEOs), and 1 District Education Officer (DEO). These categories were selected due to their direct involvement in the management and implementation of instructional leadership practices and educational achievement, which were the central focus of the study. Headteachers were key leaders whose management practices shaped the overall school environment, policy enforcement, and academic expectations, making their perspectives vital in understanding institutional performance and instructional guidance.

Sample Size Determination

Yamane's formula was used to determine the sample size. The formula was as follows:

$$n = \frac{N}{(1 + N(e)^2)}$$

Where: n = Required sample size

N = Total population size

e = Margin of error (0.05)

Since the study targeted a total population of 140 individuals, the sample size was calculated as follows:

$$n = \frac{140}{(1 + 140(0.05)^2)} = 103.7 \approx 104$$

Thus, the required sample size for the study was 104 respondents.

Table 1: Sample Size

Population Category	Target Population	Sample Size
Headteachers	126	94
Sector Education Officers	13	9
District Education Officer	1	1
Total	140	104

Source: Researcher, 2025

Sampling Techniques

The study adopted a combination of purposive and simple random sampling techniques. Purposive sampling was used to select the District Education Officer (DEO), as this individual held a unique administrative position with comprehensive oversight of education in Gatsibo District. Simple random sampling was employed to select headteachers from the 126 accredited secondary schools and Sector

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Education Officers (SEOs) from the 13 sectors. This probability sampling method ensured that every eligible participant had an equal chance of being selected, which enhanced objectivity and minimized selection bias (Kothari, 2004).

Research Instruments

Structured questionnaires and semi-structured interview guides were used to collect both quantitative and qualitative data. The questionnaire consisted primarily of closed-ended items and was distributed via Google Forms to facilitate efficient data collection. The form automatically saved responses in Google Sheets, which were then exported into Excel and analyzed in SPSS. To gather detailed qualitative data, face-to-face semi-structured interviews were conducted with selected SEOs and the DEO.

Piloting of Research Instruments

Before the main data collection, the research instruments were piloted to ensure clarity, reliability, and validity. The pilot study was carried out in one public secondary school outside Gatsibo District but with similar characteristics to the study area. Data obtained from the pilot study were analyzed to assess the internal consistency and reliability of the questionnaire using Cronbach's alpha coefficient in SPSS. A reliability coefficient of 0.70 or above was considered acceptable for social science research (Cronbach, 1951; Field, 2018).

Validity and Reliability

To ensure content validity, the questionnaire was first reviewed by education experts and academic staff at Mount Kenya University. The Content Validity Index (CVI) was calculated using SPSS to test expert agreement, and items with a CVI of 0.79 or above were accepted as valid. Reliability was tested using Cronbach's alpha in IBM SPSS Statistics version 26. A Cronbach's alpha value of 0.70 or higher was considered satisfactory.

Data Analysis Techniques and Presentation

Quantitative data were analyzed using SPSS version 26. Descriptive statistics such as frequencies, percentages, means, and standard deviations were used to summarize demographic characteristics and responses related to headteachers' competences and educational achievement. Pearson's correlation coefficient was used to determine the strength and direction of relationships between variables. Qualitative data from interviews were transcribed and analyzed thematically. Emerging themes were coded and categorized based on the study objectives to complement the quantitative findings.

Ethical Considerations

Ethical clearance was obtained from Mount Kenya University, and official authorization was also secured from the Gatsibo District Education Office. Participants were thoroughly informed about the purpose of the study, their role in it, and their right to withdraw at any time without penalty. Written consent was obtained before participation. The study avoided collecting any personally identifiable information to ensure anonymity, and all data were treated with strict confidentiality.

IV. RESULTS AND FINDINGS

A. Response Rate

The study achieved a high response rate of 95.7%, with 90 out of 94 sampled headteachers successfully completing the research instruments. All 9 Sector Education Officers and the District Education Officer participated in interviews (100% response rate). This response rate significantly exceeds the conventional academic threshold of 70%, minimizing non-response bias.

