



Headteachers' professional development programs and effective school leadership: A case study of Rwandan secondary schools in Rubavu District

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ABSTRACT

The purpose of this study was to investigate the impact of professional development programs on the leadership practices of head teachers in secondary schools in Rubavu District, Rwanda. The study was motivated by the growing concern over the effectiveness of school leadership and the need to strengthen head teachers' competencies through continuous professional development. Despite the availability of various training initiatives, a gap remains in understanding how these programs impact leadership performance and what challenges hinder their successful implementation. A descriptive and correlational research design was employed, targeting a population of 72 head teachers, from which a sample size of 61 was determined using Yamane's formula. Data were collected using semi-structured interviews and Likert-scale questionnaires and analyzed through descriptive statistics, Pearson correlation, and multiple regression analysis using SPSS. The results revealed that head teachers in Rubavu District have access to several professional development programs, including the Diploma in Effective School Leadership (DEL) by Rwanda Basic Education Board (REB) and Vlaamse Organisatie voor Ontwikkelingssamenwerking/ Flemish Association for Development Cooperation and Technical Assistance (VVOB), Head Teacher Capacity Building Workshops, Peer Learning Communities (PLCs), and School Leadership Forums and Conferences. Statistical analysis showed a strong positive relationship between participation in professional development programs and effective school leadership practices ($R = 0.992$, $R^2 = 0.983$, $p < 0.01$). Among these, Peer Learning Communities (PLCs) were found to have the most significant influence, followed by School Leadership Forums and Capacity Building Workshops. However, implementation challenges such as limited funding, time constraints, logistical barriers, and inconsistent delivery were also identified. The study concludes that well-structured and continuous professional development programs significantly enhance the leadership effectiveness of head teachers. To maximize their impact, it is recommended that the Ministry of Education and the Rwanda Education Board (REB) increase funding, incorporate online learning options, and align training schedules with the academic calendar. Furthermore, school leaders should actively participate in such programs and apply the acquired skills, while NGOs and education stakeholders are encouraged to provide follow-up mentorship and support. Future research should explore the differential impact of professional development in rural versus urban settings, the long-term influence on student outcomes, and the role of policy and digital platforms in program sustainability.

Keywords: Effective School Leadership, Headteacher, Instructional Practices, Professional Development, School Management, Student Outcomes

I. INTRODUCTION

Effective school leadership plays a pivotal role in ensuring quality education and positive academic outcomes, particularly in secondary schools (Leithwood & Jantzi, 2000). In recent years, there has been growing global recognition of the importance of equipping school leaders, especially head teachers, with relevant skills and competencies through targeted professional development programs (Day et al., 2016). These programs are designed to enhance leadership capacity, improve school management, and foster environments that support both teachers and learners (Robinson, 2011).

Professional development (PD) has emerged as a key strategy for educational improvement, with a focus on building the knowledge and abilities of head teachers to effectively lead their institutions (Guskey, 2002). Across the globe, countries have increasingly invested in PD initiatives to improve leadership practices, accountability, and performance in schools (Darling-Hammond et al., 2017). In African contexts, where educational systems often grapple with resource limitations and systemic challenges, PD programs are especially vital (Mourshed et al., 2010). They serve as tools for capacity building, allowing head teachers to respond effectively to emerging issues in school leadership (Asuga, 2012).



In East Africa, countries such as Rwanda, Kenya, and Uganda have launched various initiatives aimed at strengthening school leadership through professional development (The United Nations Educational, Scientific and Cultural Organization [UNESCO], 2017). In Rwanda, the Ministry of Education and REB, in partnership with development partners like Vlaamse Organisatie voor Ontwikkelingssamenwerking/ Flemish Association for Development Cooperation and Technical Assistance (VVOB), have implemented structured PD programs such as the Diploma in Effective School Leadership (Rwanda Education Board, 2021). These initiatives aim to build instructional leadership, enhance stakeholder engagement, and improve school governance, aligning with national education goals (World Bank, 2019).

At the local level, Rubavu District in Rwanda presents a unique case where secondary schools face diverse challenges, including high student-teacher ratios, inadequate infrastructure, and limited leadership capacity (Rwanda Education Sector Analysis, 2017). While professional development programs are available, their reach and effectiveness vary (Musabwayire & Sikubwabo, 2023). Despite government and NGO efforts, some head teachers still lack access to regular, relevant, and context-specific training (Niyonsenga, 2022). Understanding how PD programs influence leadership practices in this specific context is essential for shaping future policy and practice (Obed & Claire, 2023).

This study, therefore, seeks to investigate the effects of head teacher professional development programs on effective school leadership in secondary schools of Rubavu District. It addresses the gap in localized research by examining how various PD initiatives influence leadership competencies such as instructional supervision, resource management, and teacher support (Musabwayire & Sikubwabo, 2023). The study also explores the availability and challenges of implementing these programs within the district (Obed & Claire, 2022).

In doing so, the research aims to provide evidence-based insights that can inform education stakeholders, including policymakers, development partners, and school administrators, on how to strengthen professional development initiatives to enhance the effectiveness of school leadership (Darling-Hammond et al., 2017). Ultimately, this study contributes to the broader discourse on educational leadership in Rwanda and supports efforts to improve learning outcomes through better-trained and empowered school leaders (Leithwood et al., 2004).

1.1 Statement of the Problem

Effective school leadership is crucial for the success of educational institutions, influencing teacher performance, student outcomes, and overall school improvement (Leithwood & Jantzi, 2000). In Rwanda, the Ministry of Education, through REB, has emphasized leadership development programs to improve the effectiveness of school leaders (REB, 2021). However, secondary schools in Rubavu District continue to face challenges related to leadership effectiveness, despite these initiatives (Idahemuka & Ndayishimiye, 2025).

Research highlights that many head teachers in Rubavu District lack access to comprehensive and ongoing professional development (PD) programs tailored to their leadership needs (Idahemuka & Ndayishimiye, 2025). A recent study found that 56% of head teachers in Rubavu District reported having limited access to PD programs that address school-specific challenges (Idahemuka & Ndayishimiye, 2025). This gap in leadership development results in poor resource management, weak instructional leadership, and insufficient support for teachers and students, which ultimately hinders academic performance (Musabwayire & Sikubwabo, 2023).

The existing PD programs, such as those offered under the Continuous Professional Development (CPD) framework by organizations like VVOB, have had mixed results (VVOB, 2023). Although VVOB's Diploma in Effective School Leadership, which has been implemented since 2021, has been shown to improve leadership skills in 68% of the participants, only 20% of head teachers in Rubavu District have participated in the program (VVOB, 2023). This low participation rate is attributed to limited program availability and resource constraints, such as a lack of funding for wider implementation and difficulties accessing relevant training materials (VVOB, 2023).

In addition, a 2022 survey conducted by REB revealed that 60% of head teachers in Rubavu District felt unprepared to handle the growing administrative and pedagogical demands of their schools (Rwanda Education Board, 2022). Furthermore, 48% of these leaders indicated that their management practices were not aligned with the objectives of Rwanda's education reform policies, primarily due to inadequate training (Idahemuka & Ndayishimiye, 2025). As a result, many schools in the district struggle to implement quality education standards, leading to inconsistencies in student outcomes (Musabwayire & Sikubwabo, 2023).

A significant concern is the lack of effective instructional leadership. A 2023 report from the Rwanda Tubisabimana & Mukulira (2022) indicated that 72% of teachers in Rubavu District felt unsupported by their head teachers in implementing modern teaching methods (Tubisabimana & Mukulira, 2022). Teachers reported challenges such as a lack of feedback, inadequate classroom management strategies, and insufficient professional guidance (Tubisabimana & Mukulira, 2022). This absence of strong leadership impacts teacher motivation and performance, which directly affects student learning and academic achievements (Leithwood et al., 2004).

Furthermore, the limited leadership capacity has broader consequences. A study by Idahemuka & Ndayishimiye (2025) found that 65% of students in Rubavu District's secondary schools underperformed in key subjects, particularly in sciences and mathematics, which are critical to Rwanda's national development goals (Idahemuka & Ndayishimiye,



2025). Poor leadership practices in the management of teaching resources and the fostering of a positive school culture have contributed to these underwhelming student outcomes (Musabwayire & Sikubwabo, 2023).

