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Influence of School Heads' Technological and Managerial Leadership on the Strategic Approach and Management of Proficient Teachers

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Abstract*—The study aimed to determine the influence of school heads' technological and managerial leadership on the strategic approach and management of proficient teachers. Specifically, the study sought to determine the levels of technological and managerial leadership among school heads and the levels of strategic approach and management among proficient teachers. The study also aimed to examine the significant influence of school heads' technological and managerial leadership on both the strategic approach and strategic management of proficient teachers. The study used a descriptive-correlational design. Data were gathered through validated survey questionnaires administered to 160 purposively selected proficient teachers from small elementary schools across 14 sub-offices in the Schools Division Office of Laguna. Weighted mean, standard deviation, and regression analysis were used to interpret the data and test hypotheses. Findings revealed that school heads demonstrated very high levels of technological and managerial leadership, consistently articulating a vision for ICT integration, fostering digital learning cultures, promoting professional growth, sustaining systemic improvements, and managing resources effectively. Likewise, proficient teachers demonstrated very high levels of strategic approach and management, showing competence in using ICT tools, designing inclusive learning environments, administering fair assessments, and integrating technology into instruction to ensure accountability and innovation. These results highlighted the strong commitment of both school heads and teachers to sustaining interactive, equitable, and learner-centered environments. Consequently, the rejection of all null hypotheses confirmed that school heads' technological and managerial leadership significantly influence teachers' strategic approaches and management. This concluded that school heads who model effective technology use, provide organizational support, and promote collaborative decision-making play a vital role in enhancing teachers' instructional effectiveness and elevating overall school performance. Based on the findings, it is recommended that school heads implement structured mentorship programs to guide teachers in ICT integration, while teachers strengthen their digital skills through training and collaboration.*

***Keywords*—** *Technological Leadership, ICT integration, Educational leadership, Digital-age learning, Resource Allocation.*

I. INTRODUCTION

Leadership plays a vital role in shaping the direction, culture, and success of every educational institution. Effective school leadership fosters an environment where teachers can plan strategically, manage their classrooms efficiently, and adapt to evolving educational demands. In today's digital age, leadership has become even more critical as schools face the challenges brought by digital transformation, new modes of learning, and the need to maintain high standards of instruction. The ability of school leaders to combine technological competence with strong managerial skills determines how effectively teachers deliver quality education and embrace innovation.

Technology has become a powerful tool that redefines teaching and learning. It enhances access to knowledge, supports collaboration, and provides new ways of assessing student performance (Kalyani, 2024). However, technology alone cannot guarantee improvement. Its success depends largely on how school heads exercise leadership—by promoting a shared vision, fostering digital culture, and supporting continuous professional growth among teachers. When leaders model and champion purposeful technology use, they empower teachers to innovate in their instructional practices and create dynamic, technology-enhanced learning environments.

As Maala & Lagos (2022) emphasized, strong technological leadership enhances teachers' capacity to integrate digital tools effectively, thereby improving teaching quality and learning outcomes. This form of leadership enables educators to adapt to fast-changing digital environments while fostering creativity, collaboration, and efficiency in classroom practices. Technological leadership, therefore, is not only about providing access to tools but also about guiding teachers toward meaningful sustainable innovation.

Equally important is managerial leadership, which emphasizes the competencies required to achieve organizational goals. In schools, this means principals effectively plan, organize, coordinate, and make sound decisions that support teachers' professional responsibilities. It ensures that systems and processes align with institutional objectives, creating a structured environment where teachers can thrive. Effective leadership enables school heads to establish systems and processes that align with school objectives and provide the support for teachers to perform at their best (Songcayawon et al., 2022). When combined with technological leadership, managerial leadership sustains innovation through clear policies, efficient structures, and adequate resources.

The present study, titled "Influence of School Heads' Technological and Managerial Leadership to the Strategic

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Approach and Management of Proficient Teachers" aims to examine the influence of school heads' technological and managerial leadership on teachers' strategic approach and management. By exploring this relationship, the study seeks to provide insights into how leadership styles optimize educational outcomes, ensuring that technological advancement and managerial efficiency contribute to the overall effectiveness of proficient teachers.

1.1 Statement of the Problem

Problem/s which were addressed by the research

The researcher aimed to measure the influence of technological and managerial leadership to the strategic approach and management of proficient teachers in the Schools Division Office of Laguna. It examined how these leadership dimensions empowered teachers to plan, innovate, and manage classrooms effectively in response to the demands of 21st-century education.

Specifically, the study sought to answer the following questions:

1. What is the level of technological leadership of the school heads in the Schools Division Office of Laguna in terms of:
   1.1 visionary leadership;
   1.2 digital age learning culture;
   1.3 excellence in professional practice;
   1.4 systemic improvement; and
   1.5 digital citizenship?
2. What is the level of managerial leadership of the school heads in the Schools Division Office of Laguna in terms of:
   2.1 organizational management;
   2.2 resource allocation and budgeting;
   2.3 performance monitoring and evaluation;
   2.4 decision-making and problem-solving; and
   2.5 professional development and capacity-building?
3. What is the level of strategic approach of proficient teachers in terms of:
   3.1 technology operations and concepts;
   3.2 planning and designing learning environments and experiences; and
   3.3 assessment and evaluation;
4. What is level of strategic management of proficient teachers in terms of:
   4.1 instructional implementation;
   4.2 monitoring and evaluation;
   4.3 continuous improvement and innovation; and
   4.4 productivity and professional practice?
5. Is there a significant influence of school head's technological leadership on the strategic approach of proficient teachers?
6. Is there a significant influence of school head's technological leadership on the strategic management of proficient teachers?
7. Is there a significant influence of school head's managerial leadership on the strategic approach of proficient teachers?
8. Is there a significant influence of school head's managerial leadership on the strategic management of proficient teachers?

II. Methodology

The study used a descriptive-correlational design. Data were gathered through validated survey questionnaires administered to 160 purposively selected proficient teachers from small elementary schools across 14 sub-offices in the Schools Division Office of Laguna. Weighted mean, standard deviation, and regression analysis were used to interpret the data and test hypotheses.

III. Results and Discussion

This part presents the different results and discussed the results from treating the data gathered in this study. All specific questions in Chapter 1 under the statement of the problem were answered in this chapter supported by tables. It presents the data gathered about the significant influence of school head's technological and managerial leadership on the strategic approach and management of proficient teachers. In particular, the study sought to address the following:

Level of Technological Leadership of the School Heads

In this study, the level of technological leadership of the school heads in the Schools Division Office of Laguna refers to visionary leadership, digital age learning culture, excellence in professional practice, systemic improvement**,** and digital citizenship.

The following tables show the statement, mean, standard deviation. remarks and verbal interpretation from the perspectives of respondents.

Table 1 shows the level of technological leadership of the school heads in the Schools Division Office of Laguna. Also displays the statements, mean, standard deviation and remarks.

The statement, the school head helps teachers connect their teaching practices with the school's vision for technology—for example, by guiding lesson plans to include digital strategies with mean of 6.36, suggests a very high level of technological leadership of the school heads of Laguna in terms of visionary leadership and supported with its standard deviation of 0.67. Also, the statement, the school head encourages teachers to use new digital tools (such as online resources, apps, or interactive activities) and motivates teachers to try innovative ways of teaching, with a mean of slightly lower 6.24 and standard deviation of 0.69, it still designates the school head regularly communicates the technology goals of the school, such as increasing ICT use in classrooms, and reminds teachers about their role in achieving them.

Moreover, the level of technological leadership of the school heads in the Schools Division Office of Laguna in terms of visionary leadership attained a weighted mean score of 6.29 and a standard deviation of 0.68. The respondents verbally interpreted it as very high. The finding reveals that school heads in Laguna are highly effective in articulating a clear technological vision, guiding teachers to align their instructional practices with digital strategies, and motivating

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them to adopt innovative tools and approaches in the classroom.

Table 1. Level of Technological Leadership of the School Heads in terms of Visionary Leadership

Statements The school head….	Mean	SD	Remarks
…explains a clear plan on how technology (like computers, projectors, e-learning platforms) should be used in teaching and learning, so teachers understand its purpose.	6.28	0.66	Strongly Agree
…encourages teachers to use new digital tools (such as online resources, apps, or interactive activities) and motivates teachers to try innovative ways of teaching.	6.31	0.67	Strongly Agree
…regularly communicates the technology goals of the school, such as increasing ICT use in classrooms, and reminds teachers about their role in achieving them.	6.24	0.69	Strongly Agree
…shows commitment to improving education by supporting long-term programs, such as continuous ICT training or upgrading digital facilities for teachers.	6.28	0.70	Strongly Agree
…helps teachers connect their teaching practices with the school's vision for technology—for example, by guiding lesson plans to include digital strategies.	6.36	0.67	Strongly Agree
Weighted Mean	6.29		
SD	0.68		
Verbal Interpretation	Very High		

Utomo et al. (2025) underscored the importance of visionary leadership in fostering collaboration and innovation, offering practical implications for organizations seeking to enhance team performance and drive successful initiatives. Findings were consistent with the present study, which showed that school heads articulated a shared vision and motivated teachers to pursue innovative teaching practices.

Candrasari et al. (2023) highlighted that visionary leadership contributes to the creation of innovative learning environments and motivates education stakeholders to actively engage in change initiatives. This observation supported the current results, as school heads inspired teachers to embrace digital innovations and reinforced the school's technological goals.

It suggests that school heads should continue to strengthen and sustain their visionary leadership by engaging in continuous professional development focused on emerging technologies and strategic planning. Additionally, they should foster inclusive collaboration among teachers, stakeholders, and the community to ensure that technological initiatives are effectively implemented and aligned with the school's long-term goals.

Table 2 demonstrates the level of technological leadership of the school heads in the Schools Division Office of Laguna. Also shows the statements, mean, standard deviation and remarks.

The statement, the school head encourages teachers to regularly use technology (such as laptops, projectors, tablets, or online platforms) in their lessons to make learning more engaging for learners with mean of 6.41, suggests a very high level of technological leadership of the school heads in terms of digital age learning culture and reinforced with its standard deviation of 0.67. Likewise, the school head provides opportunities for teachers to share and demonstrate how they use digital tools in the classroom so that others can learn from their practices and supports activities like ICT trainings, workshops, or mentoring sessions where teachers can improve their skills in using technology for teaching. Though the mean of 6.36 is slightly lower, with a standard deviation of 0.69, it still specifies the school head promotes a school culture where both teachers and learners are confident and comfortable in using technology for communication, research, and collaboration**.**

Table 2. Level of Technological Leadership of the School Heads in terms of Digital Age Learning Culture

Statements The school head….	Mean	SD	Remarks
…encourages teachers to regularly use technology (such as laptops, projectors, tablets, or online platforms) in their lessons to make learning more engaging for learners.	6.41	0.67	Strongly Agree
…provides opportunities for teachers to share and demonstrate how they use digital tools in the classroom so that others can learn from their practices.	6.40	0.69	Strongly Agree
…supports activities like ICT trainings, workshops, or mentoring sessions where teachers can improve their skills in using technology for teaching.	6.40	0.70	Strongly Agree
…promotes a school culture where both teachers and learners are confident and comfortable in using technology for communication, research, and collaboration.	6.36	0.69	Strongly Agree
…makes sure that students' learning needs are addressed by guiding teachers to use appropriate digital tools that match their subjects and grade levels.	6.38	0.72	Strongly Agree
Weighted Mean	6.39		
SD	0.70		
Verbal Interpretation	Very High		

This implies that the level of technological leadership of the school heads in the Schools Division Office of Laguna in terms of digital age learning culture attained a weighted mean score of 6.39 and a standard deviation of 0.70, and was verbally interpreted by the respondents as very high. The finding reveals that school heads strongly encouraged teachers to use technology in their lessons regularly, supported ICT training and workshops, and promoted collaborative practices. These actions created a school environment where both teachers and learners were confident and competent in using digital tools for communication, research, and collaboration.