Table 2: Response Rate per Category of Respondents

Respondent Category	Research Instrument	Sample Size	Actual Participants	Response Rate
Headteachers	Questionnaire	94	90	95.7%
Sector Education Officers	Interview Guide	9	9	100%
District Education Officer	Interview Guide	1	1	100%
Total		104	100	96.2%

Source: Primary Data, 2025

B. Demographic Characteristics

Among headteachers (N = 90), gender distribution showed male dominance (64.4% male, 35.6% female), with 42.2% aged 41-50 years and 31.1% aged 31-40 years. In terms of academic qualification, 60.0% held Bachelor's degrees while 28.9% had postgraduate qualifications. Regarding experience, 45.6% had served for 6-10 years, while 30.0% had over 10 years of experience. The majority (77.8%) were from public schools, with 22.2% from government-aided schools.

C. Objective 1: Level of Headteachers' Competences

Table 3: Descriptive Statistics on Headteachers' Competences

Competence Domain	N	Mean	Std. Deviation	Agree/Strongly Agree (%)
Instructional Supervision	90	3.93	0.99	78.2%
Strategic Planning	90	3.94	0.97	81.1%
Human Resource Management	90	3.59	1.14	65.6%
Learner Assessment Oversight	90	3.90	1.00	76.7%
Stakeholder Engagement	90	3.80	1.03	72.2%
Leadership Skills	90	3.99	0.94	82.2%

Source: Primary Data, 2025

Instructional Supervision: The findings revealed that instructional supervision was generally practiced at a high level. Headteachers reported conducting classroom observations regularly (mean = 3.91), evaluating teachers' lesson plans (mean = 3.99), and providing feedback after supervision (mean = 3.89). The statement on evaluating teachers' lesson plans recorded the highest mean score of 3.99, with 52.2% agreeing and 28.9% strongly agreeing.

Strategic Planning: Strategic planning was one of the strongest competence areas among headteachers. Most schools had written development plans, recording the highest mean score of 4.13, with 47.8% agreeing and 36.7% strongly agreeing. Headteachers also monitored progress toward school goals (mean = 3.92) and allocated resources according to set priorities (mean = 3.78).

Human Resource Management: Human resource management was practiced at a moderate level. Teacher performance appraisal had a mean score of 3.74, while organizing staff training sessions had a mean score of 3.64. However, headteachers' participation in teacher recruitment recorded the lowest mean score of 3.39, suggesting limited involvement in recruitment processes.

Learner Assessment Oversight: Learner assessment oversight was relatively strong. Headteachers regularly monitored students' assessment results (mean = 4.00), used assessment results to identify students needing academic support (mean = 3.91), and guided teachers to prepare remedial strategies (mean = 3.80).

Stakeholder Engagement: Stakeholder engagement was also found to be an important competence. Headteachers worked closely with education authorities (mean = 4.02), held meetings with parents and community representatives (mean = 3.86), and mobilized external resources to support schools (mean = 3.53).

Leadership Skills: Leadership skills were among the strongest competences demonstrated. Communicating the school vision clearly recorded a mean score of 4.10, making timely and effective decisions had a mean score of 3.97, and motivating teachers and students had a mean score of 3.89.

Qualitative Findings: Interview findings supported the quantitative results. One Sector Education Officer stated that, "In our sector, most schools have development plans, but the challenge is that some plans are not fully implemented because of limited resources and weak follow-up." Another respondent noted, "Headteachers who communicate clearly with teachers and students usually create a better school climate because everyone understands the school priorities."

D. Objective 2: Level of Educational Achievement

Table 4: Descriptive Statistics on Educational Achievement

Indicator	N	Mean	Std. Deviation	Agree/Strongly Agree (%)
Progression Rates	90	3.78	1.04	72.2%
Examination Performance	90	3.67	1.10	68.9%
Skill Competency	90	3.55	1.13	64.4%
Retention Rates	90	3.96	0.96	80.0%

Source: Primary Data, 2025

Progression Rates: Progression rates were generally positive. Students being promoted to the next grade each year recorded a mean score of 3.97, while students completing the grade cycle without frequent repetition recorded a mean score of 3.82. However, transition from O'Level to A'Level had a lower mean score of 3.56, showing that transition to higher levels was weaker than annual promotion and grade completion.