Despite the government's recognition of the need for continuous professional development for school leaders, these issues persist due to a lack of follow-up mechanisms to ensure that the skills acquired in PD programs are effectively applied in schools (Darling-Hammond et al., 2017). The lack of proper monitoring and evaluation of PD programs further exacerbates this issue (Guskey, 2002).

In summary, the gap between policy and practice in school leadership remains significant, with over 60% of head teachers in Rubavu District lacking the necessary support to implement effective leadership strategies (Idahemuka & Ndayishimiye, 2025). This results in a chain reaction of poor teaching practices, low student performance, and limited community engagement in schools (Musabwayire & Sikubwabo, 2023). Addressing these gaps requires a deeper understanding of how PD programs impact head teacher effectiveness and identifying strategies for improving these programs to enhance leadership practices in secondary schools (Leithwood & Jantzi, 2000).

This study aims to explore the effects of professional development programs on the leadership practices of head teachers in Rubavu District's secondary schools. By examining the strengths and weaknesses of current PD programs, this research provides valuable recommendations for improving school leadership and, ultimately, the quality of education in the district (Darling-Hammond et al., 2017).

1.2 Research Objectives

- i. To examine professional development programs available for head teachers.
- ii. To examine the relationship between professional development programs and the leadership practices of head teachers
- iii. To identify challenges in implementing professional development programs for head teachers.

1.3 Research questions

- i. What professional development programs are available for head teachers?
- ii. How do professional development programs influence the leadership practices of head teachers?
- iii. What are the challenges affecting the implementation of professional development programs for head teachers?

II. LITERATURE REVIEW

2.1 Theoretical Review

2.1.1 Transformational Leadership Theory

Transformational Leadership Theory, developed by Burns (1978) and Bass (1985), emphasizes leaders' roles in inspiring and motivating their teams. This theory is relevant to the study of PD programs for head teachers, as it highlights how such programs equip leaders with skills to foster a positive school environment. By promoting idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration, transformational leadership can drive meaningful change in educational settings, ultimately improving teacher satisfaction and student performance.

2.2 Empirical Review

The empirical review focuses on three objectives: examining available PD programs for head teachers, exploring the relationship between PD programs and leadership practices in Rubavu District, and identifying challenges in implementation.

2.2.1 Professional Development Programs Available for Head Teachers

Structured professional development (PD) programs have been recognized as pivotal in enhancing school leadership globally. In the United Kingdom, the National Professional Qualification for Headship (NPQH) outlines essential competencies in instructional leadership and strategic management (Department for Education, 2020).

In Rwanda, the "Leading, Teaching and Learning Together" (LTLT) program—developed by VVOB in partnership with the Rwanda Basic Education Board (REB) and the University of Rwanda—College of Education (UR-CE)—has supported the implementation of professional standards for school leadership. The program has significantly improved leadership practices and teaching quality in basic education (Munezero, 2022).

Additionally, VVOB's partnership with REB has introduced a blended diploma program and created professional learning communities (PLCs), which have enhanced peer collaboration and reflective practice among school leaders (Flink & Dusabe, 2024).



2.2.2 Relationship between Professional Development and Effective School Leadership

There is strong empirical evidence supporting the positive correlation between PD programs and effective school leadership. A meta-analysis by Thurlings and den Brok (2017) found that well-designed PD significantly improves both instructional strategies and student outcomes.

In Rwanda, an impact evaluation study conducted by VVOB and partners revealed that head teachers who participated in PD programs demonstrated marked improvement in areas such as instructional supervision, school planning, and staff mentoring (Nguyen et al., 2024).

Likewise, Sibomana and Ndayambaje (2024) found that teachers who engaged in PD activities showed improved job performance, particularly in instructional delivery, classroom management, and assessment practices.

2.2.3 Challenges Affecting Implementation

Despite the evident benefits, several challenges hinder effective PD implementation. According to the Rwanda Education Board (2021), issues such as insufficient funding, lack of trained facilitators, and limited access to teaching resources continue to constrain PD delivery, particularly in rural schools.

Moreover, the National Teacher Continuous Professional Development Framework underscores the need for differentiated, evidence-based PD approaches that are responsive to teachers' needs and aligned with inclusive education goals (Rwanda Education Board, 2019).

III. METHODOLOGY

3.1 Research Design

A correlation research design was selected to explore the relationships between head teachers' participation in professional development (PD) programs and the subsequent improvements in their leadership practices, particularly in areas such as instructional leadership and resource management.

3.2 Sample Size and Sampling Procedure

The target population for this research consisted of 70 head teachers from secondary schools in Rubavu District who have engaged in PD programs. From this population, a sample size of 60 head teachers was selected using purposive sampling. This approach was chosen to ensure that the participants had relevant experience and insights into the impact of PD on their leadership practices.

3.3 Data Collection Methods

Data collection was conducted through a combination of structured questionnaires and semi-structured interviews. The questionnaires were designed to gather quantitative data on various aspects of leadership, while the semi-structured interviews aimed to provide qualitative insights into the head teachers' experiences with PD programs. This mixed-methods approach allowed for a more comprehensive understanding of the effects of PD on leadership practices.

3.4 Data Analysis Techniques

For data processing, the quantitative data collected from the questionnaires were analyzed using SPSS (Statistical Package for the Social Sciences), which facilitated statistical analysis and interpretation. The qualitative data obtained from the interviews were subjected to thematic analysis, enabling the identification of key themes and patterns related to the head teachers' experiences and perceptions of PD programs.

3.5 Ethical Considerations

Ethical considerations were a priority throughout the research process. Participants were assured of their confidentiality, and their participation was entirely voluntary. Informed consent was obtained from all participants, ensuring that they were fully aware of the study's purpose and their rights as participants. This commitment to ethical standards helped to foster trust and transparency in the research process.

IV. FINDINGS & DISCUSSION

4.1 Response Rate

The study achieved a full response rate of 100%, meaning all 60 targeted participants completed the survey. This excellent participation rate enhances the reliability and representativeness of the data, reducing the risk of non-response bias.



Table 1
Response Rate

Sampled	Responded	Response Rate (%)
60	60	60/60*100=100

4.2 The Study Findings

This section summarizes the key findings of the study, organized by research objectives, and provides insights into professional development programs, leadership effectiveness, and challenges faced by head teachers. The analysis employs descriptive statistics, including frequencies, percentages, means, and standard deviations, to illustrate observed trends, alongside inferential statistics to support the findings.

4.2.1 Professional Development Programs Available for Head Teachers

Diploma in Effective School Leadership (DEL) by REB and VVOB: The Diploma in Effective School Leadership (DEL), implemented by REB in collaboration with VVOB, aims to enhance head teachers' leadership skills. This program equips school leaders with practical knowledge in instructional leadership, school management, and decision-making. Findings indicate that the DEL program significantly improves head teachers' abilities to create effective learning environments, foster collaboration, and implement school improvement strategies, thereby contributing to their professional growth and enhancing overall school leadership practices.

Table 2
Diploma in Effective School Leadership (DEL) by REB and VVOB (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
The DEL program provided me with relevant skills for improving my leadership practices.	0 (0)	2 (3.3)	5 (8.3)	27 (45)	26 (43.3)	4.40	0.69
The DEL program helped me improve my school's instructional leadership.	0 (0)	2 (3.3)	5 (8.3)	29 (48.3)	24 (40)	4.36	0.66
The content of the DEL program was practical and applicable to my daily responsibilities.	0 (0)	2 (3.3)	5 (8.3)	28 (46.7)	25 (41.7)	4.38	0.69
The DEL program addressed the unique challenges faced by head teachers in Rwanda.	1 (1.7)	3 (5)	7 (11.7)	27 (45)	22 (36.7)	4.30	0.76
The DEL program enhanced my ability to engage with teachers and other school staff effectively.	2 (3.3)	3 (5)	7 (11.7)	26 (43.3)	22 (36.7)	4.28	0.82
The DEL program provided me with useful strategies to manage school resources.	0 (0)	2 (3.3)	4 (6.7)	28 (46.7)	26 (43.3)	4.41	0.67

The findings on the Diploma in Effective School Leadership (DEL) program reveal its significant impact on enhancing the leadership skills of head teachers, with a mean score of 4.40, indicating that the majority of respondents found the program beneficial for improving their leadership practices. Notably, 88.4% agreed that the program content was practical and applicable to their daily responsibilities, while 90% reported gaining useful strategies for managing school resources. Additionally, 88.3% noted improvements in their instructional leadership capabilities. However, some respondents felt the program could better address the unique challenges faced by head teachers in Rwanda, suggesting a need for more context-specific content. The qualitative data collected through interviews with head teachers revealed key themes related to the effectiveness of the Diploma in Effective School Leadership (DEL) program. The main themes identified included practical applicability of the program, enhanced instructional leadership, and the need for localized content. For instance, one head teacher remarked:

"The DEL program has been instrumental in shaping my leadership skills. Through this training, I have learned how to support teachers effectively, implement strategic plans, and improve instructional leadership. However, I feel that the program could be more focused on practical case studies that reflect our unique challenges in Rwanda."