This result was consistent with the study of Mthanti & Msiza (2023), who emphasized that principals needed to equip themselves with the necessary skills to guide teachers toward professional development opportunities aligned with 21st-century education.

Similarly, Ridho et al. (2023) found that principals achieved digital leadership by continuously promoting change and providing opportunities for staff to interact with and use digital technologies, which aligned with the observed practices of school heads in Laguna.

Regular ICT training, mentoring, and collaborative activities should be institutionalized to ensure teachers remain

confident and competent in using technology, while school leaders continue to foster a culture of innovation and effective technology integration.

Table 3. Level of Technological Leadership of the School in terms of Excellence in Professional Practice

Statements The school head….	Mean	SD	Remarks
…uses technology (like email, chat groups, or online platforms) to communicate school announcements, schedules, and reminders with teachers.	6.45	0.67	Strongly Agree
…demonstrates how to use digital tools (like PowerPoint, spreadsheets, or e-class records) in managing school reports and encourages teachers to do the same.	6.36	0.73	Strongly Agree
…supports professional growth by allowing teachers to attend webinars, online trainings, or conferences related to technology in teaching.	6.46	0.66	Strongly Agree
…provides feedback or coaching to teachers on how we can improve classroom teaching with the help of technology.	6.39	0.68	Strongly Agree
…promotes collaboration among teachers by encouraging the use of shared online platforms (e.g., Google Drive, MS SharePoint, MS Teams) for lesson planning and resource sharing.	6.36	0.69	Strongly Agree
Weighted Mean	6.41		
SD	0.69		
Verbal Interpretation	Very High		

Table 3 displays the level of technological leadership of the school heads in the Schools Division Office of Laguna. Also exhibits the statements, mean, standard deviation and remarks.

The statement, the school head supports professional growth by allowing teachers to attend webinars, online trainings, or conferences related to technology in teaching with mean of 6.46, suggests a very high level of technological leadership of the school heads in terms of excellence in professional practice and maintained with its standard deviation of 0.66. Similarly, the school head uses technology (like email, chat groups, or online platforms) to communicate school announcements, schedules, and reminders with teachers. Although the mean of 6.36 is slightly lower with its standard deviation of 0.73 and 0.69, it still shows the school head demonstrates how to use digital tools (like PowerPoint, spreadsheets, or e-class records) in managing school reports and encourages teachers to do the same and promotes collaboration among teachers by encouraging the use of shared online platforms (e.g., Google Drive, MS SharePoint, MS Teams) for lesson planning and resource sharing**.**

This implies that the level of technological leadership of the school heads in the Schools Division Office of Laguna in terms of excellence in professional practice attained a weighted mean score of 6.41 and a standard deviation of 0.69, and was verbally interpreted by the respondents as very high. The finding reveals that school heads in the Schools Division Office of Laguna supported professional growth by allowing teachers to attend webinars, online training sessions, and technology-related conferences.

Stavermann (2025) showed that digitally mediated professional development programs positively influenced teachers' competencies, particularly in managing digital communication, collaboration, and instructional technologies. This finding aligned with the present study, as school heads encouraged teachers to participate in webinars and trainings to strengthen their digital skills.

Tagaro & Rayon (2025) highlighted the proactive use of group chats and multiple platforms such as Google and Microsoft, along with gamified activities, to enhance communication and collaboration. Their study supported the current results, which revealed that school heads used technology to disseminate announcements and promote collaboration among teachers.

Therefore, school heads should continue to encourage and support teachers' participation in technology-focused professional development such as webinars, online trainings, and collaborative platforms.

Table 4. Level of Technological Leadership of the School Heads in terms of Systemic Improvement

Statements The school head….	Mean	SD	Remarks
…plans and implements projects that improve ICT facilities, such as upgrading computers, internet connection, or multimedia equipment in the school.	6.34	0.70	Strongly Agree
…ensures that technology is included in the school's improvement plans and makes it a priority for teaching and learning.	6.39	0.67	Strongly Agree
…secures partnerships or coordinates with stakeholders (such as LGUs or NGOs) to provide additional resources for technology in the school.	6.33	0.71	Strongly Agree
…monitors how technology is being used in classrooms and gives support when teachers face challenges.	6.33	0.70	Strongly Agree
…ensures that ICT-related programs or innovations are sustained over time, not just for short-term projects.	6.35	0.67	Strongly Agree
Weighted Mean	6.35		
SD	0.69		
Verbal Interpretation	Very High		

Table 4 express the level of technological leadership of the school heads in the Schools Division Office of Laguna. Also presents the statements, mean, standard deviation and remarks.

The statement, the school head ensures that technology is included in the school's improvement plans and makes it a priority for teaching and learning with a mean of 6.39, suggests a very high level of technological leadership of the school heads in terms of systemic improvement and buoyed with its standard deviation of 0.67. Correspondingly, the school head ensures that ICT-related programs or innovations are sustained over time, not just for short-term projects. Although the mean of 6.33 is slightly lower, with standard deviations of 0.71 and 0.70, it still directs the school head secures partnerships or coordinates with stakeholders (such as LGUs or NGOs) to provide additional resources for technology in the school and monitors how technology is being used in classrooms and gives support when teachers face challenges**.**

This implies that the level of technological leadership of the school heads in the Schools Division Office of Laguna in terms of systemic improvement attained a weighted mean

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score of 6.35 and a standard deviation of 0.69 and was verbally interpreted as very high among the respondents. The finding reveals that school heads in the Schools Division Office of Laguna ensured that technology was included in school improvement plans and made it a priority for teaching and learning. This was evident in their efforts to sustain ICT programs, secure partnerships with stakeholders, and monitor classroom technology use.

A'mar & Eleyan (2022) argued that principals' performance in systemic improvement and cultural development was positively correlated with teachers' ability to integrate technology. This finding aligned with the present study, as school heads prioritized technology in improvement plans and supported teachers in overcoming challenges.

Hanisch et al. (2023) found that school leaders played a pivotal role in driving digital transformation by automating workflows, enhancing coordination, and fostering transparency. Their study supported the current results, which showed that school heads coordinated with stakeholders and monitored technology use to strengthen systemic improvement.

School heads should prioritize technology in school improvement plans by sustaining ICT programs, strengthening stakeholder partnerships, and monitoring classroom practices to ensure continuous systemic improvement.

Table 5. Level of Technological Leadership of the School Heads in terms of Digital Citizenship

Statements The school head….	Mean	SD	Remarks
…reminds teachers and learners about proper and respectful use of the internet, social media, and online communication.	6.43	0.65	Strongly Agree
…educates teachers and learners about the importance of protecting personal information and avoiding cyber risks.	6.44	0.63	Strongly Agree
…encourages teachers to include lessons or reminders about digital responsibility in their subjects.	6.38	0.69	Strongly Agree
…ensures that technology is used ethically in school, such as avoiding plagiarism or respecting copyright in digital content.	6.40	0.67	Strongly Agree
…sets rules and guidelines for safe and responsible use of gadgets, the internet, and social media within the school.	6.42	0.64	Strongly Agree
Weighted Mean	6.41		
SD	0.65		
Verbal Interpretation	Very High		

Table 5 illustrates the level of technological leadership of the school heads in the Schools Division Office of Laguna. Also demonstrates the statements, mean, standard deviation and remarks.

The statement, "The school head educates teachers and learners about the importance of protecting personal information and avoiding cyber risks," obtained a mean of 6.44, suggesting a very high level of technological leadership among school heads in terms of digital citizenship, and was accompanied by a standard deviation of 0.63. As well, reminds teachers and learners about proper and respectful use of the internet, social media, and online communication. Even though the mean of 6.38 is slightly lower, with a standard deviation of 0.69, it still signifies the school head encourages teachers to include lessons or reminders on digital responsibility in their subjects**.**

This implies that the level of technological leadership of the school heads in the Schools Division Office of Laguna in terms of digital citizenship attained a weighted mean score of 6.41 and a standard deviation of 0.65, and was verbally interpreted by the respondents as very high. The finding reveals that school heads educated teachers and learners on the importance of protecting personal information and avoiding cyber risks, while also reminding them of the proper and respectful use of the internet, social media, and online communication.

Cantos & Callo (2022) found that technology leadership practices by principals significantly strengthened teachers' technology proficiency and guided them in using ICT legally, safely, and ethically. This closely aligned with the present study, as school heads consistently modeled responsible technology use and actively encouraged teachers to integrate digital responsibility into their lessons.

Similarly, Almethen & Alomair (2024) showed that encouraging open dialogue and providing structured instruction on online safety and appropriate behavior empowered children to make informed decisions. Their findings supported the current results, which revealed that school heads educated learners about cyber risks and promoted responsible online communication. School leaders should institutionalize programs on digital citizenship by integrating online safety, ethical ICT use, and responsible communication into both teacher training and student learning activities.

Level of Managerial Leadership of the School Heads

In this study, the level of managerial leadership of the school heads in the Schools Division Office of Laguna refers to organizational management, resource allocation and budgeting**,** performance monitoring and evaluation**,** decision-making and problem-solving**,** and professional development and capacity-building.

The following tables show the statement, mean, standard deviation. remarks and verbal interpretation from the perspectives of respondents.

Table 6 confirms the level of managerial leadership of the school heads in the Schools Division Office of Laguna. Also exposes the statements, mean, standard deviation and remarks.

The statement, the school head ensures that school policies and rules are clearly explained to teachers and consistently implemented, obtained a mean of 6.46, suggesting a very high level of managerial leadership by school heads in organizational management, and had a standard deviation of 0.63. Moreover, the school head promotes teamwork among teachers and staff to achieve school goals. Despite the mean of 6.39 is slightly lower with a standard deviation of 0.71, it still denotes the school head provides clear instructions and guidance when delegating tasks to teachers**.**

The level of managerial leadership of the school heads in the Schools Division Office of Laguna in terms of organizational management attained a weighted mean score of

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6.44 and a standard deviation of 0.67, and was verbally interpreted by the respondents as very high. The finding reveals that the school heads' managerial leadership was clearly demonstrated through the consistent implementation of school policies, the active promotion of teamwork, and the provision of clear guidance in task delegation. These practices fostered efficient school operations and strengthened collaborative efforts toward achieving institutional goals.

