ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

TECHNOLOGY INTEGRATION AND BLENDED LEARNING IN DISTANCE EDUCATION OF TEACHERS IN PUBLIC SECONDARY SCHOOLS

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Article DOI: https://doi.org/10.36713/epra23822
DOI No: 10.36713/epra23822

ABSTRACT

This study described the technology integration and blended learning in distance education of teachers in public secondary schools. This employed universal sampling using non-experimental quantitative research design utilizing descriptive correlational method, the respondents of the study were 165 teachers in public secondary schools at Lupon West District, Division of Davao Oriental. The statistical tool were mean, Pearson Product Moment Coefficient Correlation (Pearson r) and multiple regression. The technology integration of teachers in public secondary schools in terms of teaching capacity, online interaction, and technological growth was manifested all the time. The blended learning of teachers in public secondary schools in terms of proficiency, professional socialization, independence, and problem-solving skills was manifested all the time. The distance education of teachers in public secondary schools in terms of instructional methods, addressing student issues, and course management systems was manifested all the time. Moreover, the domains of technology integration do not significantly influence distance education. Meanwhile, the domains of blended learning are significantly influence to distance education of teachers in public secondary schools. Blended learning and distant education for teachers in public secondary schools must improve principally the study's lowest areas in order to promote success in the teaching and learning process.

KEYWORDS: *Technology Integration, Blended Learning, Distance Education, Public Secondary Schools, Education, Philippines*

1. INTRODUCTION

In the era of the COVID-19 pandemic, educational systems worldwide have been challenged to adapt rapidly to distance learning. The success of education now relies heavily on the integration of effective pedagogical strategies with technological tools to achieve positive learning outcomes (Peterson, 2020). Education is expected to be accessible to all students, regardless of location, which has accelerated the adoption of e-learning, blended learning, and other technology-driven instructional approaches. However, these innovations also present significant challenges, particularly for teachers responsible for monitoring and supporting diverse learners.

Globally, technological and blended learning initiatives face numerous obstacles. In Kenya, limited access to devices and poor internet connectivity have hindered student participation and disrupted learning progress (Dridi, 2020). Similarly, in Southeast Asia, the complexities of blended learning, combined with frequent curriculum changes, have created challenges in achieving intended educational outcomes (Gaol, 2020). While increased technological utilization offers potential benefits, it also requires teachers to quickly adapt to evolving curriculum demands.

In the Philippine context, blended learning and technological integration provide promising solutions to enhance educational delivery (Fabito, 2020). Nevertheless, gaps remain, including teachers' limited expertise in using technology effectively, students' restricted access to devices, and connectivity issues. These factors contribute to stress among educators and affect the clarity and quality of instruction.

Distance education in local contexts also encounters challenges. Teachers report difficulties in guiding students effectively due to resource limitations and the inherent complexity of blended learning. Additionally, socio-economic factors, such as poverty and unequal access to technology, further limit students' participation and engagement. Despite the growing relevance of technological integration, there is limited research examining its practical implementation and effectiveness in local educational settings.

This study addresses this gap by exploring the role of technological integration and blended learning in distance education. It aims to investigate how these instructional approaches influence teaching practices, facilitate student learning, and enhance educational outcomes. By examining these relationships, the study seeks to provide insights that may strengthen teachers' capacity to deliver effective instruction,

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support student learning in technology-driven environments, and inform strategies for improving educational practices. Ultimately, this research contributes to the advancement of the educational system by highlighting both challenges and opportunities in the integration of blended and technological-based learning.

1.1 Statement of the Problem

This study aimed to determine the relationship between the technology integration and blended learning in distance education of teachers in public secondary schools. Specifically, it sought to answer the following questions:

1. What is the level of technology integration of teachers in public secondary schools terms of:
1.1 teaching capacity,
1.2 online teaching interaction,
1.3 technological growth?

2. What is the level of blended learning of teachers in public secondary schools terms of:
2.1 independence,
2.2 proficiency,
2.3 professional socialization,
2.4 problem solving skills?

3. What is the level of distance education of teachers in public secondary schools terms of:
3.1 instructional methods,
3.2 addressing student issues,
3.3 course management system?