This insight reflects the broader pattern in the qualitative data, where participants valued the DEL program but also pointed to a gap in addressing the specific realities of Rwandan school leadership. These qualitative findings reinforce the quantitative results, supporting a mixed-methods triangulation of the data.

The findings on the DEL program indicate it has been highly beneficial in enhancing the leadership skills of head teachers. With a mean score of 4.40 and a standard deviation of 0.69, most respondents agreed that the program equipped them with relevant leadership competencies. These findings align with Lumby (2019), who found that



structured leadership training improves decision-making and instructional capacity in schools. Similarly, Bush and Glover (2003) emphasized that such programs lead to measurable improvements in school-wide leadership practices.

Regarding content relevance, 88.4% of respondents agreed that the DEL program provided practical and applicable knowledge for their daily tasks (mean = 4.38, SD = 0.69). This echoes Leithwood et al. (2020), who stressed that hands-on strategies are more impactful than theoretical models in leadership training.

The program’s influence on instructional leadership was also significant, with 88.3% of respondents reporting improvements (mean = 4.36, SD = 0.66). This supports Robinson (2011), who identified a strong link between leadership training and enhanced teaching and learning outcomes. Concerning school resource management, 90% of respondents indicated the program helped them develop effective strategies (mean = 4.41, SD = 0.67). This corroborates Harris & Jones (2019), who found that leadership programs are essential in strengthening financial and resource management capacities.

However, while 81.7% of respondents felt that the program addressed Rwanda-specific challenges, 11.7% were neutral and 6.7% disagreed (mean = 4.30, SD = 0.76). This suggests a partial disconnect between program content and contextual realities. DeJaeghere and Baxter (2014) argued for the need to adapt leadership development content to fit local educational settings, which is echoed in participants’ qualitative feedback. Finally, 80% of respondents reported that the DEL program enhanced their collaboration with teachers and staff (mean = 4.28, SD = 0.82), consistent with Hallinger and Wang (2015), who found that effective leadership programs foster collaborative school cultures. *Head Teacher Capacity Building Workshops*: Head Teacher Capacity Building Workshops are professional development programs aimed at enhancing school leadership and management skills.

Table 1
Head Teacher Capacity Building Workshops (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
The workshops I attended provided practical strategies for managing school resources effectively.	1 (1.7)	2 (3.3)	6 (10)	30 (50)	21 (35)	4.38	0.69
The workshops improved my ability to assess and improve teaching and learning in my school.	1 (1.7)	3 (5)	5 (8.3)	28 (46.7)	23 (38.3)	4.38	.69
The content covered in the workshops was relevant to the challenges I face as a head teacher.	0 (0%)	1 (1.7)	4 (6.7)	26 (43.3)	29 (48.3)	4.36	.73
I was able to apply the learning from the workshops directly to improve school management.	0 (0)	2 (3.3)	3 (5)	28 (46.7)	27 (45)	4.50	.56
The workshops provided a collaborative environment that facilitated peer learning.	0 (0)	1 (1.7)	2 (3.3)	24 (40)	33 (55)	4.43	.56
The workshops were well-structured and aligned with my professional development needs.	0 (0)	2 (3.3)	4 (6.7)	26 (43.3)	28 (46.7)	4.53	.50

The findings in Table 3 indicate that Head Teacher Capacity Building Workshops have been instrumental in enhancing the leadership competencies of school administrators. A majority of respondents agreed that these workshops provided practical strategies for managing school resources effectively, with a mean score of 4.38 (SD = 0.69). This aligns with previous studies, such as a report by UNESCO (2017), which emphasized that well-structured leadership workshops contribute significantly to improving school management and operational efficiency.

Moreover, the workshops were perceived to be effective in improving instructional leadership, as indicated by a mean score of 4.38 (SD = 0.69). These findings are supported by a study by Darling-Hammond et al. (2019), which highlighted that continuous professional development enhances head teachers’ ability to assess and improve teaching practices. The relevance of workshop content to the challenges faced by head teachers was also highly rated (\bar{x} = 4.36, SD = 0.73), affirming findings from Bush and Glover (2003), who noted that professional development programs must be context-specific to yield meaningful outcomes.

Additionally, respondents expressed a strong agreement (\bar{x} = 4.50, SD = 0.56) that they could directly apply the knowledge gained to improve school management. This supports the argument by Harris and Jones (2018) that professional development should emphasize practical, hands-on learning for immediate impact. The workshops also fostered collaboration among head teachers (\bar{x} = 4.43, SD = 0.56), reinforcing the importance of peer learning, as suggested by Leithwood et al. (2019), who found that networking and experience-sharing among school leaders lead to improved decision-making.

From the interviews, a head teacher noted that



"Capacity-building workshops have been among the most impactful programs for my leadership. They provide actionable strategies and create opportunities to learn from other head teachers, making them invaluable for professional growth."

This qualitative input further validates the survey findings, emphasizing that structured and well-targeted professional development workshops play a critical role in strengthening school leadership. This testimony aligns with the literature on adult learning, which suggests that practical and collaborative learning environments significantly enhance leadership effectiveness (Steyn, 2022).

Head Teachers' Peer Learning Communities (PLCs): The third indicator of professional development programs available for headteachers under this study is Head Teachers' Peer Learning Communities (PLCs).

Table 2
Head Teachers' Peer Learning Communities (PLCs) (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
The PLCs have allowed me to share best practices and collaborate with other head teachers to improve my leadership.	1 (1.7)	2 (3.3)	6 (10)	28 (46.7)	23 (38.3)	4.40	0.66
The PLCs have helped me develop strategies to address common leadership challenges in schools.	0 (0)	1 (1.7)	4 (6.7)	27 (45)	28 (46.7)	4.46	0.56
The PLCs provide a platform to discuss leadership issues and share experiences with other head teachers.	0 (0)	1 (1.7)	3 (5)	26 (43.3)	30 (50)	4.48	0.56
Through PLCs, I have gained new insights into improving school performance and student outcomes.	2 (3.3)	3 (5)	7 (11.7)	27 (45)	21 (35)	4.28	0.73
The PLCs have fostered a sense of professional community and collaboration among head teachers.	2 (3.3)	3 (5)	6 (10)	24 (40)	25 (41.7)	4.38	0.76
The PLCs have improved my ability to manage change and implement reforms effectively in my school.	3 (5)	5 (8.3)	8 (13.3)	23 (38.3)	21 (35)	4.15	0.91

The findings presented in Table 4 illustrate the significance of Head Teachers' Peer Learning Communities (PLCs) in enhancing school leadership and management. A substantial proportion of respondents (85%) agreed or strongly agreed that PLCs have enabled them to share best practices and collaborate with other head teachers, with a mean score of 4.40 (SD = 0.66). This aligns with research by Harris and Jones (2019), who found that peer learning communities significantly contribute to professional growth by facilitating knowledge exchange among school leaders.

Furthermore, 91.7% of the respondents acknowledged that PLCs helped them develop strategies to address leadership challenges (\bar{x} = 4.46, SD = 0.56). This is consistent with Leithwood et al. (2020), who emphasized that peer networks enhance problem-solving skills and leadership effectiveness. Similarly, 93.3% of the respondents agreed that PLCs provide a platform to discuss leadership issues and share experiences (\bar{x} = 4.48, SD = 0.56), supporting the argument by Nguyen and Ng (2021) that structured peer collaboration fosters innovative school leadership practices.

In terms of improving school performance and student outcomes, 80% of head teachers agreed or strongly agreed that PLCs have provided valuable insights (\bar{x} = 4.28, SD = 0.73). This reflects findings from Özdemir et al. (2022), who highlighted that school leaders engaged in professional learning communities tend to implement evidence-based strategies that positively impact student learning. Moreover, 81.7% of the respondents indicated that PLCs foster a sense of professional community and collaboration (\bar{x} = 4.38, SD = 0.76), reinforcing studies such as Timperley (2008), which suggest that collegial relationships among school leaders lead to shared accountability and improved school governance.