Examination Performance: Examination performance was found to be moderately positive. Examination results had improved in the last three years (mean = 3.76). However, national examination results being satisfactory compared to district expectations recorded a mean score of 3.64, while students achieving satisfactory results across major subjects recorded a mean score of 3.62.

Skill Competency: Skill competency was moderate. Students' ability to apply knowledge to solve real-life problems recorded a mean score of 3.69, while critical thinking and communication skills recorded a mean score of 3.58. However, students' digital literacy in learning activities recorded the lowest mean score of 3.37, showing that digital literacy was the weakest area.

Retention Rates: Retention rates were among the strongest indicators. Most students remaining in school until completion recorded the highest mean score of 4.02, while students graduating within the expected time frame recorded a mean score of 3.98. The dropout rate being low recorded a mean score of 3.89.

Qualitative Findings: Interview findings supported the quantitative results. One Sector Education Officer stated, "In our sector, retention improves when headteachers work closely with parents and local leaders to follow up students who are frequently absent." Another respondent noted, "Schools with regular supervision usually have better teaching practices, and this later affects learner performance."

E. Objective 3: Relationship Between Headteachers' Competences and Educational Achievement

Table 5: Correlation Between Headteachers' Competences and Educational Achievement

Variable	Headteachers' Competences	Educational Achievement	
Headteachers' Competences	Pearson Correlation	1	.753**
	Sig. (2-tailed)		.000
	N	90	90
Educational Achievement	Pearson Correlation	.753**	1
	Sig. (2-tailed)	.000	
	N	90	90

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

Source: Primary Data, 2025

The results show a Pearson correlation coefficient of $r = .753$ with a significance value of $p = .000$. This indicates a strong positive and statistically significant relationship between headteachers' competences and educational achievement. Since the p-value is below 0.01, the relationship is significant at the 0.01 level. This means that higher levels of headteachers' competences are associated with higher levels of educational achievement.

Qualitative Findings: Interview findings supported the statistical relationship. The District Education Officer explained, "Schools where headteachers demonstrate strong competences in supervision, planning, assessment monitoring, and stakeholder engagement consistently perform better in national examinations and have lower dropout rates." Another Sector Education Officer noted, "Schools with better leadership usually have better examination preparation and lower absenteeism."

V. DISCUSSION

A. Headteachers' Competences in Public Secondary Schools

The finding that headteachers demonstrated moderate to high levels of competences in instructional supervision (mean = 3.93), strategic planning (mean = 3.94), learner assessment oversight (mean = 3.90), stakeholder engagement (mean = 3.80), and leadership skills (mean = 3.99) aligns with Bush and Glover's (2016) assertion that effective school leaders combine instructional, strategic, and relational competences to improve school outcomes. Locally, this supports Uwizeyimana and Niyonkuru (2021), who found that schools with competent headteachers in Eastern Rwanda demonstrated better organizational practices. The strongest competence identified was leadership skills, particularly vision communication, which reflects the emphasis in Instructional Leadership Theory on setting clear direction for school improvement (Hallinger & Murphy, 1985).

However, the relatively weaker performance in human resource management (mean = 3.59), particularly in teacher recruitment, reflects systemic constraints in Rwanda's public education system where recruitment decisions are centralized. This finding is consistent with Ngcobo and Tikly (2017), who noted that in many developing countries, headteachers' influence over staffing is limited by higher-level administrative procedures. The qualitative finding that headteachers could identify staffing gaps but had limited control over recruitment confirms this structural limitation.

The moderate performance in external resource mobilization (mean = 3.53) reflects the rural context of Gatsibo District, where communities have limited economic capacity to support schools. This finding aligns with Komba et al. (2020), who found that stakeholder engagement effectiveness depends on community socioeconomic conditions.