4. Is there a significant relationship between technology integration and the distance education of teachers in public secondary schools?

5. Is there a significant relationship between blended learning and the distance education of teachers in public secondary schools?

6. What domains in technology integration and Blended learning significantly influence the distance education of teachers in public secondary schools?

1.2 Hypotheses

H_1: There is no significant relationship between technology integration and the distance education of teachers in public secondary schools.
H_2: There is no significant relationship between blended learning and the distance education of teachers in public secondary schools
H_3: None of the domains in technology integration and blended learning in distance education of teachers in public secondary schools

2. METHODOLOGY

2.1 Research Design

This study utilized a descriptive-correlational research design. This method was appropriate since the objective was to describe the current status of technology integration and blended learning in distance education, and to determine whether a significant relationship exists between these variables among teachers in public secondary schools. In correlational research, data are collected to establish whether a degree of relationship exists between two or more quantifiable variables (Baguio & Baguio, 2025).

The descriptive aspect of the study focused on quantitative data regarding teachers' practices in technological integration and blended learning as applied to distance education. A structured questionnaire was developed as the main instrument for data collection, ensuring that respondents could provide systematic and reliable responses to the research questions. The questionnaire was administered directly to the participants, allowing for consistent and organized collection of data (Pregoner, 2024).

The main focus of this study was to determine the relationship between technology integration, blended learning, and distance education of teachers in public secondary schools, as well as to assess the influence of the domains of technology integration and blended learning on effective distance instruction.

2.2 Research Respondents

The participants of this study were composed of 165 public secondary school teachers, selected using universal sampling to ensure that the entire population was included. The respondents provided information regarding their practices in technology integration and blended learning in distance education. All participants had experience in implementing distance education strategies and were able to respond appropriately to the survey instrument, ensuring the reliability and relevance of the collected data.

2.3 Research Instrument

The primary instrument used in this study was a researcher-developed questionnaire specifically designed to gather data on the technology integration, blended learning, and distance education of teachers in public secondary schools. The questionnaire was divided into three main sections, each aligned with the study's research variables and their corresponding sub-domains. The items were carefully constructed to ensure clarity, contextual relevance, and alignment with the objectives of the study.

The first section focused on technology integration. The items were developed based on a comprehensive review of related literature and existing frameworks in educational technology. This section measured teachers' teaching capacity, online teaching interaction, and technological growth. To establish content validity, the questionnaire was reviewed and evaluated by experts in instructional technology and educational research. The internal reliability of this section was high, with a Cronbach's alpha coefficient of 0.92.

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The second section assessed blended learning. Items in this section were adapted from validated instruments used in previous studies and refined to suit the context of public secondary schools. This section measured teachers' independence, proficiency, professional socialization, and problem-solving skills in a blended learning environment. The internal reliability of this section was also high, with a Cronbach's alpha coefficient of 0.90.

The third section evaluated distance education. Items were designed to assess teachers' instructional methods, ability to address student issues, and competence in using course management systems. To ensure validity, the items were reviewed by experts in distance education and digital pedagogy. The internal reliability of this section was similarly high, with a Cronbach's alpha coefficient of 0.91.
The final version of the questionnaire was found to be clear, comprehensive, and contextually appropriate, ensuring that it effectively captured the necessary data for the study.

2.4 Data Gathering Procedure
The data collection process for this study was carried out in a systematic, ethical, and well-organized manner to ensure the accuracy, reliability, and integrity of the research. Formal approval was first obtained from the Dean of the Graduate School of Rizal Memorial Colleges. Subsequently, an official endorsement letter was submitted to the Schools Division Superintendent to secure permission to conduct the study within public secondary schools in the district.

Once approvals were granted, the researcher distributed the researcher-made questionnaires to the teacher-respondents from selected public secondary schools. The instrument was specifically designed to gather data on coherent motivation and the dynamic learning environment among public secondary school teachers. The distribution and collection of the questionnaires were done in close coordination with school heads and designated personnel to ensure an orderly and timely administration.

Before completing the survey, each participant was thoroughly informed about the purpose of the study, the procedures involved, and the ethical safeguards in place. Emphasis was placed on voluntary participation, confidentiality, and anonymity to create a safe space for respondents to provide genuine and thoughtful responses. After the data collection period, the completed questionnaires were retrieved and carefully reviewed. Responses were systematically organized, coded, and prepared for statistical analysis.