Lastly, while the ability of PLCs to improve change management and reform implementation was slightly lower, with 73.3% agreement (\bar{x} = 4.15, SD = 0.91), it still demonstrates the role of peer networks in supporting adaptive leadership. Fullan (2019) argues that professional learning communities are essential in navigating educational reforms, as they provide school leaders with the confidence and collective expertise needed to drive change effectively.

School Leadership Forums and Conferences: School Leadership Forums and Conferences provide head teachers with opportunities to engage with educational experts, policymakers, and peers to discuss emerging trends, challenges, and best practices in school leadership.



Table 3
School Leadership Forums and Conferences (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
The forums and conferences have provided valuable insights into the latest trends in school leadership.	3 (5)	4 (6.7)	7 (11.7)	26 (43.3)	20 (33.3)	4.30	0.82
The forums and conferences allowed me to network and collaborate with other educational leaders.	1 (1.7)	2 (3.3)	6 (10)	27 (45)	24 (40)	4.41	0.67
The forums have given me access to expert advice on improving school management practices.	3 (5)	4 (6.7)	7 (11.7)	26 (43.3)	20 (33.3)	4.26	0.82
The conferences have helped me stay updated on new policies and strategies in education.	2 (3.3)	4 (6.7)	7 (11.7)	26 (43.3)	21 (35)	4.31	0.79
The forums have equipped me with practical tools and resources for effective school leadership.	1 (1.7)	3 (5)	6 (10)	28 (46.7)	22 (36.7)	4.33	0.70
The leadership forums and conferences have strengthened my confidence in leading my school.	3 (5)	5 (8.3)	8 (13.3)	24 (40)	20 (33.3)	4.25	0.85

School leadership forums and conferences play a crucial role in enhancing the professional development of head teachers by providing access to expert knowledge, networking opportunities, and policy updates. The findings from Table 5 indicate that a majority of head teachers find these forums beneficial. Specifically, 76.6% of respondents (Agree = 43.3%, Strongly Agree = 33.3%) stated that these forums provided valuable insights into the latest trends in school leadership ($\bar{x} = 4.30$, $SD = 0.82$). Similarly, 85% (Agree = 45%, Strongly Agree = 40%) acknowledged that these conferences facilitated networking and collaboration with other educational leaders ($\bar{x} = 4.41$, $SD = 0.67$). These findings align with studies such as Harris and Jones (2019), which highlight that professional networking among school leaders enhances the sharing of best practices and improves leadership effectiveness.

Additionally, 76.6% of respondents agreed that these forums gave them access to expert advice on school management practices ($\bar{x} = 4.26$, $SD = 0.82$), supporting claims from Lumby and Foskett (2019) that leadership training improves decision-making in educational institutions. Moreover, 78.3% of head teachers agreed that these conferences helped them stay updated on new policies and strategies ($\bar{x} = 4.31$, $SD = 0.79$). This is consistent with the work of Bush (2007), who found that regular participation in leadership development programs enables head teachers to adapt effectively to policy changes.

Furthermore, 83.4% of respondents agreed that these forums equipped them with practical leadership tools ($\bar{x} = 4.33$, $SD = 0.70$), reinforcing the argument by Schleicher (2012) that well-structured leadership programs lead to improved school governance. Lastly, 73.3% of head teachers reported increased confidence in leading their schools due to these events ($\bar{x} = 4.25$, $SD = 0.85$), echoing findings from Pont et al. (2008), which emphasize the role of leadership forums in boosting self-efficacy among school leaders.

In the interviews, head teachers provided valuable insights into their experiences with school leadership forums and conferences. One head teacher shared,

The conferences have been a great opportunity to learn from other educational leaders and stay updated on new strategies. However, the challenge is accessibility, especially for those of us in rural areas. Travel and accommodation costs can sometimes limit participation, which is unfortunate because the knowledge gained is highly beneficial for school leadership.”

Another head teacher emphasized,

“The forums have allowed me to collaborate with peers, share ideas, and discuss leadership challenges. While I have gained confidence and useful strategies, the forums are not always easy to access due to logistical and financial constraints.”

This sentiment aligns with the findings of Darling-Hammond et al. (2017), who noted that barriers such as funding and travel logistics often restrict school leaders from fully engaging in professional development activities.

4.2.2 Effective School Leadership

Creating a Strategic Direction for the School: Creating a strategic direction for the school is a fundamental aspect of effective school leadership. It involves setting a clear vision, defining long-term goals, and establishing actionable plans to improve school performance.



Table 4
Creating a Strategic Direction for the School (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
I set a clear and compelling vision for the school’s future.	3 (5)	4 (6.7)	7 (11.7)	26 (43.3)	20 (33.3)	4.3	0.8
I develop strategic goals and plans that align with the school’s mission.	1 (1.7)	2 (3.3)	6 (10)	27 (45)	24 (40)	4.38	0.73
I regularly communicate the school’s vision and goals to staff, students, and parents.	2 (3.3)	4 (6.7)	7 (11.7)	26 (43.3)	21 (35)	4.31	0.79
I monitor the school’s progress toward achieving strategic goals.	1 (1.7)	2 (3.3)	5 (8.3)	28 (46.7)	24 (40)	4.43	0.64
I foster a culture of high expectations for both staff and students.	1 (1.7)	3 (5)	7 (11.7)	27 (45)	22 (36.7)	4.35	0.73
I involve staff and stakeholders in setting the school’s strategic direction.	1 (1.7)	2 (3.3)	6 (10)	28 (46.7)	23 (38.3)	4.36	0.68

The ability of head teachers to create a strategic direction for their schools is essential in ensuring effective leadership and academic success. The results from Table 6 indicate that most head teachers agree or strongly agree that they set a clear and compelling vision for their schools (76.6%, $\bar{x} = 4.3$, $SD = 0.8$) and develop strategic goals aligned with the school’s mission (85%, $\bar{x} = 4.38$, $SD = 0.73$). Similarly, 78.3% of respondents affirmed that they regularly communicate the school’s vision and goals to staff, students, and parents ($\bar{x} = 4.31$, $SD = 0.79$), while 86.7% actively monitor their school's progress toward achieving strategic goals ($\bar{x} = 4.43$, $SD = 0.64$). Additionally, 81.7% of head teachers foster a culture of high expectations ($\bar{x} = 4.35$, $SD = 0.73$), and 85% involve staff and stakeholders in setting the strategic direction of the school ($\bar{x} = 4.36$, $SD = 0.68$). These findings suggest that head teachers play a crucial role in guiding their schools towards a clear and structured vision.

Studies have highlighted the importance of strategic leadership in education. For instance, Bush and Glover (2003) emphasized that successful school leaders establish a clear vision, which enhances staff motivation and student performance. Similarly, Leithwood et al. (2020) found that schools with strong strategic leadership exhibit improved academic outcomes due to effective goal-setting and progress monitoring. Moreover, a study by Fullan (2021) reinforced that a shared vision fosters collaboration among teachers, students, and the community, leading to a positive school culture.

The interview with one head teacher further supports these findings. When asked about the influence of professional development programs on their ability to create a strategic direction, the head teacher stated:

"Professional development programs, particularly leadership workshops and training, have significantly enhanced my ability to set clear goals and communicate the school's vision effectively. Through these programs, I have learned how to align our school's objectives with national education policies and involve teachers and parents in decision-making. This collaborative approach has strengthened our school's strategic direction and improved overall performance."

These insights align with previous research indicating that leadership training positively impacts school governance and planning (Day & Sammons, 2016). Ultimately, professional development plays a pivotal role in equipping head teachers with the necessary skills to create and sustain a strategic vision for their schools.

Leading Learning and Teaching: Effective school leadership extends beyond administrative functions to actively guiding the teaching and learning process.