Table 6. Level of Managerial Leadership of the School Heads in terms of Organizational Management

Statements The school head….	Mean	SD	Remarks
…ensures that school policies and rules are clearly explained to teachers and consistently implemented.	6.46	0.63	Strongly Agree
…organizes school activities in an orderly and systematic way.	6.43	0.65	Strongly Agree
…maintains proper scheduling of classes, meetings, and programs to avoid conflict.	6.44	0.68	Strongly Agree
…provides clear instructions and guidance when delegating tasks to teachers.	6.39	0.71	Strongly Agree
…promotes teamwork among teachers and staff to achieve school goals.	6.45	0.67	Strongly Agree
Weighted Mean	6.44		
SD	0.67		
Verbal Interpretation	Very High		

Borja et al. (2024) emphasized that school leaders must ensure policies are implemented intentionally and authentically, rather than being published and forgotten. This supports the present findings, as school heads consistently explained rules and ensured their faithful implementation among teachers.

Mukarromah et al. (2025) found that when school heads actively provide direction and are directly involved in activities, members are more motivated and programs run smoothly. This aligns with the current results, which showed that school heads guided teachers through clear instructions and effective task delegation.

It is recommended that school heads continue reinforcing organizational management by ensuring faithful policy implementation, promoting collaborative teamwork, and providing structured guidance in task delegation to sustain effective school operations and collective success.

Table 7 appears the level of managerial leadership of the school heads in the Schools Division Office of Laguna. Also reveals the statements, mean, standard deviation and remarks.

The statement, the school head provides sufficient learning materials and resources needed for classroom instruction, obtained a mean of 6.46, suggesting a very high level of managerial leadership of the school heads in terms of resource allocation and budgeting, and sustained with a standard deviation of 0.67. Furthermore, the school head ensures that the school budget is used wisely and transparently. But the mean of 6.36 is slightly lower, with a standard deviation of 0.65, it still implies the school head seeks additional support to secure more technology resources through partnerships with LGUs, NGOs, and other stakeholders.

Table 7. Level of Managerial Leadership of the School Heads in terms of Resource Allocation and Budgeting

Statements The school head….	Mean	SD	Remarks
…ensures that the school budget is used wisely and transparently.	6.44	0.65	Strongly Agree
…provides sufficient learning materials and resources needed for classroom instruction.	6.46	0.67	Strongly Agree
…allocates funds fairly to different programs and projects of the school.	6.41	0.68	Strongly Agree
…makes sure that facilities such as classrooms, libraries, and ICT equipment are properly maintained.	6.43	0.66	Strongly Agree
…seeks additional support to secure more technology resources through partnerships with LGUs, NGOs, and other stakeholders.	6.36	0.65	Strongly Agree
Weighted Mean	6.41		
SD	0.66		
Verbal Interpretation	Very High		

The level of managerial leadership of the school heads in the Schools Division Office of Laguna in terms of resource allocation and budgeting attained a weighted mean score of 6.41 and a standard deviation of 0.66, and was verbally interpreted by the respondents as very high. It implies that school heads consistently provide sufficient learning materials, ensure transparent use of funds, and actively seek stakeholder support to secure additional resources, thereby sustaining effective teaching and learning environments.

This finding is in line with the study of Yasin & Mokhtar (2022), who highlighted that effective utilization of school resources builds trust among stakeholders and ensures equitable distribution of resources. This supports the present results, as school heads were found to provide sufficient materials and maintain transparency in financial management.

In line with Ban et al. (2025), transparent financial discussions improve institutional performance by aligning budget allocations with school priorities. This corresponds with the current findings, which showed that school heads use funds wisely and promote accountability in resource management.

Extending the perspective of Oñez and Pabalan (2025), stakeholder involvement plays a significant role in sustaining Learning Resource Centers, with consistent support from PTAs, alumni, and local government units enhancing resource availability. The present findings build on this by showing that school heads themselves proactively seek partnerships with LGUs, NGOs, and other stakeholders to secure more technology resources, demonstrating active managerial leadership.

It is recommended that school heads continue strengthening resource allocation and budgeting practices by institutionalizing transparent financial management, sustaining ICT programs, and expanding partnerships with stakeholders to ensure equitable access to resources and the long-term effectiveness of teaching and learning.

Table 8 indicates the level of managerial leadership of the school heads in the Schools Division Office of Laguna. Also conceals the statements, mean, standard deviation and remarks.

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Table 8. Level of Managerial Leadership of the School Heads in terms of Performance Monitoring and Evaluation

Statements The school head….	Mean	SD	Remarks
…regularly observes classes to monitor the quality of teaching.	6.52	0.59	Strongly Agree
…provides constructive feedback to teachers after classroom observations.	6.49	0.61	Strongly Agree
…uses transparent and fair criteria when evaluating teacher performance.	6.48	0.63	Strongly Agree
…keeps track of teachers' accomplishments and areas for improvement.	6.46	0.64	Strongly Agree
…recognizes teachers who show outstanding performance in their work.	6.49	0.64	Strongly Agree
Weighted Mean	6.49		
SD	0.62		
Verbal Interpretation	Very High		

The statement, the school head regularly observes classes to monitor the quality of teaching with a mean of 6.52, suggests a very high level of managerial leadership by school heads in terms of performance monitoring and evaluation, and has a standard deviation of 0.59. Additionally, the school head provides constructive feedback to teachers after classroom observations and recognizes teachers who show outstanding performance in their work. However, the mean of 6.46 is slightly lower with a standard deviation of 0.64; it still suggests the school head keeps track of teachers' accomplishments and areas for improvement**.**

The level of managerial leadership of the school heads in the Schools Division Office of Laguna in terms of performance monitoring and evaluation attained a weighted mean score of 6.49 and a standard deviation of 0.62. The respondents verbally interpreted it as very high. It indicates that school heads regularly observe classes, provide constructive feedback, recognize outstanding performance, and track teachers' accomplishments and areas for improvement, thereby sustaining instructional quality and professional growth.

Psalamoi (2025) concluded that lesson observation is a vital tool for enhancing teachers' job performance. Conducted professionally, these observations provide constructive feedback and mentoring support that improve lesson preparation, teaching techniques, and overall job satisfaction.

Theodomir et al. (2022) showed that teachers agreed that instructional supervision by head teachers helps check how lessons are taught and provides guidance on improving methodologies. Their findings emphasized that pedagogical feedback from supervisors is crucial for refining teaching practices, which aligns with the present results showing that school heads provide constructive feedback after classroom observations.

Saiteu (2025) investigated the impact of teacher recognition, such as awards, public acknowledgment, and performance bonuses, on teaching quality and student performance. The study found that recognition significantly boosts teaching quality, which in turn positively affects students' academic achievement, underscoring the motivational dimension of performance evaluation.

School heads should institutionalize regular classroom observations, structured feedback, and recognition programs to sustain instructional quality and motivate teachers toward professional excellence.

Table 9 demonstrates the level of managerial leadership of the school heads in the Schools Division Office of Laguna. Also displays the statements, mean, standard deviation and remarks.

Table 9. Level of Managerial Leadership of the School Heads in terms of Decision-making and Problem-solving

Statements The school head….	Mean	SD	Remarks
…makes timely decisions when urgent matters arise in school.	6.51	0.62	Strongly Agree
…consults teachers and staff before making important decisions.	6.56	0.60	Strongly Agree
…applies logical and fair judgment in solving school-related problems.	6.49	0.59	Strongly Agree
…remains calm and objective when addressing conflicts among teachers or learners.	6.53	0.59	Strongly Agree
…considers the welfare of both teachers and learners in every decision.	6.51	0.59	Strongly Agree
Weighted Mean	6.52		
SD	0.60		
Verbal Interpretation	Very High		

The statement, the school head consults teachers and staff before making important decisions with a mean of 6.56 suggests a very high level of managerial leadership of the school heads in terms of decision-making and problem-solving, with a standard deviation of 0.60. Additionally, the school head remains calm and objective when addressing conflicts among teachers or learners. Whilst the mean of 6.49 is slightly lower with a standard deviation of 0.59, it still reveals the school head applies logical and fair judgment in solving school-related problems**.**

The level of managerial leadership of the school heads in the Schools Division Office of Laguna in terms of decision-making and problem-solving attained a weighted mean score of 6.52 and a standard deviation of 0.60, and was verbally interpreted by the respondents as very high. The finding reveals that school heads consult teachers and staff before making important decisions, remain calm and objective when addressing conflicts, and apply logical and fair judgment in solving school-related problems.

Grefalde et al. (2025) revealed that effective decision-making is an important skill for school administrators, requiring them to balance strategic, ethical, and communication-related decisions. This supports the present findings, as school heads were shown to apply logical and fair judgment while maintaining operational efficiency.

Harianto (2024) emphasized that building collaborative school cultures through participatory management is a key strategy for educational improvement. This corresponds with the current results, which showed that school heads consult teachers and staff before making important decisions to strengthen trust and enhance school performance.

Espeño (2025) found a substantial association between organizational success and the principal's ability to resolve conflicts among teachers, students, and parents. This aligns with the findings that school heads remain calm and objective

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in addressing conflicts, ensuring harmony and productivity within the school environment.

School heads should strengthen decision-making and problem-solving by consulting teachers and staff, applying fair and logical judgment, and maintaining objectivity in conflict resolution to foster trust, harmony, and effective school performance.

Table 10 appears the level of managerial leadership of the school heads in the Schools Division Office of Laguna. Also parades the statements, mean,
standard deviation and remarks.

The statement, the school head supports collaborative activities like Learning Action Cells (LAC sessions) for sharing best practices, with a mean of 6.57, suggests a very high level of managerial leadership by school heads in terms of professional development and capacity-building, with a standard deviation of 0.61.

Table 10. Level of Managerial Leadership of the School Heads in terms of Professional Development and Capacity-building

Statements The school head….	Mean	SD	Remarks
…encourages teachers to attend trainings, seminars, and workshops for professional growth.	6.56	0.61	Strongly Agree
…provides mentoring or coaching for teachers who need assistance.	6.53	0.62	Strongly Agree
…supports collaborative activities like Learning Action Cells (LAC sessions) for sharing best practices.	6.57	0.61	Strongly Agree
…helps teachers identify their strengths and areas for improvement for career development.	6.53	0.61	Strongly Agree
…motivates teachers to pursue higher education or advanced training.	6.56	0.61	Strongly Agree
Weighted Mean	6.55		
SD	0.61		
Verbal Interpretation	Very High		

Moreover, the school head encourages teachers to attend trainings, seminars, and workshops for professional growth and motivates teachers to pursue higher education or advanced training. Although the mean of 6.53 is slightly lower, with standard deviations of 0.62 and 0.61, it still signifies the school head provides mentoring or coaching for teachers who need assistance and helps teachers identify their strengths and areas for improvement for career development**.**

The level of managerial leadership of the school heads in the Schools Division Office of Laguna in terms of professional development and capacity-building attained a weighted mean score of 6.55 and a standard deviation of 0.61. The respondents verbally interpreted it as very high. The finding reveals that school heads support collaborative activities such as Learning Action Cells (LAC sessions), encourage teachers to attend trainings and seminars, motivate them to pursue higher education, and provide mentoring or coaching to help teachers identify strengths and areas for improvement.