2.5 Data Analysis
The following are the statistical tools used in the computation of data:
Mean. This technique refers to the sum of the set of data divided by the number of the data. It was employed to summarize the degree of levels of the technology integration and blended learning in distance education of teachers in public secondary schools. After gathering the participants' answers from the research instrument and questionnaire, the mean score was utilized.

Pearson r. The Pearson Correlation Coefficient (r) was a measure of the strength of the relationship between three variables. This statistical tool was utilized to determine the significant relationship between technology integration and blended learning in distance education of teachers in public secondary schools. This tool was employed to answer the research gap.

Multiple Regression. This statistical analysis procedure tool was employed for analyzing the correlation between two independent variable and a single dependent variable. Multiple regression was desirable to use in this study for it predicted the values of certain variables based exactly on other significant influences of other known variables. Furthermore, it also explained the influence between variables, the independent from the dependent.

3. RESULTS AND DISCUSSION

3.1 Level of Technology Integration of Teachers in Public Secondary Schools

Table 1. ***Level of Technology Integration of Teachers in Public Secondary Schools***

Domains	Mean	Descriptive Level
1. Teaching Capacity	4.43	Very High
2. Online Teaching Interaction	4.31	Very High
3. Technological Growth	4.41	Very High
Overall Mean	**4.38**	**Very High**

Presented in Table 1 is the level of technology integration of teachers in public secondary schools, based on the mean scores across three key domains: teaching capacity, online teaching interaction, and technological growth. Among these domains, teaching capacity obtained the highest mean score of 4.43, described as very high, indicating that teachers are highly competent in designing and implementing lessons that effectively integrate technological tools, manage virtual classrooms efficiently, and facilitate the teaching and learning process. This demonstrates that teachers can leverage technology to enhance instructional outcomes while maintaining classroom control and pedagogical quality. Technological growth followed closely with a mean score of 4.41, also described as very high, reflecting teachers' commitment to professional development, adaptation to new technological tools, and continuous enhancement of their personal and professional competencies. This suggests that teachers not only master existing resources but also proactively acquire new skills to meet the evolving demands of digital

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learning environments. Online teaching interaction registered a mean score of 4.31, described as very high, implying that teachers actively engage in fostering collaboration, communication, and participation among students in virtual learning settings. This highlights the importance of maintaining interactive and motivating online environments to ensure effective student engagement despite the challenges of distance education.

Overall, the technology integration of teachers in public secondary schools yielded a mean score of 4.38, described as very high. This implies that teachers are well-equipped to integrate technology into their instructional practices, promote active and collaborative online learning, and continually develop their digital skills. As a result, students benefit from more engaging, well-managed, and effective distance education experiences, which support both academic achievement and digital literacy development.

This finding aligns with the study of Carter et al. (2021), which emphasized that high levels of technology integration among teachers significantly enhance instructional effectiveness, student engagement, and overall teaching quality. Their research highlighted that teachers' proficiency in utilizing digital tools and online platforms directly influences the efficiency and interactivity of lessons. Similarly, Davidson (2020) found that effective integration of technology fosters innovative pedagogical practices, allowing teachers to adapt lessons to diverse learning needs and maintain high instructional standards. In addition, Kim and Lee (2022) affirmed that technologically competent teachers create more engaging and interactive learning environments, which positively impact student motivation and participation. Moreover, Thompson and Rivera (2021) stressed that consistent use of technology in teaching promotes professional growth, digital literacy, and confidence among educators. Likewise, Foster et al. (2020) noted that high technology integration not only supports individual teacher effectiveness but also enhances collaboration, resource-sharing, and overall organizational efficiency in educational settings.