Table 5
Leading Learning and Teaching (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
I prioritize instructional quality as the core focus of school leadership.	2 (3.3)	4 (6.7)	7 (11.7)	26 (43.3)	21 (35)	4.33	0.79
I support teachers in implementing effective teaching practices.	1 (1.7)	3 (5)	6 (10)	27 (45)	23 (38.3)	4.40	0.74
I ensure that professional development is aligned with instructional improvement needs.	1 (1.7)	2 (3.3)	6 (10)	28 (46.7)	23 (38.3)	4.41	0.64
I monitor student learning outcomes and use data to inform teaching strategies.	1 (1.7)	3 (5)	6 (10)	27 (45)	23 (38.3)	4.40	0.71
I encourage collaboration among teachers to share best practices.	1 (1.7)	2 (3.3)	5 (8.3)	28 (46.7)	24 (40)	4.46	0.62
I promote innovative approaches to teaching and learning to improve student outcomes.	1 (1.7)	3 (5)	6 (10)	27 (45)	23 (38.3)	4.40	0.74

The findings from Table 7 indicate that head teachers play a crucial role in leading learning and teaching by prioritizing instructional quality, supporting teachers, and fostering collaboration. A significant proportion of respondents agreed or strongly agreed that they prioritize instructional quality as the core focus of their leadership (78.3%, $\bar{x} = 4.33$, $SD = 0.79$). This aligns with research by Hallinger and Wang (2015), who emphasized that effective school leadership is centered on improving instruction and ensuring high-quality teaching practices.

Supporting teachers in implementing effective teaching practices was also highly rated, with 83.3% of respondents agreeing or strongly agreeing ($\bar{x} = 4.40$, $SD = 0.74$). This finding is supported by Leithwood et al. (2022), who noted that instructional leadership significantly impacts teacher development and student learning. Additionally, ensuring that professional development aligns with instructional improvement needs was a key priority ($\bar{x} = 4.41$, $SD = 0.64$), reflecting the necessity of continuous teacher training. Similarly, a study by Bush and Glover (2003) found that professional development tailored to teachers' needs leads to enhanced instructional practices and improved student performance.

Moreover, a large majority of head teachers reported monitoring student learning outcomes and using data to inform teaching strategies (83.3%, $\bar{x} = 4.40$, $SD = 0.71$), highlighting the importance of data-driven decision-making. This is consistent with the findings of Robinson et al. (2011), who emphasized that effective school leaders use student performance data to refine teaching methods and drive school improvement. Encouraging collaboration among teachers to share best practices was another significant aspect ($\bar{x} = 4.46$, $SD = 0.62$), reinforcing the idea that collective professional learning contributes to instructional effectiveness (Timperley, 2008).

Additionally, promoting innovative teaching approaches was also well recognized ($\bar{x} = 4.40$, $SD = 0.74$). In the interview, a head teacher emphasized,

"Professional development programs have helped me guide teachers in adopting modern teaching strategies, such as learner-centered methods and technology integration. I also conduct regular observations and provide constructive feedback to ensure continuous instructional improvement."

This response underscores the importance of professional development in equipping school leaders with the skills to enhance teaching quality and ultimately improve student outcomes.

Managing the School as an Organization: Effective school leadership extends beyond instructional guidance to the overall management of the school as an organization.



Table 6
Managing the School as an Organization (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
I ensure the efficient use of financial, material, and human resources to support school operations.	3 (5)	4 (6.7)	7 (11.7)	26 (43.3)	20 (33.3)	4.31	0.81
I establish clear policies and procedures to guide the school’s daily activities.	1 (1.7)	2 (3.3)	5 (8.3)	28 (46.7)	24 (40)	4.46	0.65
I maintain transparency and accountability in managing school finances and resources.	2 (3.3)	4 (6.7)	7 (11.7)	26 (43.3)	21 (35)	4.33	0.79
I oversee the maintenance of school facilities to ensure a safe learning environment.	1 (1.7)	2 (3.3)	5 (8.3)	28 (46.7)	24 (40)	4.46	0.65
I develop and implement plans for continuous improvement in organizational management.	1 (1.7)	3 (5)	6 (10)	27 (45)	23 (38.3)	4.33	0.72
I ensure the school’s resources are allocated equitably to meet the needs of all students and staff.	3 (5)	4 (6.7)	7 (11.7)	26 (43.3)	20 (33.3)	4.26	0.82

The findings from Table 8 indicate that head teachers play a crucial role in managing schools as organizations, with a strong emphasis on resource allocation, transparency, and continuous improvement. The majority of respondents agreed or strongly agreed that they ensure the efficient use of financial, material, and human resources to support school operations (76.6%, $\bar{x} = 4.31$, $SD = 0.81$). Additionally, a significant number of headteachers reported that they establish clear policies and procedures to guide the school’s daily activities (86.7%, $\bar{x} = 4.46$, $SD = 0.65$), highlighting their commitment to structured governance.

Moreover, transparency and accountability in managing school finances and resources were acknowledged by 78.3% of the respondents ($\bar{x} = 4.33$, $SD = 0.79$), reflecting the importance of ethical leadership in school administration. The oversight of school facilities to ensure a safe learning environment was another area of strength, with 86.7% agreeing or strongly agreeing ($\bar{x} = 4.46$, $SD = 0.65$). The results also indicate a proactive approach to organizational management, as 83.3% of respondents ($\bar{x} = 4.33$, $SD = 0.72$) reported developing and implementing continuous improvement plans. However, while resource allocation was rated positively, a slightly lower mean score ($\bar{x} = 4.26$, $SD = 0.82$) suggests that challenges may exist in ensuring equity in distribution.

These findings align with recent studies emphasizing the role of school leaders in effective organizational management. Research by Leithwood et al. (2019) underscores that well-managed schools exhibit strong financial stewardship and systematic planning, leading to improved institutional performance. Similarly, Bush (2007) highlights that transparent decision-making and equitable resource distribution enhance stakeholder trust and overall school effectiveness.

In the interview, one headteacher shared insights on how professional development programs have improved their capacity to manage the school as an organization:

“These programs have significantly enhanced my ability to allocate resources wisely and maintain transparency. I have learned best practices for budgeting and financial reporting, ensuring that both staff and parents have confidence in how school funds are used. Additionally, training on policy implementation has helped me establish clearer guidelines for school operations, which has improved efficiency and accountability.”

The data suggests that professional development programs play a vital role in equipping headteachers with the skills needed to manage schools effectively, ensuring financial responsibility, policy adherence, and a conducive learning environment.

Working with Parents and the Wider Community: Working with Parents and the Wider Community is a crucial indicator of effective school leadership, emphasizing collaboration between schools, families, and the broader community.



Table 7
Working with Parents and the Wider Community (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
I actively engage parents in supporting their children’s education.	1 (1.7)	3 (5)	6 (10)	28 (46.7)	22 (36.7)	4.35	0.70
I build partnerships with community organizations to enhance the school’s resources.	1 (1.7)	2 (3.3)	5 (8.3)	27 (45)	25 (41.7)	4.45	0.62
I communicate regularly with stakeholders about the school’s goals and achievements.	1 (1.7)	3 (5)	6 (10)	28 (46.7)	22 (36.7)	4.36	0.68
I involve parents and community members in decision-making processes.	2 (3.3)	4 (6.7)	7 (11.7)	26 (43.3)	21 (35)	4.30	0.74
I organize activities that foster collaboration between the school and the wider community.	1 (1.7)	2 (3.3)	5 (8.3)	27 (45)	25 (41.7)	4.48	0.62
I seek input from stakeholders to address challenges and improve school performance.	1 (1.7)	3 (5)	6 (10)	28 (46.7)	22 (36.7)	4.35	0.70

The data presented in Table 9 suggests that school leaders are effectively engaging with parents, the wider community, and educational authorities to strengthen stakeholder relationships. A significant portion of respondents, 83.4%, agreed or strongly agreed that they actively engage parents in supporting their children’s education ($\bar{x} = 4.35$, $SD = 0.70$). This aligns with Epstein’s (2018) findings, which emphasize the critical role of parental involvement in student achievement. Furthermore, the results highlight that school leaders actively build partnerships with community organizations to enhance school resources, with 86.7% agreeing or strongly agreeing ($\bar{x} = 4.45$, $SD = 0.62$). This finding is in line with Goodall (2018), who asserts that community involvement in school activities positively impacts student outcomes and school development.

Another important aspect is the regular communication between school leaders and stakeholders. 83.4% of respondents reported that they frequently communicate school goals and achievements to stakeholders ($\bar{x} = 4.36$, $SD = 0.68$). Research by Harris and Jones (2019) suggests that transparent communication is key in fostering trust and shared responsibility between schools and their communities. Additionally, 78.3% of respondents reported involving parents and community members in decision-making processes ($\bar{x} = 4.30$, $SD = 0.74$), which reflects the participatory leadership model advocated by Leithwood et al. (2019), where shared decision-making is essential for school improvement.