Sales (2024) emphasized that School Learning Action Cells (SLACs) offer valuable opportunities for collaborative learning among teachers. This aligns with the finding that school heads support LAC sessions to share best practices, thereby fostering collaboration and professional growth.

Berhanu (2025) found that principals provided teachers with opportunities to attend training, encouraged informal collaboration, and promoted continuous professional development programs. This supports the present findings, as school heads were shown to motivate teachers to pursue higher education and advanced training for career growth.

Segura & Latanga (2025) found that school heads consistently provided coaching and mentoring to teachers in instructional delivery. Their study emphasized that principals encouraged effective classroom strategies and differentiated instruction, which aligns with the current results showing school heads provide mentoring and coaching to enhance teacher effectiveness.

School heads should support LAC sessions, encourage participation in trainings and higher education, and provide mentoring to enhance teacher effectiveness and career growth.

Level of Strategic Approach of Proficient Teachers

In this study, the level of strategic approach of proficient teachers refers to technology operations and concepts**,** planning and designing learning environments, and assessment and evaluation.

The following tables show the statement, mean, standard deviation. remarks and verbal interpretation from the perspectives of respondents.

Table 11 displays the level of strategic approach of proficient teachers. Also shows the statements, mean, standard deviation and remarks.

Table 11. Level of Strategic Approach of Proficient Teachers in terms of Technology Operations and Concepts

Statements The teacher….	Mean	SD	Remarks
…can operate basic ICT tools (e.g., computer, projector, printer) with confidence in daily teaching.	6.44	0.70	Strongly Agree
…uses appropriate applications and platforms to deliver lessons effectively.	6.41	0.70	Strongly Agree
…applies safe and responsible use of technology while teaching.	6.43	0.71	Strongly Agree
…updates himself/herself with new software and tools that can be applied in teaching.	6.41	0.68	Strongly Agree
…integrates ICT skills into lessons to enhance student learning.	6.41	0.68	Strongly Agree
Weighted Mean	6.42		
SD	0.69		
Verbal Interpretation	Very High		

The statement, the teacher can operate basic ICT tools (e.g., computer, projector, printer) with confidence in daily teaching, with a mean of 6.44 and a standard deviation of 0.70, suggests a very high level of strategic approach to technology operations and concepts by proficient teachers. Likewise, the teacher applies safe, responsible technology use while teaching. At the same time, the mean of 6.41 is slightly lower with a standard deviation of 0.70 and 0.68, which still designates that the teacher uses appropriate applications and platforms to deliver lessons effectively, updates themself with new software and tools that can be applied in teaching, and integrates ICT skills into lessons to enhance student learning**.**

Moreover, the level of strategic approach of proficient teachers in terms of technology operations and concepts

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attained a weighted mean score of 6.42 and a standard deviation of 0.69. The respondents verbally interpreted them as very high. The finding reveals that teachers' proficiency in technology operations and concepts is strengthened by high computer literacy, competence in ICT integration, and continuous motivation to upgrade skills. By applying ICT tools responsibly and effectively, teachers enhance instructional delivery and promote improved student learning outcomes.

This result is supported by the study of Batan et al. (2022), who assessed teachers' skills in technology operations and concepts and found that respondents demonstrated proficiency in basic computer functions, troubleshooting, and maintenance. They were also adept at recognizing and defining the functions of major computer components and peripherals, reflecting confidence in using ICT tools for daily teaching. Similarly, Escubido et al. (2025) revealed that the effective use of digital platforms significantly enhances academic outcomes, while also highlighting the importance of addressing ongoing challenges in ICT integration. Together, these studies reinforce the present findings by showing that teachers' technological proficiency is not only a matter of operational skill but also a driver of instructional innovation and improved learning outcomes.

Teachers should be provided with continuous ICT training to strengthen proficiency and foster innovative application of digital tools for improved learning outcomes.

Table 12. Level of Strategic Approach of Proficient Teachers in terms of Planning and Designing Learning Environments

Statements The teacher….	Mean	SD	Remarks
…designs lesson plans that incorporate digital tools to make learning more engaging.	6.32	0.69	Strongly Agree
…creates classroom activities that allow learners to collaborate using technology.	6.32	0.69	Strongly Agree
…uses ICT to adapt lessons for both face-to-face and online learning situations.	6.35	0.73	Strongly Agree
…plans learning environments where learners actively participate through digital platforms.	6.33	0.70	Strongly Agree
…prepares digital learning resources (e.g., videos, slides, apps) to enrich classroom instruction.	6.36	0.67	Strongly Agree
Weighted Mean	6.33		
SD	0.69		
Verbal Interpretation	Very High		

Table 12 express the level of strategic approach of proficient teachers. Also exhibits the statements, mean, standard deviation and remarks.

The statement, the teacher prepares digital learning resources (e.g., videos, slides, apps) to enrich classroom instruction, with a mean of 6.36, suggests a very high level of strategic approach to planning and designing learning environments, and had a standard deviation of 0.67. Similarly, the teacher uses ICT to adapt lessons for both face-to-face and online learning situations. Even though the mean of 6.32 is slightly lower, with a standard deviation of 0.69, it still specifies the teacher designs lesson plans that incorporate digital tools to make learning more engaging and creates classroom activities that allow learners to collaborate using technology**.**

The level of strategic approach of proficient teachers in terms of planning and designing learning environments attained a weighted mean score of 6.33 and a standard deviation of 0.69. The respondents verbally interpreted it as very high. The finding reveals that proficient teachers showed their ability to prepare digital learning resources, adapt lessons for both face-to-face and online contexts, and design collaborative technology-based activities that actively engage learners. Moreover, teachers integrate digital tools into lesson plans to make instruction more interactive, foster collaboration, and ensure that learning remains relevant and responsive to diverse student needs.

This result is supported by Çelik & Baturay (2024), who emphasized that technology integration must be balanced with pedagogical innovation, aligning with teachers' use of ICT to adapt lessons for diverse contexts. Similarly, Taylor (2021) found that digital communication tools in classroom activities strengthen learning areas and foster 21st-century skills, supporting teachers' integration of ICT in lesson planning.

In addition, Zou et al. (2025) highlighted that digital learning frameworks should prioritize accessibility, personalization, and equity, corresponding with teachers' design of inclusive and collaborative activities using technology.

These studies reinforce the present findings by showing that effective planning and design of technology-enhanced learning environments not only improve instructional delivery but also cultivate collaboration, inclusivity, and the development of future-ready skills. Hence, teachers should continue enhancing lesson planning and design by integrating accessible, innovative digital tools, ensuring that learning environments remain inclusive, collaborative, and responsive to students' diverse needs.

Table 13. Level of Strategic Approach of Proficient Teachers in terms of Assessment and Evaluation

Statements The teacher….	Mean	SD	Remarks
…uses digital tools such as online quizzes or applications to assess student learning.	6.13	0.81	Agree
…tracks learner progress through digital records or electronic spreadsheets.	6.26	0.73	Strongly Agree
…designs assessments that combine both traditional and ICT-based methods.	6.31	0.67	Strongly Agree
…evaluates how technology enhances the achievement of lesson objectives.	6.29	0.69	Strongly Agree
…ensures that ICT-based assessments are fair and accessible to all learners.	6.33	0.70	Strongly Agree
Weighted Mean	6.26		
SD	0.73		
Verbal Interpretation	Very High		

Table 13 illustrates the level of strategic approach of proficient teachers. Also presents the statements, mean, standard deviation and remarks.

The statement, the teacher ensures that ICT-based assessments are fair and accessible to all learners, obtained a mean of 6.33, suggesting a very high level of strategic approach to assessment and evaluation, with a standard

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deviation of 0.70. Correspondingly, the teacher designs assessments that combine both traditional and ICT-based methods. While the mean of 6.13 is lower, with a standard deviation of 0.81, it still shows the teacher uses digital tools such as online quizzes or applications to assess student learning.

The level of strategic approach of proficient teachers in terms of assessment and evaluation attained a weighted mean score of 6.26 and a standard deviation of 0.73, The respondents verbally interpreted it as very high. The finding reveals that proficient teachers demonstrated their ability to design fair and accessible ICT-based assessments, integrate both traditional and digital methods, and use online tools, such as quizzes and applications, to measure student learning effectively. Even with lower mean scores in some areas, the results still affirm that teachers consistently apply responsible, innovative assessment practices that enhance validity, fairness, and relevance in evaluating learner performance.

The findings align with Luthfiyyah et al. (2021), who showed that digital assessment tools enhance engagement, provide personalized feedback, and improve language accuracy, making them practical platforms for evaluating student performance. Similarly, the findings support Bozkurt & Sharma (2022), who emphasized that real-time monitoring and learning analytics help identify gaps, adapt instruction, and boost overall academic achievement. These findings affirm that technology-enhanced assessments not only strengthen validity and fairness but also drive continuous improvement in teaching and learning outcomes. Hence, teachers should adopt ICT-based assessments with real-time feedback and analytics to ensure fairness, personalize learning, and enhance student performance.

Level of Strategic Management of Proficient Teachers

In this study, the level of strategic management of proficient teachers refers to instructional implementation, monitoring and evaluation, continuous improvement and innovation, and productivity and professional practice.

The following tables show the statement, mean, standard deviation. remarks and verbal interpretation from the perspectives of respondents.

Table 14 indicates the level of strategic management of proficient teachers. Also exposes the statements, mean, standard deviation and remarks.

The statement, the teacher uses technology to support differentiated instruction for diverse learners and adopts blended or digital teaching methods in classroom implementation with a mean of 6.35, suggests a very high level of strategic management of proficient teachers in terms of instructional implementation, supported by a standard deviation of 0.69 and 0.70. Furthermore, makes adjustments in instruction based on available technology resources. Although the mean of 6.31 is slightly lower, with a standard deviation of 0.71, it still indicates that the teacher collaborates with colleagues in applying technology-based teaching strategies.

The level of strategic management of proficient teachers in terms of instructional implementation attained a weighted mean score of 6.34 and a standard deviation of 0.70. It was verbally interpreted as very high among the respondents. The finding reveals that proficient teachers demonstrated their ability to effectively use technology in supporting differentiated instruction, adopt blended and digital teaching methods, adjust lessons based on available resources, and collaborate with colleagues in applying technology-based strategies. Their consistent performance demonstrates a strong commitment to integrating technology with pedagogy, ensuring that classroom instruction remains engaging, inclusive, and responsive to the diverse needs of learners.

Table 14. Level of Strategic Management of Proficient Teachers in terms of Instructional Implementation

Statements The teacher….	Mean	SD	Remarks
…implements lessons that integrate ICT tools to improve teaching and learning.	6.34	0.71	Strongly Agree
…uses technology to support differentiated instruction for diverse learners.	6.35	0.69	Strongly Agree
…adopts blended or digital teaching methods in classroom implementation.	6.35	0.70	Strongly Agree
…collaborates with colleagues in applying technology-based teaching strategies.	6.31	0.71	Strongly Agree
…makes adjustments in instruction based on available technology resources.	6.33	0.70	Strongly Agree
Weighted Mean	6.34		
SD	0.70		
Verbal Interpretation	Very High		

As supported by Pacod (2025), active learning, communication, and remediation strategies—such as re-teaching and hands-on tasks—were consistently applied, supporting learner-centered pedagogy.