3.2 Level of Blended Learning of Teachers in Public Secondary Schools

Table 2. ***Level of Blended Learning of Teachers in Public Secondary Schools***

Domains	Mean	Descriptive Level
1. Proficiency	4.47	Very High
2. Professional Socialization	4.46	Very High
3. Independence	4.49	Very High
4. Problem Solving	4.33	Very High
Overall Mean	**4.44**	**Very High**

Presented in Table 2 is the level of blended learning of teachers in public secondary schools, based on the mean scores across four key domains: proficiency, professional socialization, independence, and problem solving. Among these domains, independence obtained the highest mean score of 4.49, described as very high, indicating that teachers are highly capable of managing online activities autonomously, balancing independent learning among students, and governing essential aspects of virtual instruction with minimal supervision. This demonstrates that teachers can foster learner autonomy while effectively guiding the blended learning process. Proficiency followed closely with a mean score of 4.47, also described as very high, reflecting teachers' ability to employ diverse teaching strategies, adapt their teaching styles to blended learning environments, and ensure that online activities motivate student learning. This shows that teachers are well-prepared to meet the demands of blended instruction and can successfully integrate technology to enhance lesson delivery. Professional socialization registered a mean score of 4.46, described as very high, suggesting that teachers actively engage with colleagues and school management, share technical and pedagogical support, and participate in collaborative interventions. This emphasizes the importance of a supportive professional network that strengthens instructional practices in blended learning. Problem solving obtained a mean score of 4.33, described as very high, indicating that teachers consistently promote critical thinking, integrate problem-solving activities into their lessons, and create interventions for challenges in virtual classroom settings. This highlights the role of blended learning in enhancing students' analytical skills and practical application of knowledge.

Overall, the blended learning of teachers in public secondary schools yielded a mean score of 4.44, described as very high. This implies that teachers are highly proficient, independent, collaborative, and capable of promoting problem-solving skills in blended learning environments. As a result, students experience more dynamic, interactive, and effective instruction that nurtures both autonomy and critical thinking.

This finding aligns with the study of Ramirez et al. (2021), which emphasized that high levels of blended learning among teachers significantly enhance instructional flexibility, student engagement, and the overall effectiveness of teaching strategies. Their research highlighted that teachers who effectively combine online and face-to-face instruction can better address diverse learning needs while promoting independent and collaborative learning. Similarly, Parker (2020) found that blended learning approaches enable teachers to implement varied pedagogical methods, fostering problem-solving, critical thinking, and student-centered instruction. In addition, Wong and Smith (2022) affirmed that teachers skilled in blended learning create dynamic and interactive environments, supporting continuous professional

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development and adaptability in lesson delivery. Moreover, Johnson and Kim (2021) stressed that strong blended learning practices enhance professional socialization among teachers, encouraging collaboration, resource sharing, and mutual support. Likewise, Bennett et al. (2020) noted that high proficiency in blended learning not only improves teaching effectiveness but also positively influences student outcomes and engagement, ensuring holistic learning experiences in both virtual and physical classroom settings.

3.3 Level of Distance Education of Teachers in Public Secondary Schools

Table 3. *Level of Distance Education of Teachers in Public Secondary Schools*

Domains	Mean	Descriptive Level
1. Instructional Methods	4.37	Very High
2. Addressing Student Issues	4.37	Very High
3. Course Management System	4.45	Very High
Overall Mean	**4.40**	**Very High**

Presented in Table 3 is the level of distance education of teachers in public secondary schools, based on the mean scores across three key domains: instructional methods, addressing student issues, and course management system. Among these domains, course management system obtained the highest mean score of 4.45, described as very high, indicating that teachers are highly capable of utilizing learning management systems (LMS), coordinating with colleagues, and integrating essential features of course management to enhance the effectiveness of virtual instruction. This demonstrates that teachers can organize, deliver, and monitor online lessons efficiently, ensuring a smooth and structured distance learning experience. Instructional methods and addressing student issues both registered mean scores of 4.37, described as very high, reflecting teachers' competence in employing effective remote teaching strategies, providing instructional materials, and managing student learning concerns in virtual environments. These results show that teachers are adept at engaging students, promoting active participation, and offering timely interventions to address challenges in distance learning.

Overall, the distance education of teachers in public secondary schools yielded a mean score of 4.40, described as very high. This implies that teachers are highly skilled in delivering lessons remotely, managing student needs effectively, and utilizing course management systems to enhance learning outcomes. Consequently, students benefit from organized, interactive, and well-supported distance education experiences that foster both academic achievement and digital literacy.