The survey also highlights that 86.7% of school leaders organize activities that foster collaboration between the school and the wider community ($\bar{x} = 4.48$, $SD = 0.62$), a practice supported by Jeynes (2021), who emphasizes the importance of school-community collaboration in providing additional support to students. Furthermore, 83.4% of respondents reported seeking input from stakeholders to address school challenges and improve performance ($\bar{x} = 4.35$, $SD = 0.70$). Ainscow and Viola (2023) advocates for this approach, arguing that involving stakeholders in addressing school challenges leads to more effective improvement strategies and enhances the overall quality of education.

In the interview with the headteacher, they highlighted the positive impact of professional development programs on their ability to engage stakeholders. They noted,

“Professional development programs have helped me develop structured approaches to engaging parents and the community. For example, through leadership training, I learned how to implement more inclusive parent-teacher meetings where parents actively contribute ideas rather than just receive information. Additionally, workshops on school-community partnerships have enabled me to build stronger collaborations with local organizations, securing resources and sponsorships for school projects. Such initiatives have improved trust and transparency, ultimately fostering a more engaged school community.”

This testimonial underscores the value of professional development programs in improving the capacity of school leaders to effectively engage with all stakeholders. The data confirms that school leaders are successfully building partnerships with parents, the community, and educational authorities. These efforts are further strengthened by professional development programs, which enhance communication, collaboration, and transparency, leading to a more engaged and supportive school environment. These findings are consistent with existing literature, which supports the importance of stakeholder involvement in enhancing school leadership and improving educational outcomes.



4.2.3 Challenges Affecting the Implementation of Professional Development Programs

The implementation of professional development programs faces several challenges that hinder their effectiveness. More details are in Table 10 below.

Table 8

Challenges Affecting the Implementation of Professional Development Programs (n=60)

Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	\bar{x}	Std. D
	F (%)	F (%)	F (%)	F (%)	F (%)		
Insufficient funding limits the accessibility of professional development programs	1 (1.7)	2 (3.3)	6 (10)	28 (46.7)	23 (38.3)	4.40	0.64
The heavy workload of head teachers makes it difficult to fully engage in professional development programs.	1 (1.7)	2 (3.3)	5 (8.3)	27 (45)	25 (41.7)	4.45	0.62
There is a lack of follow-up support to ensure the effective implementation of skills acquired in professional development programs.	3 (5)	6 (10)	8 (13.3)	24 (40)	19 (31.7)	4.11	1.02
The duration of professional development programs is often too short to cover all necessary topics	1 (1.7)	3 (5)	6 (10)	28 (46.7)	22 (36.7)	4.33	0.68
Limited availability of professional development programs in rural areas restricts participation in such locations.	2 (3.3)	3 (5)	7 (11.7)	27 (45)	21 (35)	4.26	0.73
Professional development programs do not always address the specific challenges faced by head teachers in their respective schools.	1 (1.7)	2 (3.3)	5 (8.3)	27 (45)	25 (41.7)	4.46	0.62
Poor coordination and communication between education authorities and head teachers hinder participation in professional development programs.	1 (1.7)	2 (3.3)	5 (8.3)	26 (43.3)	26 (43.3)	4.48	0.62
The content of some professional development programs is outdated and not aligned with current educational needs and policies.	1 (1.7)	3 (5)	6 (10)	25 (41.7)	25 (41.7)	4.45	0.67
A lack of experienced facilitators reduces the effectiveness of professional development programs.	1 (1.7)	4 (6.7)	7 (11.7)	26 (43.3)	22 (36.7)	4.33	0.77
There is limited collaboration during professional development programs, which hinders peer learning opportunities.	2 (3.3)	3 (5)	6 (10)	27 (45)	22 (36.7)	4.31	0.74

The findings in Table 10 reveal several key challenges affecting the implementation of professional development (PD) programs for head teachers. One of the most significant barriers is insufficient funding, with 85% of respondents agreeing or strongly agreeing that financial constraints limit access to PD programs ($\bar{x} = 4.40$, $SD = 0.64$). This finding aligns with research by Darling-Hammond et al. (2019), which highlights that inadequate financial support often prevents school leaders from attending high-quality training programs. Similarly, research by UNESCO (2017) emphasizes that limited investment in PD leads to unequal access, particularly in low-resource settings.

Another major challenge is the heavy workload of head teachers, which hinders their ability to fully engage in PD programs. A total of 86.7% of respondents agreed or strongly agreed that their responsibilities make it difficult to attend and apply the skills learned ($\bar{x} = 4.45$, $SD = 0.62$). This is consistent with the findings of Pont et al. (2008), who argue that head teachers often struggle to balance administrative duties with professional growth opportunities, reducing the effectiveness of PD initiatives.

A lack of follow-up support was also identified as a key issue, with 71.7% of respondents agreeing or strongly agreeing that there is inadequate post-training assistance to ensure the effective implementation of acquired skills ($\bar{x} = 4.11$, $SD = 1.02$). Guskey (2019) supports this finding, stating that PD programs that lack follow-up mechanisms fail to translate into meaningful improvements in school leadership and instructional practices. Additionally, the duration of PD programs is often too short to cover all necessary topics, as indicated by 83.4% of respondents ($\bar{x} = 4.33$, $SD = 0.68$). This aligns with research by Kraft and Papay (2022), which suggests that short-term training programs fail to provide sufficient depth, leading to superficial learning experiences rather than substantial skill development.

Geographical barriers also play a role in restricting access to PD programs, particularly in rural areas. A total of 80% of respondents agreed or strongly agreed that limited availability of training in remote locations limits participation ($\bar{x} = 4.26$, $SD = 0.73$). According to Komba and Mwandanji (2008), rural educators often face logistical and



infrastructural challenges that prevent them from attending professional training sessions. Another concern raised by head teachers is that PD programs do not always address their specific challenges, with 86.7% of respondents agreeing or strongly agreeing with this statement ($\bar{x} = 4.46, SD = 0.62$). This supports the argument made by Timperley (2008), who states that generic PD programs fail to meet the diverse needs of school leaders, leading to limited practical application.

Poor coordination and communication between education authorities and head teachers were also noted as barriers, with 86.6% of respondents agreeing or strongly agreeing ($\bar{x} = 4.48, SD = 0.62$). Research by OECD (2012) highlights that weak communication between policymakers and educators results in ineffective implementation of PD programs and low participation rates. Another challenge highlighted is the outdated content of some PD programs, with 83.4% of respondents agreeing or strongly agreeing that training does not always align with current educational policies and needs ($\bar{x} = 4.45, SD = 0.67$). This is consistent with findings by Avalos (2011), which suggest that PD programs must be continuously updated to reflect new teaching methodologies, leadership strategies, and policy changes.

The effectiveness of PD programs is also compromised by a lack of experienced facilitators, as 80% of respondents noted ($\bar{x} = 4.33, SD = 0.77$). This finding is reinforced by Villegas-Reimers (2003), who emphasizes the need for highly skilled trainers with expertise in adult learning and school leadership to ensure the success of PD initiatives. Lastly, limited collaboration during PD programs was highlighted as a concern by 81.7% of respondents ($\bar{x} = 4.31, SD = 0.74$). This aligns with the research of Kennedy (2023), which states that collaborative learning enhances the effectiveness of PD by allowing peer exchange, shared experiences, and collective problem-solving.

In the interview, the head teacher reinforced these findings by stating: *“One of the biggest challenges I have faced in accessing professional development is the lack of financial support. Many training sessions require travel and accommodation expenses that are not covered by the education authorities. Additionally, my heavy workload as a head teacher makes it difficult to attend lengthy training programs, as I have to manage school operations daily. Even when I manage to attend, there is little follow-up support to help implement what I have learned. Sometimes, the content of these programs does not fully address the specific challenges we face in our schools. Moreover, there is often poor coordination between education authorities and schools, leading to missed opportunities for valuable training sessions.”*

The data and interview responses indicate that while PD programs play a crucial role in enhancing school leadership, their implementation is hindered by financial constraints, workload pressures, limited accessibility, inadequate follow-up, outdated content, and poor coordination. Addressing these challenges through improved funding, targeted training, better communication, and structured follow-up support could significantly enhance the effectiveness of professional development for head teachers.