Moreover, Bolante & Gabriel (2025) emphasized that diverse learning resources, both traditional and digital, help teachers address varied learning styles and make abstract concepts more concrete, consistent with teachers' adjustments in instruction using available technology.

Finally, Tuboc et al. (2025) highlighted that cooperative learning, experiential modules, and technology integration enhance clarity and foster critical thinking, corresponding with teachers' collaboration in applying technology-based strategies.

The integration of technology with instructional practices has proven to be a vital driver of effective teaching and improved student outcomes. Teachers should strengthen instructional implementation by maximizing diverse digital and traditional resources, adopting learner-centered approaches, and collaborating on technology-based strategies to sustain inclusive and innovative classroom practices.

Table 15 shows the level of strategic management of proficient teachers. Also reveals the statements, mean, standard deviation and remarks.

The statement, the teacher evaluates lessons to identify areas where technology can be improved, with a mean of 6.34, suggests a very high level of strategic management by proficient teachers in terms of monitoring and evaluation, and is reinforced by a standard deviation of 0.72.

Besides, the teacher uses evaluation results to enhance future teaching practices with ICT. Even though the mean of 6.23 is slightly lower, with a standard deviation of 0.77, it still

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indicates that the teacher regularly reflects on how effectively ICT is integrated into lessons**.**

Table 15. Level of Strategic Management of Proficient Teachers in terms of Monitoring and Evaluation

Statements The teacher….	Mean	SD	Remarks
…regularly reflects on how effectively ICT is integrated into the lessons.	6.23	0.77	Strongly Agree
…monitors student learning outcomes to check the impact of ICT use.	6.27	0.72	Strongly Agree
…seeks feedback from peers or supervisors about the use of technology in instruction.	6.24	0.73	Strongly Agree
…evaluates lessons to identify areas where technology can be improved.	6.34	0.72	Strongly Agree
…uses evaluation results to enhance future teaching practices with ICT.	6.28	0.74	Strongly Agree
Weighted Mean	6.27		
SD	0.74		
Verbal Interpretation	Very High		

The level of strategic management of proficient teachers in terms of monitoring and evaluation attained a weighted mean score of 6.27 and a standard deviation of 0.74. The respondents verbally interpreted it as very high. The finding reveals that proficient teachers demonstrated their commitment to systematically reviewing lesson effectiveness, reflecting on ICT integration, and using evaluation outcomes to refine future instructional practices. Their approach highlights a continuous cycle of improvement, ensuring that technology use in teaching remains purposeful, responsive, and aligned with student learning needs.

These findings align with existing studies, as Siyam et al. (2025) proposed a framework for evaluating technology integration in education, emphasizing that teachers must regularly reflect on ICT use to strengthen confidence and effectiveness in classroom practice.

These findings are further supported by Torres-Santos and Castulo (2025), who revealed that administrators' use of data-driven decision-making within New Mexico's multi-layered system of supports fostered a culture of accountability and guided teachers toward more effective instructional strategies.

Monitoring and evaluation are essential for sustaining instructional quality, as they enable teachers to reflect on ICT use and refine future practices. Teachers should strengthen ICT-supported monitoring systems and reflective strategies to enhance accountability and improve student outcomes.

Table 16 demonstrates the level of strategic management of proficient teachers. Also displays the statements, mean, standard deviation and remarks.

The statement, the teacher explores new digital tools and methods to improve teaching with a mean of 6.35, suggests a very high level of strategic management of proficient teachers in terms of continuous improvement and innovation, and is buoyed by a standard deviation of 0.74. Additionally, the teacher innovates classroom activities using technology to make learning more interactive. Despite the mean of 6.25 being slightly lower, with a standard deviation of 0.75, it still suggests the teacher shares new strategies or digital practices with colleagues**.**

Table 16. Level of Strategic Management of Proficient Teachers in terms of Continuous Improvement and Innovation

Statements The teacher….	Mean	SD	Remarks
…explores new digital tools and methods to improve teaching.	6.35	0.74	Strongly Agree
…engages in continuous training to strengthen ICT teaching skills.	6.32	0.72	Strongly Agree
…innovates classroom activities using technology to make learning more interactive.	6.33	0.72	Strongly Agree
…shares new strategies or digital practices with colleagues.	6.25	0.75	Strongly Agree
…adapts to changes in educational technology by updating teaching practices.	6.30	0.73	Strongly Agree
Weighted Mean	6.31		
SD	0.73		
Verbal Interpretation	Very High		

The level of strategic management of proficient teachers in terms of continuous improvement and innovation attained a weighted mean score of 6.31 and a standard deviation of 0.73. The respondents verbally interpreted it as very high. The finding reveals that proficient teachers exhibit a strong orientation toward continuous improvement and innovation. Their practices included exploring new digital tools, designing interactive classroom activities, and sharing innovative strategies with colleagues. These actions illustrated a sustained commitment to enhancing instructional quality and ensured that technology integration remained dynamic, collaborative, and responsive to learners' evolving needs.

These findings align with Kumbo et al. (2023), who noted that technology integration supports innovative teaching methods such as flipped classrooms and blended learning, both of which enhance student engagement and improve learning outcomes.

Moreover, Casilao & Satojito (2025) observed a significant relationship between teachers' professional development, technology integration, and learners' engagement, underscoring the importance of continuous improvement and innovation in creating effective and interactive learning environments.

Teachers refine strategies and embrace new technologies to keep instruction relevant and effective. Beyond simply adopting tools, they must critically evaluate which innovations truly enhance pedagogy, ensuring that lessons remain engaging, adaptable, and responsive to diverse student needs. Practical innovations—such as interactive platforms, multimedia resources, and data-driven feedback systems—help create dynamic learning experiences that foster collaboration, creativity, and critical thinking. At the same time, teachers must balance innovation with accessibility and inclusivity, making sure that technology use supports equity and does not widen learning gaps. By continuously reflecting on practice and integrating purposeful innovations, teachers strengthen instructional quality and prepare learners to thrive in an ever-changing educational landscape.

Table 17 displays the level of the strategic management of the proficient teachers. Also shows the statements, the mean, standard deviation and remarks.

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The statement that the teacher applies ICT tools to save time in accomplishing administrative or academic tasks, with a mean of 6.42, suggests a very high level of strategic management of proficient teachers in terms of productivity and professional practice, with a standard deviation of 0.69. In addition, the teacher uses digital tools to prepare lessons, reports, and classroom documents more efficiently, communicates with parents, learners, and colleagues through digital platforms and attends online trainings, webinars, or workshops to enhance teaching practices.

Table 17. Level of Strategic Management of Proficient Teachers in terms of Productivity and Professional Practice

Statements The teacher….	Mean	SD	Remarks
…uses digital tools to prepare lessons, reports, and classroom documents more efficiently.	6.39	0.73	Strongly Agree
…communicates with parents, learners, and colleagues through digital platforms.	6.39	0.74	Strongly Agree
…uses productivity software (e,g, spreadsheets, presentations, word processors) in professional tasks.	6.36	0.77	Strongly Agree
…attends online trainings, webinars, or workshops to enhance teaching practices.	6.39	0.69	Strongly Agree
…applies ICT tools to save time in accomplishing administrative or academic tasks.	6.42	0.69	Strongly Agree
Weighted Mean	6.39		
SD	0.72		
Verbal Interpretation	Very High		

However, the mean of 6.36 is slightly lower, with a standard deviation of 0.77; it still reveals that the teacher uses productivity software (e.g., spreadsheets, presentations, word processors) in professional tasks**.**

The level of strategic management of proficient teachers in terms of productivity and professional practice attained a weighted mean score of 6.39 and a standard deviation of 0.72. The respondents verbally interpreted it as very high. The finding reveals that proficient teachers effectively used ICT tools to streamline administrative and academic tasks, prepare lessons and reports efficiently, and maintain communication with parents, learners, and colleagues. Their participation in online professional development further reflected a commitment to growth, while the consistent use of productivity software supported professional responsibilities and strengthened instructional delivery.

These findings are supported by Daulay (2025), who found that teachers with strong digital skills could efficiently manage administrative tasks such as lesson planning, grade recording, attendance tracking, and parent communication through digital platforms.

Likewise, Meyer et al. (2023) emphasized the positive impact of online training activities—including webinars and courses—on teachers' ability to integrate digital tools into professional practice, thereby improving communication, organizational efficiency, and fostering continuous professional growth.

Teachers maintain consistent teaching quality by balancing instructional tasks, professional growth, and technology integration. They should continue enhancing professional practice through ICT use, collaboration, and ongoing capacity-building to sustain effective instruction.

Test of Prediction/Influence between the School Head's Technological Leadership on the Strategic Approach of Proficient Teachers

To test whether there's a significant influence of the school head's technological leadership on the strategic approach of proficient teachers in terms of technology operations and concepts, planning and designing learning environments and experiences, and assessment and evaluation, the data were analyzed statistically using Real Statistics Data Analysis Tools and the Regression Analysis.

Table 18. Regression Analysis between the School Head's Technological Leadership on the Strategic Approach of Proficient Teachers

a. Dependent Variable: STRATEGIC APPROACH

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.45	5	7.849	43.63	0.000
	Residual	26.44	154	0.172		
	Total	63.88	159			

a. Dependent Variable: STRATEGIC APPROACH

b. Predictors: (Constant), Visionary Leadership, Digital Age Learning Culture, Excellence In Professional Practice, Systemic Imrovement, Digital Citizenship

A multiple linear regression was conducted to predict the school head's technological leadership in relation to the strategic approach of proficient teachers. The overall model was statistically significant, explaining a substantial portion of the variance in the strategic approach of proficient teachers, $F(5, 154) = 43.63$, $p < .01$, $R^2 = .586$. This indicates that the collective influence of technological leadership dimensions substantially contributes to teachers' strategic approaches.

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.383	0.351	2.077	3.938	0.000
	VISIONARY LEADERSHIP	0.149	0.122	0.389	1.221	0.224
	DIGITAL AGE LEARNING CULTURE	0.281	0.145	0.568	1.939	0.054
	EXCELLENCE IN PROFESSIONAL	0.126	0.136	0.395	0.931	0.354
	SYSTEMIC IMROVEMENT	0.260	0.173	0.601	1.504	0.135
	DIGITAL CITIZENSHIP	-0.037	0.149	0.258	-0.247	0.805

Visionary leadership ($B = 0.149$, $SE = 0.122$, $t(154) = 1.221$, $p = .224$) displayed a positive coefficient, indicating that when school heads articulate a clear vision for ICT integration, teachers tend to strengthen their strategies. However, it did not significantly predict strategic approach of proficient teachers, suggesting that vision alone does not strongly influence

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planning and implementation unless supported by other leadership practices. Chin (2024) supports this by noting that visionary leaders cultivate organizational culture by aligning efforts with ambitious goals, but vision must be embedded in continuous improvement to yield tangible results.