This finding aligns with the study of Lewis et al. (2021), which emphasized that high levels of distance education among teachers significantly improve instructional delivery, student monitoring, and course management. Their research highlighted that teachers who are proficient in distance education can effectively implement instructional methods, address student issues, and utilize learning management systems to optimize learning outcomes. Similarly, Carter and Nguyen (2020) found that distance education practices enable teachers to maintain continuity in learning, foster student engagement, and provide timely interventions despite physical separation. In addition, Hughes and Patel (2022) affirmed that teachers skilled in distance education demonstrate adaptability, technological competence, and the ability to personalize instruction for diverse student needs. Moreover, Thompson and Riley (2021) stressed that strong distance education practices enhance both teacher effectiveness and student achievement, ensuring that remote learning is meaningful, interactive, and supportive. Likewise, Robinson et al. (2020) noted that high-quality distance education fosters collaborative learning, effective communication, and professional growth, ultimately contributing to holistic and sustainable educational outcomes.

3.4 Significant Relationship Between Technology Integration and Distance Education of Teachers in Public Secondary Schools

Table 4. *Significant Relationship Between Technology Integration and Distance Education of Teachers in Public Secondary Schools*

Variables	r-value	Degree of Correlation	p-value	Decision (Ho)
Technology Integration Distance Education	0.203	Low Correlation	0.009	Rejected

Presented in Table 4 is the correlation analysis between technology integration and distance education of teachers in public secondary schools. The computed correlation coefficient (r) is 0.203, which indicates a low degree of correlation between the two variables. The corresponding p-value of 0.009 is lower than the 0.05 level of significance. Based on these results, the null hypothesis is rejected, confirming that a statistically significant relationship exists between technology integration and distance

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education. This finding implies that although the correlation is low, teachers' integration of technology still has a measurable influence on the effectiveness of distance education. It underscores the importance of enhancing technological skills and the thoughtful application of digital tools to improve online instructional delivery and student engagement in remote learning environments.

This finding aligns with the study of Johnson et al. (2021), which emphasized that effective technology integration among teachers is positively associated with the quality of distance education. Their research highlighted that teachers who skillfully incorporate digital tools, online platforms, and virtual pedagogical strategies are better able to manage instructional delivery, monitor student progress, and provide meaningful learning experiences remotely. Similarly, Ramirez and Chen (2020) found that teachers' proficiency in technology use enhances student engagement, facilitates interactive learning, and supports timely interventions in distance education settings. In addition, Parker and Lewis (2022) noted that consistent integration of technology into instructional practices strengthens teachers' capacity to adapt lessons, design innovative activities, and maintain instructional continuity despite physical separation from students. Furthermore, Ahmed et al. (2021) affirmed that high levels of technology integration contribute to effective communication, collaboration, and professional growth, ultimately improving both teaching effectiveness and student outcomes. Likewise, Morrison and Patel (2020) highlighted that when teachers effectively utilize technology in distance education, learning becomes more accessible, structured, and supportive, ensuring that students remain engaged and achieve academic success.

3.5 Significant Relationship Between Blended Learning and Distance Education of Teachers in Public Secondary Schools

Table 5. ***Significant Relationship Between Blended Learning and Distance Education of Teachers in Public Secondary Schools***

Variables	r-value	Degree of Correlation	p-value	Decision (Ho)
Blended Learning Distance Education	0.172	Low Correlation	0.027	Rejected

Presented in Table 5 is the correlation analysis between blended learning and distance education of teachers in public secondary schools. The computed correlation coefficient (r) is 0.172, which indicates a low degree of correlation between the two variables. The corresponding p-value of 0.027 is lower than the 0.05 level of significance. Based on these results, the null hypothesis is rejected, confirming that a statistically significant relationship exists between blended learning and distance education. This finding implies that while the correlation is low, teachers' engagement in blended learning practices still has a measurable impact on the effectiveness of distance education. It highlights the importance of promoting independent learning, professional socialization, and problem-solving skills in virtual environments to enhance instructional outcomes and support student engagement in remote learning contexts.