4.2.4 The Relationship between Professional Development Programs and the Effective School Leadership

Correlation analysis was employed to assess the relationship between participation in these programs and core indicators of effective leadership, while regression analysis evaluated whether engagement in professional development significantly predicts leadership effectiveness.

Table 9
Correlation Analysis of Variables (n=60)

		Creating a Strategic Direction for the School	Leading Learning and Teaching	Managing the School as an Organization	Working with Parents and the Wider Community
Diploma in Effective School Leadership (DEL) by REB and VVOB	Pearson Correlation	.908**	.892**	.851**	.893**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	60	60	60	60
Head Teacher Capacity Building Workshops	Pearson Correlation	.843**	.921**	.879**	.877**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	60	60	60	60
Head Teachers' Peer Learning Communities (PLCs)	Pearson Correlation	.899**	.961**	.928**	.920**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	60	60	60	60
School Leadership Forums and Conferences	Pearson Correlation	.900**	.816**	.814**	.908**
	Sig. (2-tailed)	.000	.000	.000	.000
	N	60	60	60	60

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



The findings presented in Table 11 highlight the positive impact of structured leadership training on school management and educational outcomes. The correlation analysis reveals a strong and statistically significant relationship between participation in professional development programs and effective school leadership across all key indicators. The Diploma in Effective School Leadership (DEL) shows the highest correlation with Creating a Strategic Direction for the School ($r = .908, p < .001$) and also demonstrates strong associations with Leading Learning and Teaching ($r = .892$), Managing the School as an Organization ($r = .851$), and Working with Parents and the Wider Community ($r = .893$). Similarly, Head Teacher Capacity Building Workshops and Head Teachers’ Peer Learning Communities (PLCs) exhibit significant positive correlations with various leadership indicators, particularly enhancing instructional leadership and stakeholder engagement.

Table 10
Overall Correlations (n=60)

		Effective School Leadership
Professional Development Programs	Pearson Correlation	.986**
	Sig. (2-tailed)	.000
	N	60

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

The correlation analysis reveals a strong positive relationship ($r = .986, p < .001$) between Professional Development Programs and Effective School Leadership, indicating that increased participation in these programs is closely linked to enhanced leadership effectiveness in schools. This near-perfect correlation suggests that when head teachers engage in structured training, workshops, and peer learning communities, their abilities to strategically direct schools, lead teaching and learning, manage operations, and collaborate with parents significantly improve.

4.3 Regression Analysis

Table 11
Model Summary (n=60)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.992 ^a	.983	.982	.07219

a. Predictors: (Constant), School Leadership Forums and Conferences, Head Teacher Capacity Building Workshops, Head Teachers’ Peer Learning Communities (PLCs), Diploma in Effective School Leadership (DEL) by REB and VVOB

The regression analysis results indicate a strong relationship between Professional Development Programs and Effective School Leadership, with an R-value of 0.992 reflecting an exceptionally high correlation. The R Square value of 0.983 shows that 98.3% of the variance in effective school leadership is explained by professional development initiatives, including the Diploma in Effective School Leadership (DEL), Head Teacher Capacity Building Workshops, Peer Learning Communities (PLCs), and School Leadership Forums & Conferences. Additionally, the low Standard Error of the Estimate (0.07219) suggests precise predictions, reinforcing the conclusion that investing in professional development programs significantly enhances school leadership effectiveness and highlights the importance of continuous capacity-building initiatives for head teachers.

Table 12
Analysis of Variance (ANOVA) (n=60)

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.722	4	4.180	802.257	.000 ^b
	Residual	.287	55	.005		
	Total	17.008	59			

a. Dependent Variable: Effective School Leadership

b. Predictors: (Constant), School Leadership Forums and Conferences, Head Teacher Capacity Building Workshops, Head Teachers’ Peer Learning Communities (PLCs), Diploma in Effective School Leadership (DEL) by REB and VVOB

The ANOVA results presented in Table 14 confirm the statistical significance of the regression model in predicting Effective School Leadership based on Professional Development Programs. The F-value (802.257) is notably high, indicating that the independent variables (professional development programs) collectively have a significant impact on school leadership effectiveness. The p-value (Sig. = 0.000) is well below the 0.01 threshold, meaning that the model is statistically significant at the 99% confidence level. This implies that the relationship between Professional Development Programs and Effective School Leadership is not due to chance. Furthermore, the Sum of Squares for Regression (16.722) accounts for almost the entire Total Sum of Squares (17.008), while the Residual Sum of Squares



(0.287) is minimal. This suggests that the model explains almost all the variability in effective school leadership, leaving little unexplained variance.

Table 13
Regression Coefficients (n=60)

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.159	.086		1.839	.071
	Diploma in Effective School Leadership (DEL) by REB and VVOB	.130	.046	.142	2.803	.007
	Head Teacher Capacity Building Workshops	.152	.054	.140	2.820	.007
	Head Teachers' Peer Learning Communities (PLCs)	.511	.047	.539	10.841	.000
	School Leadership Forums and Conferences	.174	.031	.215	5.548	.000

a. Dependent Variable: Effective School Leadership

The regression analysis presented in Table 15 highlights the significant impact of various professional development programs on effective school leadership. Notably, Head Teachers' Peer Learning Communities (PLCs) emerged as the most influential predictor, with a standardized coefficient (β) of 0.539 and a highly significant p-value ($p < 0.001$). This finding underscores the importance of collaborative peer learning in enhancing leadership practices. Supporting this, a study by Meyer and Richter (2024) demonstrated that principals participating in an intensive 18-month professional development program reported significant improvements in leadership practices, which were associated with positive changes in school leadership dynamics and student achievement.

School Leadership Forums and Conferences also showed a substantial positive effect on leadership effectiveness ($\beta = 0.215, p < 0.001$). These forums provide platforms for networking and sharing best practices, which are crucial for leadership development. Research by Darling-Hammond et al. (2017) indicates that high-quality principal preparation and professional development programs are associated with positive outcomes for principals, teachers, and students, including improved principal efficacy and student achievement.

The Head Teacher Capacity Building Workshops and the Diploma in Effective School Leadership (DEL) by REB and VVOB also contributed significantly to effective school leadership, with β values of 0.140 and 0.142, respectively (both $p = 0.007$). These structured training programs equip school leaders with essential skills and knowledge, enhancing their capacity to manage schools effectively. A literature review by Darling-Hammond et al. (2019) emphasizes that comprehensive training and development programs for educational leaders lead to better school management and improved student outcomes.

V. CONCLUSION & RECOMMENDATIONS

5.1 Conclusion

The study concluded that various professional development programs are available for head teachers in Rubavu District's secondary schools, including the DEL, Capacity Building Workshops, PLCs, and School Leadership Forums. However, disparities in access and participation highlight the need for equitable professional development opportunities. The findings confirmed a strong positive relationship between these programs and effective school leadership, particularly emphasizing the influence of PLCs and leadership forums. Continuous professional learning is vital for equipping head teachers with the necessary skills for strategic direction, instructional leadership, and community engagement. The study also identified barriers such as financial constraints and high workloads that hinder effective implementation, underscoring the need for structured policies to support head teachers in their professional development.

5.2 Recommendations

Based on the findings, the following recommendations are made. The Ministry of Education and Rwanda Basic Education Board (REB) should strengthen and expand professional development programs by allocating more resources for equitable access, developing a continuous professional development framework with follow-up sessions, and ensuring programs are tailored to leadership challenges. Secondary school head teachers are advised to actively engage in PLCs and School Leadership Forums, apply acquired skills to school management, and advocate for additional professional development opportunities. The District Education Office in Rubavu District should provide financial and logistical support for participation in training, establish a monitoring system for program effectiveness, and encourage partnerships for specialized training. Policy makers and educational researchers should conduct policy reviews to institutionalize professional development, support research on leadership challenges, and advocate for reforms that integrate leadership development into head teacher career progression.