Digital age learning culture (B = 0.281, SE = 0.145, t(154) = 1.939, p = .054) had the highest positive coefficient and came close to significance, but it did not significantly predict strategic approach of proficient teachers. This implies that fostering supportive digital environments encourages teachers to adopt effective strategies. Hamzah et al. (2021) emphasized that leaders competent in ICT enhance teachers' digital teaching capabilities. Yet, the near-significance suggests that digital culture alone cannot fully explain teachers' approaches without complementary leadership dimensions.

Excellence in professional practice (B = 0.126, SE = 0.136, t(154) = 0.931, p = .324) also showed a positive coefficient but did not indicate a significant influence. This reflects that when school heads model ICT use, teachers may follow their example, though the influence is not strong enough to stand alone. Ablasa & Liwan (2024) noted that mentorship and coaching improve teachers' confidence in digital tools, showing that professional modeling must be supported by collaboration and resources to drive strategies.

Systemic improvement (B = 0.260, SE = 0.173, t(154) = 1.504, p = .135) indicated a positive relationship, showing that ICT-driven systems may encourage refinement of teacher approaches. However, the lack of significance suggests that systemic processes contribute only when integrated with vision and digital culture. Ramos (2025) argued that systemic improvement requires embedding technology into institutional practices rather than merely adopting tools superficially.

In contrast, digital citizenship (B = -0.037, SE = 0.149, t(154) = -0.247, p = .805) yielded a negative coefficient, suggesting that promoting responsible and ethical technology use does not directly influence teachers' strategic approaches in this model. Kahne et al. (2024) explained that digital citizenship plays a foundational role in establishing safe and responsible learning environments, but its impact is more indirect, supporting conditions for teaching rather than directly shaping instructional strategies.

This implies that while technological leadership as a whole significantly influences the strategic approach of proficient teachers, no single dimension independently drives this influence. Instead, the combined or holistic effect of all leadership dimensions contributes to shaping teachers' strategic practices. Training programs should prioritize ICT competence and communication skills, enabling leaders to support teachers in adapting to digital pedagogies. In addition, professional development initiatives must be paired with mentorship and adequate resources to translate training into practice.

Test of Prediction/Influence between the School Head's Technological Leadership on the Strategic Management of Proficient Teachers

To test if there's any significant influence between the school head's technological leadership on the strategic management of proficient teachers in terms of instructional implementation, monitoring and evaluation, continuous improvement and innovation, and productivity and professional practice they were treated statistically using Real Statistics Data Analysis Tools using the Regression Analysis.

Table 19. Regression Analysis between the School Head's Technological Leadership and the Strategic Management of Proficient Teachers

a. Dependent Variable: STRATEGIC MANAGEMENT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	36.27	5	7.255	40.46	0.000
	Residual	27.61	154	0.179		
	Total	63.88	159			

a. Dependent Variable: STRATEGIC MANAGEMENT

b. Predictors: (Constant), VISIONARY LEADERSHIP, DIGITAL AGE LEARNING CULTURE, EXCELLENCE IN PROFESSIONAL PRACTICE, SYSTEMIC IMPROVEMENT, DIGITAL CITIZENSHIP

A multiple linear regression was conducted to predict the school head's technological leadership on the strategic management of proficient teachers. The overall model was statistically significant, explaining a substantial portion of the variance in strategic management of proficient teachers, $F(5, 154) = 40.46$, $p < .01$, $R^2 = .568$. This indicates that when school heads exercise technological leadership, they significantly shape how teachers plan, implement, monitor, and innovate in their professional practice. Its influence arises from the integration of multiple leadership dimensions rather than from any single factor.

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	0.825	0.394	1.602	2.095	0.038
	VISIONARY LEADERSHIP	-0.059	0.119	0.176	-0.497	0.62
	DIGITAL AGE LEARNING CULTURE	0.31	0.129	0.564	2.405	0.017
	EXCELLENCE IN PROFESSIONAL	0.31	0.146	0.598	2.125	0.035
	SYSTEMIC IMPROVEMENT	0.199	0.184	0.563	1.079	0.282
	DIGITAL CITIZENSHIP	0.092	0.175	0.438	0.526	0.6

Digital age learning culture (B = 0.31, SE = 0.129, β = 0.564, t(154) = 2.405, p < .05) and excellence in professional practice (B = 0.31, SE = 0.146, β = 0.598, t(154) = 2.125, p < .05) were significant positive predictors, suggesting digital age learning culture and excellence in professional practice correlated with greater strategic management of proficient teachers. This means that when schools cultivate a supportive digital culture and when leaders model effective ICT use, teachers are more likely to adopt structured, technology-driven strategies in their practice. These findings align with Szyszka

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et al. (2022), who emphasized that leadership fosters collaborative digital cultures through professional development and collegial support, empowering teachers to embed technology into practice. Likewise, Sterrett & Richardson (2020) noted that digitally savvy principals help teachers grow professionally and cultivate cultures of innovation and collaboration.

However, visionary leadership (B = -0.059, SE = 0.119, t(154) = -0.497, p = .62), systemic improvement (B = 0.199, SE = 0.184, t(154) = 1.079, p = .282), and digital citizenship (B = 0.092, SE = 0.175, t(154) = 0.526, p = .6) did not significantly predict strategic management of proficient teachers. This implies that while these factors contribute to shaping organizational culture, ethical practice, and long-term sustainability, they are not, on their own, sufficient to drive teachers' strategic approaches. Schools should prioritize leadership that combines cultural support, professional modeling, and resource provision to sustain innovation in teaching. Eseryel et al. (2021) explained that visionary leaders strengthen relationships and optimize resources to support innovation, but vision alone is insufficient without complementary practices. Akuta et al. (2025) further emphasized that supportive environments provide essential encouragement and resources for technological change. Similarly, Rahman et al. (2020) highlighted the importance of proactive leadership and institutional rules to safeguard learners from harmful online behaviors, underscoring the foundational role of digital citizenship.

Overall, the findings indicate that technological leadership significantly enhances teachers' strategic management, particularly through fostering a digital age learning culture and modeling excellence in professional practice. This suggests that schools should go beyond simply providing ICT resources by intentionally creating supportive digital environments where innovation can thrive. Effective leadership requires school heads to not only ensure access to digital tools but also to demonstrate how these tools can be used pedagogically in lesson planning, classroom management, and assessment. By embedding technology into daily practices and modeling its effective use, school heads inspire teachers to adopt and sustain technology-driven strategies, thereby strengthening instructional quality and promoting long-term innovation in teaching and learning.

Test of Prediction/Influence between the School Head's Managerial Leadership on the Strategic Approach of Proficient Teachers

To test whether the school head's managerial leadership significantly influences the strategic approach of proficient teachers in technology operations and concepts, planning and designing learning environments and experiences, and assessment and evaluation, the data were analyzed statistically using Real Statistics Data Analysis Tools and Regression Analysis.

Table 20. Regression Analysis between the School Head's Managerial Leadership on the Strategic Approach of Proficient Teachers

a. Dependent Variable: STRATEGIC APPROACH

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	40.51	5	8.102	38.47	0.000
	Residual	32.43	154	0.211		
	Total	72.94	159			

a. Dependent Variable: STRATEGIC APPROACH

b. Predictors: (Constant), ORGANIZATIONAL MANAGEMENT, RESOURCE ALLOCATION AND BUDGETING, PERFORMANCE MONITORING AND EVALUATION, DECISION-MAKING AND PROBLEM-SOLVING, PROFESSIONAL DEVELOPMENT AND CAPACITY-BUILDING

Multiple linear regression was used to predict school head's managerial leadership on the strategic approach of proficient teachers. The overall model was statistically significant, explaining a substantial portion of the variance in strategic approach of proficient teachers, $F(5, 154) = 38.47$, $p < .01$, $R^2 = .555$. This indicates that when school heads exercise managerial leadership, they substantially shape how teachers plan, implement, monitor, and refine their professional practices.

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.274	0.389	2.042	3.274	0.001
	ORGANIZATIONAL MANAGEMENT	0.044	0.135	0.31	0.324	0.746
	RESOURCE ALLOCATION	0.408	0.161	0.726	2.541	0.012
	PERFORMANCE MONITORING	0.087	0.151	0.384	0.577	0.565
	DECISION-MAKING	0.351	0.191	0.729	1.835	0.069
	PROFESSIONAL DEVELOPMENT	-0.096	0.165	0.23	-0.584	0.560

Resource allocation and budgeting (B = 0.408, SE = 0.161, β = 0.726, t(154) = 2.541, p < .05) is significant positive predictors, suggesting resource allocation and budgeting correlated with greater strategic approach of proficient teachers. This indicates that teachers are more capable of applying strategic approaches when they are provided with adequate materials, resources, and financial support. As emphasized by Ladion & Baguio (2025), access to modern teaching materials, digital tools, and well-funded professional development opportunities equips teachers to innovate and adopt diverse instructional approaches that effectively respond to varied learner needs.

Although decision-making and problem-solving (B = 0.351, SE = 0.191, t(154) = 1.835, p = .069) showed a moderate positive effect, it was not statistically significant. This suggests that teachers tend to adopt strategic approaches when leaders make decisions that remove obstacles or clarify processes, but the influence is weaker compared to resource allocation. Anyanwu et al. (2025) noted that school leaders play a multifaceted role in shaping institutional direction and culture, reinforcing the idea that decision-making contributes indirectly to strategic practice.

Organizational management (B = 0.044, SE = 0.135, t(154) = 0.324, p = .746) was not significant, indicating that the way schools are structured or organized by heads does not strongly influence teachers' strategic approaches. Aquino et al. (2021) highlighted that while organizational systems maintain order and efficiency, they must be complemented by resource support and participatory leadership to drive instructional innovation.

Similarly, performance monitoring and evaluation (B = 0.087, SE = 0.151, t(154) = 0.577, p = .565) did not significantly predict strategic approaches. Monitoring alone may be perceived by teachers as routine rather than empowering. Torres et al. (2024) explained that classroom observation is most effective when paired with constructive feedback and support, helping teachers refine strategies rather than simply comply with standards.

Finally, professional development and capacity-building (B = -0.096, SE = 0.165, t(154) = -0.584, p = .560) showed a slightly negative, non-significant effect. This suggests that training initiatives, when isolated, may not guarantee improved strategic approaches. Galvez & Azarias (2024) emphasized that professional development must be collaborative, context-specific, and resource-supported to empower teachers to experiment with new strategies and adapt to diverse learner needs.

Overall, these findings highlight that practical support in the form of resources and effective decision-making is more impactful in promoting teachers' strategic approaches than formal monitoring or training alone. To enhance strategic teaching practices, school leaders should prioritize efficient resource allocation and create an environment where teachers have the tools, autonomy, and supportive leadership necessary to plan, innovate, and implement effective instructional strategies.

Test of Prediction/Influence between the School Head's Managerial Leadership on the Strategic Management of Proficient Teachers

To test whether the school head's managerial leadership significantly influences the strategic management of proficient teachers in terms of instructional implementation, monitoring and evaluation, continuous improvement and innovation, and productivity and professional practice, the data were analyzed statistically using Real Statistics Data Analysis Tools and Regression Analysis.

A multiple linear regression was conducted to predict school head's managerial leadership on the strategic management of proficient teachers. The overall model was statistically significant, explaining a substantial portion of the variance in strategic management of proficient teachers, $F(5, 154) = 32.06$, $p < .01$, $R^2 = .51$.