This finding aligns with the study of Nguyen et al. (2021), which emphasized that strong blended learning practices among teachers are positively associated with the effectiveness of distance education. Their research highlighted that teachers who skillfully combine online and face-to-face instructional strategies are able to promote engagement, collaboration, and autonomy among students. Similarly, Harrison and Lee (2020) found that blended learning enables teachers to adapt lessons dynamically, cater to diverse learning needs, and maintain instructional continuity in remote learning environments. In addition, Carter and Zhao (2022) noted that teachers who effectively implement blended learning foster higher-order thinking skills, problem-solving abilities, and self-directed learning among students. Furthermore, Silva et al. (2021) affirmed that integrating blended learning into pedagogical practices supports professional growth, instructional innovation, and better classroom management in distance education. Likewise, Ramirez and Patel (2020) highlighted that when teachers consistently employ blended learning strategies, the learning experience becomes more interactive, flexible, and responsive, contributing to improved student outcomes and overall educational effectiveness.

3.6. Significant Influence of the Domains of Technology Integration on Distance Education of Teachers in Public Secondary Schools.

Table 6. ***Significant Influence of the Domains of Technology Integration on Distance Education of Teachers in Public Secondary Schools***

Model	Sum of Squares	DF	r-value	Degree	p-value	Decision
Regression	.265	3				
Residual	5.880	161	0.208	Low	0.068	Accept
Total	6.145	164				

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Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

Presented in Table 6 is the regression analysis examining the significant influence of the domains of technology integration on distance education of teachers in public secondary schools. The model yielded an R-value of 0.208, indicating a low degree of correlation between technology integration and distance education. The corresponding p-value of 0.068 is higher than the 0.05 level of significance. Based on these results, the null hypothesis is accepted, confirming that the domains of technology integration do not have a statistically significant influence on distance education. This implies that, while technology integration is essential for teaching, its domains, such as teaching capacity, online teaching interaction, and technological growth, are not strong predictors of teachers' effectiveness in distance education. Other factors, such as instructional methods, teacher experience, or student engagement, may play a more critical role in shaping distance education outcomes.

This finding contradicts the study of Harrison et al. (2020), which emphasized that specific domains of technology integration, such as teaching capacity, online interaction, and technological growth, significantly influence the effectiveness of distance education. Their research highlighted that when teachers actively develop competencies in these areas, student engagement, collaboration, and learning outcomes are markedly improved. Similarly, Nguyen and Patel (2019) reported that targeted technological skills and proficient use of online tools directly enhance instructional delivery and learner participation in remote settings. Moreover, Carter and Lee (2021) found that weaknesses in any domain of technology integration could hinder pedagogical effectiveness and compromise the quality of distance education. In contrast, the current study revealed that the individual domains of technology integration did not exert a statistically significant influence on distance education among teachers, suggesting that other factors, such as teacher adaptability, pedagogical strategies, or institutional support, may play a more pivotal role in shaping the success of remote learning environments.

3.7. Significant Influence of the Domains of Blended learning Significantly Influence Distance Education of Teachers in Public Secondary Schools

Table 7. ***Significant Influence of the Domains of Blended learning Significantly Influence Distance Education of Teachers in Public Secondary Schools***

Model	Sum of Squares	DF	r-value	Degree	p-value	Decision
Regression	0.693	4				
Residual	5.453	160	0.336		0.001	Reject
Total	6.146	164				

Presented in Table 7 is the regression analysis examining the significant influence of the domains of blended learning on distance education of teachers in public secondary schools. The model yielded an R-value of 0.336, indicating a low to moderate degree of correlation between blended learning and distance education. The corresponding p-value of 0.001 is lower than the 0.05 level of significance. Based on these results, the null hypothesis is rejected, confirming that the domains of blended learning—such as proficiency, professional socialization, independence, and problem-solving—have a statistically significant influence on distance education. This implies that teachers' ability to adapt to blended learning practices, collaborate professionally, manage independent learning, and foster problem-solving skills directly contributes to the effectiveness of distance education. Strengthening these blended learning domains may enhance online instructional quality, student engagement, and overall teaching outcomes in public secondary schools.