B. Level of Educational Achievement

The finding that educational achievement was generally moderate to good, with retention rates (mean = 3.96) and progression rates (mean = 3.78) rated more positively than examination performance (mean = 3.67) and skill competency (mean = 3.55), reflects the reality that Rwandan schools have been relatively successful in keeping students in school but continue to struggle with quality outcomes. This supports REB's (2022) report that while enrollment and retention have improved, examination performance remains a challenge in many districts.

The weaker performance in digital literacy (mean = 3.37) and critical thinking skills (mean = 3.58) reflects the implementation challenges of the Competency-Based Curriculum in resource-constrained settings. This finding aligns with UNESCO's (2020) observation that many education systems struggle to translate curriculum reforms into tangible competency development, particularly in low-resource environments. The qualitative finding that digital literacy is limited because not all schools have enough digital learning resources confirms this implementation gap.

C. Relationship Between Headteachers' Competences and Educational Achievement

The strong positive correlation ($r = .753$, $p < .001$) between headteachers' competences and educational achievement confirms that effective school leadership is a critical determinant of learner outcomes. This finding is consistent with Wambua (2021), who found a significant positive relationship between school leadership competences and student academic performance in Kenya, and Tsegay et al. (2022), who reported that leadership competence, especially instructional supervision and performance monitoring, was strongly associated with learner outcomes in Ethiopia.

The finding also supports Instructional Leadership Theory (Hallinger & Murphy, 1985), which posits that school leaders influence achievement through defining school goals, managing curriculum implementation, supervising instruction, and promoting a learning-focused school climate. The Systems Theory perspective is also relevant, as the correlation suggests that when headteachers coordinate key elements such as supervision, planning, and stakeholder engagement effectively, overall school performance improves.

The qualitative finding that schools with regular supervision and better leadership have better examination preparation and lower absenteeism provides practical evidence of how competences translate into improved outcomes. This is consistent with Accountability

Theory, which proposes that student achievement improves when school leaders set performance expectations, monitor progress using data, and ensure responsibility for results among teachers and learners (Pont et al., 2019).

VI. CONCLUSION

This study investigated the influence of headteachers' competences on educational achievement in public secondary schools in Gatsibo District, Rwanda. Three key conclusions emerge from the findings.

First, headteachers in Gatsibo District generally demonstrated moderate to high levels of competences in instructional supervision, strategic planning, learner assessment oversight, stakeholder engagement, and leadership skills. However, human resource management, particularly teacher recruitment involvement, and external resource mobilization require strengthening. Strategic planning was the strongest competence area, with most schools having written development plans, while human resource management was the weakest area, reflecting systemic constraints beyond headteachers' direct control.

Second, educational achievement in public secondary schools in Gatsibo District was generally moderate to good, with retention rates and progression rates rated more positively than examination performance and skill competency. Students demonstrated some level of skill competency, but digital literacy and critical thinking still required improvement. The transition from O'Level to A'Level was weaker than annual promotion and grade completion, suggesting that academic support for learners transitioning to higher levels needs strengthening.

Third, there is a strong positive and statistically significant relationship between headteachers' competences and educational achievement in public secondary schools in Gatsibo District. This means that higher levels of headteachers' competences are associated with higher levels of educational achievement, including better learner progression, retention, examination performance, and skill development. The study confirms that headteachers' competences are important drivers of educational achievement, and strengthening these competences is likely to contribute to improved school performance.

Overall, headteachers' competences significantly influence educational achievement in Gatsibo District. Sustainable educational improvement requires instructional leadership that bridges the gap between high-level goal setting and everyday classroom practices, addresses resource constraints through improved resource mobilization, and develops teachers' capacity to deliver competency-based instruction effectively.

VII. RECOMMENDATIONS

A. Recommendations for Practice

Strengthen Instructional Supervision: Headteachers should conduct regular classroom observations, evaluate teachers' lesson plans, provide constructive feedback, and follow up whether teachers apply the feedback given. This will improve teaching quality and student performance.