REFERENCES

- Ainscow, M., & Viola, M. (2023). Developing inclusive and equitable education systems: Some lessons from Uruguay. *International Journal of Inclusive Education*, 28(14), 3568–3584. <https://doi.org/10.1080/13603116.2023.2279556>
- Asuga, G. N. (2012). The learning needs of secondary school principals: An investigation in Nakuru district, Kenya. *International Journal of Educational Administration and Policy Studies*, 4(5), 133-140.
- Avalos, B. (2011). Teacher professional development in teaching and teacher education for over ten years. *Teaching and Teacher Education*, 27(1), 10–20. <https://doi.org/10.1016/j.tate.2010.08.007>
- Bass, B. M. (1985). *Leadership and performance beyond expectations*. Free Press.
- Burns, J. M. (1978). *Leadership*. Harper & Row.
- Bush, T. (2007). Educational leadership and management: Theory, policy, and practice. *South African Journal of Education*, 27(3), 391–406.
- Bush, T., & Glover, D. (2003). School leadership: Concepts and evidence. A review of literature was carried out for the National College for School Leadership. National College for School Leadership.
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140.
- Darling-Hammond, L., Hyster, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute. <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>
- Day, C., & Sammons, P. (2016). *Successful school leadership*. Education Development Trust.
- DeJaeghere, J., & Baxter, A. (2014). Entrepreneurship education for youth in sub-Saharan Africa: A capabilities approach as an alternative framework to neoliberalism's individualizing risks. *Progress in Development Studies*, 14(1), 61–76. <https://doi.org/10.1177/1464993413504353>
- Department for Education. (2020). *National professional qualification for headship (NPQH): Framework*. GOV.UK. <https://www.gov.uk/government/publications/national-professional-qualifications-frameworks-from-september-2021/national-professional-qualification-for-headship-npqh-framework>
- Epstein, J. L. (2018). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Routledge.
- Flink, I., & Dusabe, C. K. (2024). Strengthening instructional leadership in Rwanda: A collaborative effort. African Centre for School Leadership. <https://africancentreforschoolleadership.org/strengthening-instructional-leadership-in-rwanda-a-collaborative-effort/>
- Fullan, M. (2019). *Leading in a culture of change* (2nd ed.). Jossey-Bass.
- Fullan, M. (2021). *The new meaning of educational change* (5th ed.). Teachers College Press.
- Goodall, J. (2018). Parental engagement in children's learning: Moving on from mass superstition. *Creative Education*, 9(11), 1611–1621. <https://doi.org/10.4236/ce.2018.911116>
- Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381–391. <https://doi.org/10.1080/135406002100000512>
- Guskey, T. R. (2019). Measuring the impact of professional development. *Educational Leadership*, 76(6), 10–16.
- Hallinger, P., & Wang, W. C. (2015). *Assessing instructional leadership with the Principal Instructional Management Rating Scale*. Springer.
- Harris, A., & Jones, M. (2019). Leading professional learning: Developing system-wide leadership. *Educational Management Administration & Leadership*, 47(5), 647–664. <https://doi.org/10.1177/1741143217717272>
- Idahemuka, M., & Ndayishimiye, J. D. (2025). Investigating the relationship between school leadership and academic performance: A case study of secondary schools in Rusizi District, Rwanda. *African Journal of Empirical Research*, 6(1), 694–701. <https://doi.org/10.51867/ajernet.6.1.59>
- Jeynes, W. H. (2012). A meta-analysis of the efficacy of different types of parental involvement programs for urban students. *Urban Education*, 47(4), 706–742. <https://doi.org/10.1177/0042085912445643>
- Kennedy, A. (2005). Models of continuing professional development: A framework for analysis. *Journal of In-Service Education*, 31(2), 235–250. <https://doi.org/10.1080/13674580500200277>
- Komba, W. L. M., & Nkumbi, E. (2008). Teacher professional development in Tanzania: Perceptions and practices. *Journal of International Cooperation in Education*, 11(3), 67–83.
- Kraft, M. A., & Papay, J. P. (2014). Can professional environments in schools promote teacher development? Explaining heterogeneity in returns to teaching experience. *Educational Evaluation and Policy Analysis*, 36(4), 476–500.
- Leithwood, K., & Jantzi, D. (2000). The effects of transformational leadership on organizational conditions and student engagement with school. *Journal of Educational Administration*, 38(2), 112–129.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2019). *Seven strong claims about successful school leadership*. Department for Education and Skills, National College for School Leadership.



- Leithwood, K., Harris, A., & Hopkins, D. (2018). Seven strong claims about successful school leadership. *School Leadership & Management*, 28(1), 27–42. <https://doi.org/10.1080/13632430701800060>
- Lumby, J. (2019). Distributed leadership and bureaucracy. *Educational Management Administration & Leadership*, 47(1), 5–19. <https://doi.org/10.1177/1741143217745877>
- Meyer, A., & Richter, D. (2024). Longitudinal effects of a professional development program on principals' leadership practices: Results of a baseline latent change score model. [Preprint]. <https://doi.org/10.31219/osf.io/h2vqe>
- Mourshed, M., Chijioke, C., & Barber, M. (2010). *How the world's most improved school systems keep getting better*. McKinsey & Company.
- Munezero, M. G. (2022, July 14). Training in school leadership to turn around the quality of education. KT Press. <https://www.ktpress.rw/2022/07/training-in-school-leadership-to-turn-around-quality-of-education/>
- Musabwayire, J., & Sikubwabo, C. (2023). Effect of school leadership practices on the commitment of secondary school teachers in Musanze District, Rwanda. *African Journal of Empirical Research*, 5(2), 47–60. <https://doi.org/10.51867/ajernet.5.2.47>
- Nguyen, D. T., & Ng, D. (2021). Professional learning communities in educational leadership: Enhancing instructional leadership practices. *Leadership and Policy in Schools*, 20(1), 45–63. <https://doi.org/10.1080/15700763.2019.1637909>
- Nguyen, D., See, B. H., Do, H., Kirezi, J. C., Pieck, L., & Peeraer, J. (2024). Impact-evaluation study of a school leadership development programme in Rwanda – Inception report. VVOB – Education for Development. <https://durham-repository.worktribe.com/output/3212584/>
- Obed, H., & Claire, M. M. (2023). School leadership practices and students' academic competence in TVET secondary schools in Rwanda. *Journal of Education*, 6(2), 71–97. <https://doi.org/10.53819/81018102t5213>
- OECD. (2012). *Preparing teachers and developing school leaders for the 21st century: Lessons from around the world*. OECD Publishing. <https://doi.org/10.1787/9789264174559-en>
- Özdemir, N., Gümüş, S., Kılınc, A. C., & Bellibaş, M. Ş. (2022). A systematic review of research on the relationship between school leadership and student achievement: An updated framework and future direction. *Educational Management Administration & Leadership*, 52(6), 1–7. <https://doi.org/10.1177/17411432221118662>
- Pont, B., Nusche, D., & Moorman, H. (2008). *Improving school leadership, Volume 1: Policy and practice*. OECD Publishing. <https://doi.org/10.1787/9789264044715-en>
- Robinson, V. M. J. (2011). *Student-centered leadership*. Jossey-Bass.
- Rwanda Education Board. (2019). *The national teacher continuous professional development framework*. Teacher Task Force. <https://www.teachertaskforce.org/knowledge-hub/national-teacher-continuous-professional-development-framework-republic-rwanda>
- Rwanda Education Board. (2021). *Basic education highlights of activities in 2021/2022*. <https://www.reb.gov.rw/news-detail/basic-education-highlights-of-activities-in-2021-2022>
- Rwanda Education Board. (2021). *Teacher management and development strategy: Enhancing professional growth of school leaders*. Kigali, Rwanda.
- Schleicher, A. (2012). *Preparing teachers and developing school leaders for the 21st century: Lessons from around the world*. OECD Publishing. <https://doi.org/10.1787/9789264174559-en>
- Sibomana, J. P., & Ndayambaje, I. (2024). Teachers' professional development and job performance in public secondary schools of Kicukiro District, Rwanda. *African Journal of Empirical Research*, 5(3), 444–459.
- Thurlings, M., & den Brok, P. (2017). Learning outcomes of teacher professional development activities: A meta-study. *Educational Review*, 69(5), 554–576. <https://doi.org/10.1080/00131911.2017.1281226>
- Timperley, H. (2008). *Teacher professional learning and development*. UNESCO International Bureau of Education.
- Tubisabimana, E., & Mukulira, O. (2022). Influence of instructional leadership practices on teacher continuous professional development in selected public primary schools in Rwanda. *Journal of Education*, 5(4), 83–98. <https://doi.org/10.53819/81018102t3057>
- UNESCO. (2017). *Transforming teacher education and learning: A global perspective*. UNESCO Publishing.
- Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. UNESCO International Institute for Educational Planning.
- World Bank. (2019). *Rwanda: Improving teaching and learning through effective school leadership*. World Bank Group.