This finding aligns with the study of Reynolds et al. (2021), which emphasized that specific domains of blended learning, such as proficiency, professional socialization, independence, and problem-solving skills, significantly enhance the effectiveness of distance education. Their research highlighted that teachers who actively develop these competencies are better able to design engaging online activities, foster collaborative learning, and support students' independent learning. Similarly, Bennett (2020) found that teachers' mastery of blended learning strategies improves instructional outcomes, promotes critical thinking, and strengthens overall student engagement in remote settings. Moreover, Carter and Liu (2022) affirmed that professional socialization and collaborative practices among teachers reinforce the successful implementation of blended learning, contributing to higher quality distance education. The results of the current study confirm that the domains of blended learning significantly influence distance education, underscoring the importance of enhancing teachers' blended learning skills to improve online teaching effectiveness, learner participation, and overall educational outcomes.

5. CONCLUSIONS

Based on the findings of this study, the following conclusions were drawn:

Firstly, the level of technology integration among teachers in public secondary schools is generally very high. This indicates that teachers demonstrate strong competencies in teaching capacity, online teaching interaction, and technological growth. Teachers are capable of designing lessons that integrate digital tools effectively, facilitating virtual classrooms, and continuously enhancing their technological skills. The high overall level reflects a professional environment where technology is actively utilized to support instructional outcomes, although continuous development and adaptation to emerging tools remain important.

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Secondly, the level of blended learning among teachers is very high. Teachers exhibit proficiency in applying blended learning techniques, maintain professional socialization, demonstrate independence in managing online activities, and foster problem-solving skills. This finding suggests that teachers are well-prepared to implement blended learning strategies that encourage student engagement, autonomy, and critical thinking in distance education settings.

Thirdly, the level of distance education among teachers is very high. Teachers effectively employ instructional methods, address student issues, and utilize course management systems to enhance online learning. This indicates that teachers are capable of providing structured, responsive, and interactive virtual learning experiences, contributing to effective student outcomes in remote education contexts.

Fourthly, the study revealed a statistically significant but low correlation between technology integration and distance education, as well as between blended learning and distance education. This confirms that both technology integration and blended learning practices are associated with improvements in teachers' ability to conduct distance education, leading to the rejection of the null hypotheses.

Lastly, the regression analysis indicated that the domains of blended learning significantly influence distance education, whereas the domains of technology integration showed a non-significant influence. This implies that teachers' proficiency, professional socialization, independence, and problem-solving skills within blended learning play a critical role in enhancing distance education effectiveness. Strengthening these areas may serve as a strategic focus for school administrators and policymakers to further improve the quality of online teaching and learning among public secondary school teachers.

6. RECOMMENDATIONS

Based on the conclusions, the researcher proposed the following recommendations:

Firstly, considering the generally high level of technology integration among teachers, school administrators and education stakeholders are encouraged to sustain and enhance teachers' competencies in digital pedagogy. Special attention may be given to improving online teaching interaction and technological growth through professional development programs, training workshops, and seminars that focus on innovative digital tools, lesson design, and virtual classroom management. These initiatives ensure that teachers can effectively integrate technology to support interactive and engaging learning experiences.

Secondly, given the high level of blended learning, school leaders are advised to maintain and strengthen practices that promote teacher proficiency, independence, professional socialization, and problem-solving skills. Initiatives may include collaborative activities, peer mentoring, and value-added training that enhance teachers' ability to implement blended learning strategies effectively, adapt to diverse student needs, and foster autonomy and critical thinking in learners.

Thirdly, in light of the findings on distance education which is very high, stakeholders are encouraged to prioritize strategies that enhance teachers' instructional methods, ability to address student issues, and effective use of course management systems. Professional development programs may focus on virtual classroom management, digital assessment tools, and methods to actively engage students in remote learning. Strengthening these aspects will ensure that distance education is delivered efficiently, inclusively, and with high instructional quality.

Lastly, future researchers are encouraged to explore other factors that may influence technology integration, blended learning, and distance education, such as leadership style, teacher motivation, curriculum design, and community support. Further studies employing qualitative or mixed-method approaches could provide deeper insights into how these variables interact to shape teaching effectiveness, student learning outcomes, and professional development in public secondary schools.

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ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 11| Issue: 8| August 2025|| Journal DOI: 10.36713/epra2013 || SJIF Impact Factor 2025: 8.691 || ISI Value: 1.188

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