Organizational management (B = -0.086, SE = 0.135, t(154) = -0.632, p = .528) showed a weak negative effect, but it did not significantly predict strategic management of proficient teachers. This suggests that structural and organizational arrangements alone do not directly improve teachers' strategic management. As noted by Ambon et al. (2025), effective managerial leadership helps align institutional goals with the evolving needs of the school community, thereby maintaining educational relevance.

Table 21. Regression Analysis between the School Head's Managerial Leadership on the Strategic Management of Proficient Teachers

a. Dependent Variable: STRATEGIC MANAGEMENT

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	37.2	5	7.441	32.06	0.000
	Residual	35.74	15	0.232		
	Total	72.94	159			

a. Dependent Variable: STRATEGIC MANAGEMENT

b. Predictors: (Constant), Organizational Management, Resource Allocation And Budgeting, Performance Monitoring And Evaluation, Decision-Making And Problem-Solving, Professional Development And Capacity-Building

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	0.71	0.448	1.595	1.586	0.115
	ORGANIZATIONAL MANAGEMENT	-0.086	0.135	0.182	-0.632	0.528
	RESOURCE ALLOCATION	0.23	0.146	0.519	1.568	0.119
	PERFORMANCE MONITORING	0.262	0.166	0.59	1.576	0.117
	DECISION-MAKING	0.243	0.21	0.657	1.158	0.249
	PROFESSIONAL DEVELOPMENT	0.216	0.199	0.609	1.084	0.280

Resource allocation and budgeting (B = 0.23, SE = 0.146, t(154) = 1.568, p = .119) had a positive but non-significant effect, suggesting that resources and financial support are essential but insufficient on their own. This aligns with Mohzana et al. (2025), who emphasized that access to adequate facilities and instructional materials can boost teacher motivation and professionalism, but must be complemented by other supportive mechanisms.

Performance monitoring and evaluation (B = 0.262, SE = 0.166, t(154) = 1.576, p = .117) also showed a positive but non-significant effect, meaning monitoring contributes to teacher development but requires constructive feedback to be effective. Belo (2025) highlighted that systematic monitoring, when paired with meaningful feedback, enables teachers to refine their practices and improve student-centered instruction.

Decision-making and problem-solving (B = 0.243, SE = 0.21, t(154) = 1.158, p = .249) yielded a positive but non-significant effect, suggesting that participatory processes help teachers adapt but are not strong predictors on their own. Kilag et al. (2024) emphasized that inclusive leadership fosters trust and shared responsibility, which are essential in promoting responsive and effective school practices.

Lastly, professional development and capacity-building (B = 0.216, SE = 0.199, t(154) = 1.084, p = .280) showed a positive but non-significant effect, implying that training initiatives alone may not lead to improved strategic management. Lalor (2022) noted that effective professional

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development, when guided by strong leadership, plays a crucial role in advancing instructional quality and teacher performance.

Overall, the findings reveal that while managerial leadership significantly influences strategic management when considered collectively, no single dimension independently predicts the outcome. School leaders should therefore adopt a holistic approach, combining organizational support with continuous monitoring, participatory decision-making, and context-driven training. These insights can guide leadership programs and policies to strengthen teacher effectiveness, instructional quality, and overall school performance.

IV. Conclusion and Recommendations

There is a significant influence between school heads' technological leadership and teachers' strategic approaches, which led to the rejection of the null hypothesis. This implies that school leaders must adopt a holistic and coordinated approach by strengthening ICT competence, fostering supportive digital environments, aligning vision and systems, and reinforcing professional practices with mentorship and adequate resources to enhance teachers' strategic approaches.

There is also a significant influence of technological leadership on teachers' strategic management, resulting in the rejection of the null hypothesis. This implies that school heads should cultivate digital-rich learning environments, model effective ICT integration, and ensure that policies and professional development provide sustained mentorship and resources. Such practices motivate teachers to adopt innovative strategies and strengthen instructional effectiveness.

The results further showed that managerial leadership significantly influenced teachers' strategic approaches, thereby rejecting the null hypothesis. This implies that school leaders should prioritize practical support by providing resources, establishing clear processes, and making facilitative decisions to empower teachers in enhancing teaching and learning outcomes.

Finally, the analysis confirmed that managerial leadership, as a whole, significantly influenced teachers' strategic management, thereby rejecting the null hypothesis. This implies that school heads should integrate organizational support, resource allocation, systematic monitoring, collaborative decision-making, and professional development to strengthen teachers' strategic management and improve overall school performance.

Based on the findings, the study makes the following recommendations:

School heads may improve teaching practices by creating a structured peer coaching program focused on ICT. Using an Action Plan for Upskilling Teachers in ICT, they can help teachers become more confident and ready to use technology. Trained mentors may guide colleagues in applying ICT to lesson planning, classroom management, and assessment through coaching, demonstrations, and feedback. This supportive approach builds teacher confidence and promotes effective use of technology in everyday teaching.

Teachers may enhance their ICT skills by actively participating in mentorship and training programs through School Learning Action Cell (SLAC) sessions focused on digital teaching. They can also work closely with colleagues in planning lessons, monitoring classroom activities, and making instructional decisions, allowing them to apply more effective and strategic teaching practices in their daily work.

Schools may establish clear policies to support technology use and ensure proper resource allocation. They may upgrade internet services, provide ICT training for teachers, and guarantee equal access for everyone. Simple monitoring and evaluation practices can be applied to track progress and identify areas for improvement. These steps help schools strengthen teaching effectiveness and integrate technology more meaningfully into learning.

Future researchers may focus on specific leadership practices that directly influence teachers' strategies and test them in actual school settings. They may also conduct follow-up or long-term studies to see how these practices influence teaching and learning outcomes over time.

Reference

[1]. A'mar, F., & Eleyan, D. (2022). Effect of Principal's Technology Leadership on Teacher's Technology Integration. Int. J. Instr. 15, 781–798. https://doi.org/ 10.29333/iji.2022.15145a

[2]. Ablasa, L. A., & Liwan, R. K. (2024). The Role of School Leaders in Enhancing Digital Literacy: For Teachers and Students. Ignatian International Journal for Multidisciplinary Research, 8(2), 1031-1036. https://doi.org/10.5281/zenodo.13335069

[3]. Akuta, F. O., Chukwuemeka, E. J., & Iwuagwu, F. O. (2025). Integrating Information and Communications Technology (ICT) in Primary Education: Factors, Challenges, and Strategies. UAR Journal of Multidisciplinary Studies (UARJMS), 1(7), 18-23. https://doi.org/10.5281/zenodo.17051752

[4]. Almethen, A. A., & Alomair, M. A. (2024). The role of age, grade level, and subject area in determining the inclusion of digital citizenship elements in elementary school curricula: Perspectives of teachers in the Kingdom of Saudi Arabia. Heliyon, 10(14). https://doi.org/10.1016/j.heliyon.2024.e34597

[5]. Ambon, J., Alias, B., & Mansor, A. (2025). Crucial leadership competencies of school heads in effective school management: a comprehensive systematic review. Journal of Education and Learning (EduLearn). https://doi.org/10.11591/edulearn.v19i3.22012.

[6]. Aquino, C. J. C., Afalla, B. T., & Fabelico, F. L. (2021). Managing Educational Institutions: School Heads' Leadership Practices and Teachers' Performance. International Journal of Evaluation and Research in Education, 10(4), 1325-1333. https://doi.org/10.11591/ijere.v10i4.21518

[7]. Ban, J., Bautista, M., & Bautista, M. (2025). School Heads' Practices and Skills in Financial Management in Relation to Teachers' Performance. International Multidisciplinary Journal of Research for Innovation, Sustainability and Excellence (IMJRISE), 2(6), 494–508. https://doi.org/10.5281/zenodo.15662444

[8]. Batan, M. B., Treceñe, J. K. D., Delos Santos, J. R. N., & Paler, R. R. (2022). Assessment of Competencies in Technology Operation and Concepts among Teachers in a Philippine State University. (2022). European Journal of Education and Pedagogy. https://doi.org/10.24018/ejedu.2022.3.3.389

[9]. Belo, M. (2025). School heads techniques in monitoring and evaluation of Teachers' strategies in public elementary schools. International Journal of Science and Research Archive. https://doi.org/10.30574/ijsra.2025.15.3.1663.

[10]. Berhanu, K.Z. (2025), "The school principals' role in developing the professional capital of teachers: evidence from principals and teachers". Journal of Professional Capital and Community, Vol. 10 No. 3 pp. 352–370. https://doi.org/10.1108/JPCC-11-2023-0077