Institutionalize Strategic Planning: Schools should maintain written development plans, allocate resources according to set priorities, and monitor progress toward school goals. Sector Education Officers should support headteachers in developing and implementing realistic school improvement plans.

Enhance Human Resource Management: Headteachers should be trained in teacher performance appraisal, staff motivation, and professional development coordination. Since headteachers have limited control over teacher recruitment, they should be supported to identify staffing gaps and report them to higher authorities.

Strengthen Learner Assessment Oversight: Headteachers should regularly monitor students' assessment results, use assessment data to identify students needing academic support, and guide teachers to prepare remedial strategies for low-performing students. Schools should establish systematic mechanisms for translating assessment results into practical interventions.

Improve Stakeholder Engagement: Headteachers should work closely with parents, local leaders, education officers, and community partners to reduce absenteeism, prevent dropout, mobilize resources, and support learners. Regular parent-teacher meetings and community engagement activities should be institutionalized.

Enhance Leadership Skills: Headteachers should continue to communicate school vision clearly, make timely and effective decisions for school improvement, and motivate teachers and students to perform better. Leadership development programs should emphasize these core skills.

Support Digital Literacy and Competency-Based Learning: Schools should improve students' digital literacy and practical skills by encouraging teachers to use learner-centered methods, practical activities, group work, problem-solving tasks, and available ICT tools. Headteachers should monitor the implementation of competency-based approaches.

B. Recommendations for Policy

Strengthen Leadership Training Programs: MINEDUC, REB, and NESA should strengthen leadership support programs for headteachers, especially in rural districts such as Gatsibo. These programs should focus on instructional leadership, teacher support, assessment follow-up, school planning, and resource mobilization. Regular training should be mandatory for all newly appointed headteachers.

Integrate Leadership Competence Metrics into National Inspection Framework: NESA and MINEDUC should develop standardized indicators for measuring headteachers' competences, including instructional supervision, strategic planning, human resource management, learner assessment oversight, stakeholder engagement, and leadership skills. This would provide school administrators with clear expectations for leadership performance.

Provide Curriculum Flexibility for Competency Development: Policymakers should allocate specific, non-examable time for competency-building activities by "de-congesting" the current upper secondary curriculum. This would relieve teachers from the pressure of compromising competency development for academic syllabus coverage.

Support Digital Infrastructure Development: The government should invest in digital infrastructure, including computers, internet connectivity, and digital learning resources, particularly in rural districts. This would enable schools to implement competency-based approaches effectively.

C. Recommendations for Further Research

Longitudinal Study on Leadership Competences and Student Outcomes: Future research should track cohorts of students over several years to determine the long-term effects of headteachers' competences on students' academic achievement, civic conduct, and conflict-resolution abilities beyond graduation.

Comparative Study Across Districts: A comparable study should be carried out in multiple Rwandan districts to determine how regional socioeconomic characteristics affect leadership competences and educational achievement, comparing urban versus rural contexts or different provinces.

Impact of Leadership Training Programs: Research should evaluate the effectiveness of existing leadership training programs in improving headteachers' competences and school performance. This would inform the design of more effective professional development initiatives.

Development of Assessment Instruments: Research should focus on developing and validating standardized instruments for measuring headteachers' competences and educational achievement outcomes in the Rwandan context.

Appendices

Appendix I: Questionnaire for Headteachers

The head teacher questionnaire included sections on demographic information, instructional supervision, strategic planning, human resource management, learner assessment oversight, stakeholder engagement, leadership skills, and educational achievement. All items used a five-point Likert scale from "Strongly Disagree" to "Strongly Agree."

Appendix II: Interview Guide for Sector Education Officers

The semi-structured interview guide included questions on headteachers' competences, monitoring and support mechanisms, challenges and gaps, and the influence of competences on educational achievement, with probes for examples and strategies.

Appendix III: Interview Guide for District Education Officer

The semi-structured interview guide included questions on overall managerial capacity, trends and patterns in leadership and achievement, and interventions and support for strengthening headteachers' competences.

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