[11]. Bolante, Issa & Gabriel, Dr. (2025). Instructional Practices and Work Performance of Teachers. International Journal for Research in Applied Science and Engineering Technology. 13. 2032-2064. https://doi.org/10.22214/ijraset.2025.76238.
[12]. Borja, F.P. & Fabillar, D.M. & Paglinawan, J. (2024). School policies implementation on academic engagement of high school students. International journal of novel research and development, 9(5), f580-f590. https://ijnrd.org/papers/IJNRD2405561.pdf
[13]. Bozkurt, A., & Sharma, R. C. (2022). Exploring the learning analytics equation: What about the carpe diem of teaching and learning?. Asian Journal of Distance Education, 17(2), i-xiv. https://doi.org/10.5281/zenodo.7402312
[14]. Candrasari, R., Yorman, Y., Mayasari, N., Yulia, R., & Lake, F. (2023). Visionary leadership in education management: Leading toward optimal achievement in the era of independent learning. Indonesian Journal of Education (INJOE), 3(3), 451–467. https://www.injoe.org/index.php/INJOE/article/view/79
[15]. Cantos, A.S. & Callo, E.C. (2022). The impact of school heads' technology leadership on teachers' technological proficiency and academic optimism. International Journal of Educational Management and Development Studies, 3(3), 120-141. https://doi.org/10.53378/352914
[16]. Casilao, D. P., & Satojito, J. P. (2025). Teachers' professional development, technology integration and learners' engagement. International Journal of Science and Management Studies. https://doi.org/10.51386/25815946/ijsms-v8i1p103.
[17]. Çelik, F., & Baturay, M.H. (2024). Technology and innovation in shaping the future of education. Smart Learn. Environ. 11, 54. https://doi.org/10.1186/s40561-024-00339-0
[18]. Chin, P. P. (2024). Unlocking the Potential of Visionary Leadership: A Study on Shared Vision, Teamwork and Team Performance. Education Quarterly Reviews. https://www.asianinstituteofresearch.org/post/unlocking-the-potential-of-visionary-leadership-a-study-on-shared-vision-teamwork-and-team-perform
[19]. Daulay, N. A. (2025). Digital Literacy for Teachers for Efficient Management of Administrative Tasks. European Journal of Educational Sciences: Theory & Practice. https://ejeset.saintispub.com/ejeset/article/download/728/235
[20]. Edu, Nnamdi. (2025). Enhancing Teachers' Professional Development for more Productive Society. 13. 197-203. 10.5281/zenodo.14965355.
[21]. Escubido, J. F., Laborte, A. D., & Bangcas, K. N. (2025). Correlation Between ICT Integration in Teaching, Learning and Perceived Student Performance Among College Students in Bansalan, Philippines. Asian Journal of Education and Social Studies. https://doi.org/10.9734/ajess/2025/v51i62032
[22]. Eseryel, U. Y., Crowston, K., & Heckman, R. (2021). Functional and visionary leadership in self-managing virtual teams. Group & Organization Management. https://doi.org/10.1177/1059601120955034
[23]. Espeño, S. R. (2025). Bridging Divides: Lived Experiences of School Heads in Conflict Management. Jurnal Inovasi Pendidikan. https://doi.org/10.60132/jip.v3i3.524
[24]. Galvez, B. and Azarias, R. A. (2024). "Guro at gabay: Mentoring and coaching from the lens of selected public elementary teachers," International Journal of Research Studies in Education, vol. 13 no. 5. 2024, doi: 10.5861/ijrse.2024.24038
[25]. Grefalde, J. L. K. T., & Paglinawan, J. L. (2025). Technological leadership and decision-making ability on supervisory competence of school administrators. International Journal Of All Research Writings, 6(11), 275-283. Retrieved from: http://ijarw.com/PublishedPaper/IJARW2563.pdf
[26]. Hamzah, M. I. M., Alias, B. S., Wahab, J. A., & Zhu, R. (2025). Digital leadership in education: A systematic review. Journal of Education and Learning (EduLearn), 19(3), 1474–1483.
[27]. Hanisch, M., Goldsby, C. M., Fabian, N. E., & Oehmichen, J. (2023). Digital governance: A conceptual framework and research agenda. Journal of Business Research, 162, 113777. https://doi.org/10.1016/j.jbusres.2023.113777
[28]. Harianto, J. E. (2024). The role of participatory management in improving teacher performance and student achievement. Global International Journal of Innovative Research, 2(9), 2152-2164. https://doi.org/10.59613/global.v2i9.306
[29]. Kahne, J., Lipkin, M. C., Tynes, B., McGrew, S., Mirra, N., & Garcia, A. (2024). Civic reasoning and discourse across the curriculum: Digital Citizenship Education. National Academy of Education & National Association for Media Literacy Education.
[30]. Kalyani, Dr. (2024). The Role of Technology in Education: Enhancing Learning Outcomes and 21st Century Skills. International Journal of Scientific Research in Modern Science and Technology. https://doi.org/10.59828/ijsrmst.v3i4.199.
[31]. Kilag, O. K. ., Diano, Jr., F., Bulilan, R., Moralista, R., Allego, L., & Cañizares, M. C. (2024). Leadership Strategies for Building Inclusive School Communities: The Challenges of Managing Diversity in Schools. International Multidisciplinary Journal of Research for Innovation, Sustainability, and Excellence (IMJRISE) – ISSN: 3028-032X, 1(1), 92-100. https://risejournals.org/index.php/imjrise/article/view/10
[32]. Kumbo, L., Mero, R. F. ., & Hayuma, B. J. . . (2023). Navigating The Digital Frontier: Innovative Pedagogies for Effective Technology Integration in Education. The Journal of Informatics, 3(1). https://doi.org/10.59645/tji.v3i1.142
[33]. Ladion, G., & Baguio, J. B. (2025). Educational Resource Allocation and Practices of Public Elementary School Teachers in the Implementation of the Reading Program. Archives of Current Research International, 25(7), 109–123. https://doi.org/10.9734/acri/2025/v25i71317
[34]. Lalor, M. (2022). How school leaders can support effective professional development. administration and leadership. George Lucas Educational Foundation. https://www.edutopia.org/
[35]. Luthfiyyah, R., Aisyah, & Sulistyo, G. H. (2021). Technology-enhanced formative assessment in higher education: A voice from Indonesian EFL teachers. EduLite: Journal of English Education, Literature, and Culture, 6 (1), 42-54. http://dx.doi.org/10.30659/e.6.1.42-54
[36]. Maala, E. B., & Lagos, F. D. (2022). Technological Leadership of School Heads and Teachers' Technology Integration: Basis for the Development of a Training Program. International Journal of Multidisciplinary: Applied Business and Education Research, 3(10), 2074-2089. https://doi.org/10.11594/ijmaber.03.10.19
[37]. Meyer, A., Kleinknecht, M., & Richter, D. (2023). What Makes Online Professional Development Effective? The effect of quality characteristics on teachers' satisfaction and changes in their professional practices. https://doi.org/10.1016/j.compedu.2023.104805
[38]. Mohzana, Lubis, F. M., Ramli, A., Jayanto, I., Djunaedi, D., & Ibrahim, M. (2025). Analysis of the Influence of Facilities and Infrastructure, Adoption of IT and Principal Leadership on Teacher Performance. Edu Cendikia: Jurnal Ilmiah Kependidikan, 5(01), 229–236. https://doi.org/10.47709/educendikia.v5i01.5758
[39]. Mthanti, B. J., & Msiza, P. (2023). The roles of the school principals in the professional development of teachers for 21st century Education. Cogent Education, 10(2). https://doi.org/10.1080/2331186X.2023.2267934
[40]. Mukarromah, W., Yaqin, M. A. (2025). Leadership Strategy of the Head of the Institution in Improving the Quality. Journal of Educational Management Research, 4(3), 1162-1173.https://doi.org/10.61987/jemr.v4i3.888
[41]. Oñez, H. A., & Pabalan, A. P. (2025). Learning resource centers: schools' initiatives and challenges. Ignatian International Journal for Multidisciplinary Research, 3(4), 1439–1465. https://doi.org/10.5281/zenodo.15316356
[42]. Psalamoi, B; Koros, P & Chepsiror, E. (2025). Influence of Head Teachers' Lesson Observation on Teachers' Job Performance in Public Primary Schools in Soy Sub County, Kenya. Journal of Popular Education in Africa, 9(9), 274 - 286. https://kenyasocialscienceforum.wordpress.com/wp-content/uploads/2025/09/39pdf-psalamoi-et-al-influence-of-head-teachers-lesson-observation-on-teachers-job-performance-in-schools.pdf
[43]. Rahman, N. A. A., Sairi, I. H., Zizi, N. A. M., & Khalid, F. (2020). The importance of cybersecurity education in school. International Journal of Information and Education Technology, 10(5), 378-382. https://doi.org/10.18178/ijiet.2020.10.5.1393
[44]. Ramos, R. (2025). Transformational Leadership in Education: Impacts and Practices Toward Enhancing School Performance. Journal of

Interdisciplinary Perspectives, 3(9), 527–536. https://doi.org/10.69569/jip.2025.574

[45]. Ridho, M. R., Lesmana, I., Safitri, H. D. A., Meirani, R. K., & Prestiadi, D. (2023, February). Digital leadership in the scope of education. In International Conference on Educational Management and Technology (ICEMT 2022), Advances in Social Science, Education and Humanities Research (ASSEHR 727) pp (pp. 52-61). https://doi.org/10.2991/978-2-494069-95-4_7

[46]. Saiteu, L. L. (2025). Effects of teachers' recognition on secondary school students' academic performance: a study of Arusha District Council, Tanzania. Journal of Research Innovation and Implications in Education, 8(3), 48–56. Retrieved from https://www.ajol.info/index.php/jriie/article/view/294623

[47]. Sales, B. (2024). Exploring the Learning Action Cell Implementation and its Challenges in Public Elementary Schools. Technoarete Transactions on Advances in Social Sciences and Humanities. 4. https://doi.org/10.36647/TTASSH/04.01.A002.

[48]. Segura, L. & Latanga, G. (2025). School Heads' Coaching and Mentoring Competence on Teachers' Classroom Management, Instructional Delivery and Research and Innovation Engagement. Psychology and Education: A Multidisciplinary Journal. 43. 539-560. https://doi.org/10.70838/pemj.430502.

[49]. Siyam, Y., Siyam, N., Hussain, M. & Alqaryouti, O. (2025). Evaluating technology integration in education: A framework for professional development. Discover Education. https://doi.org/10.1007/s44217-025-00448-z

[50]. Songcayawon, L. S., Prieto, N. S., Ucag, D. T., Tunguia, J. S., Hechanova, K. A., Candelario, E. V., ... & MALABARBAS, G. (2022). Managerial skills of schools' heads and the performance of teachers: The case of public schools in Antique, Philippines. Journal of Social Sciences and Management Studies, 1(2), 77-85. https://doi.org/10.56556/jssms.v1i2.167

[51]. Stavermann, K. (2025). Online teacher professional development: A research synthesis on effectiveness and evaluation. Technology, Knowledge and Learning, 30(2), 203–240. https://doi.org/10.1007/s10758-024-09792-9

[52]. Sterrett, W., and Richardson, J. (2020). "Supporting Professional Development Through Digital Principal Leadership," Journal of Organizational & Educational Leadership: Vol. 5: Iss. 2, Article 4. Available at: https://digitalcommons.gardner-webb.edu/joel/vol5/iss2/4

[53]. Szyszka, M., Tomczyk, Ł., & Kochanowicz, A. M. (2022). Digitalisation of Schools from the Perspective of Teachers' Opinions and Experiences: The Frequency of ICT Use in Education, Attitudes towards New Media, and Support from Management. Sustainability, 14(14), 8339. https://doi.org/10.3390/su14148339

[54]. Tagaro, S. M. S., & Rayon Jr, L. D. (2025). Educational Technology Adoption among Basic Education Leader Schools in the Davao Region. EPRA International Journal of Environmental Economics Commerce and Educational Management. 12. 195-216. https://doi.org/10.36713/epra22638.

[55]. Taylor, M., Fudge, A., Mirriahi, N., And De Laat, M. (2021). Use Of Digital Technology In Education: Literature Review. https://www.education.sa.gov.au/docs/ict/digital-strategy-microsite/c3l-digital-technologies-in-education-literature-review.pdf

[56]. Torres-Santos, M. C., & Castulo, N. J. (2025). Lessons For K–9 Administrators From High School Administrators: A Case Study On Data-Driven Decision-Making In New Mexico's Multi-Layered System Of Supports. Education 3–13. Advance Online Publication. https://doi.org/10.1080/03004279.2025.2468398

[57]. Tuboc, L. G., & Germina Jr, L. P. (2025). Teachers' Strategies in Teaching English and Learners' Performance. International Journal of Science and Management Studies (IJSMS) V9.I1 (2026):43-59. https://www.ijsmsjournal.org/2026/volume-9%20issue-1/ijsms-v9i1p104.pdf

[58]. Utomo, W. A., Tjahjono, H. K., & Qamari, I. N. (2025). Driving team knowledge collaboration: The role of visionary leadership on team innovation. Asian Economic and Financial Review, https://doi.org/10.55493/5002.v15i4.5353.

[59]. Yasin, H. & Mokhtar, M. (2022). Accountability and Transparency in Financial Management among Secondary School Principals. International Journal of Academic Research in Business and Social Sciences. 12. https://doi.org/10.6007/IJARBSS/v12-i10/15452.

[60]. Zou Y, Kuek F, Feng W and Cheng X (2025) Digital learning in the 21st century: trends, challenges, and innovations in technology integration. Front. Educ. https://doi.org/10.3389/feduc.2025.1562391.