

Challenges in the Implementation of Blended Learning and District Elementary Schools' Performance

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Abstract

Blended learning continues to shape teaching and learning practices in today's evolving educational landscape. This study was conducted to determine the challenges in the implementation of blended learning and district elementary schools' performance during School Year 2024–2025. Specifically, it aimed to find out the respondents' level of challenges in the implementation of blended learning, examine the level of school performance, and determine whether there was a significant relationship between the challenges in the implementation of blended learning and district elementary schools' performance. The respondents of the study were the 200 Grade 5 and Grade 6 teachers of the 25 public elementary schools in Talakag Districts II and III. Universal sampling was employed to include all eligible teacher respondents. The data were gathered using a validated questionnaire adapted and modified from Trust and Whalen (2020) and from the schools' official records. A descriptive-correlational research design was utilized. Frequency and percentage, mean and standard deviation, and Pearson's product-moment correlation coefficient (r) were used to analyze the level of challenges in the implementation of blended learning, the district elementary schools' performance, and to determine the significant relationship between the variables.

The results showed that the teachers were challenged in implementing blended learning, with technical issues emerging as the most challenging indicator and pedagogical shift as the least challenging. In terms of school performance, the participation rate (86.47%) and dropout rate (2.92%) were Satisfactory, the cohort survival rate (80.13%) was Fairly Satisfactory, and the retention rate (95.76%) was Outstanding. Pearson's r revealed that only the digital divide was significantly related to school performance, specifically to the participation rate ($r = -.45$, $p = .02$); hence, the null hypothesis was rejected only for this relationship. It can be concluded that while teachers were challenged in implementing blended learning, these challenges were generally not significantly related to school performance, except for the digital divide. It is recommended that teachers' skills be strengthened through continuous training on blended teaching strategies and instructional technology, along with the sharing of effective practices through Learning Action Cell (LAC) sessions, peer mentoring, and collaborative lesson planning, to help improve the implementation of blended learning. Further studies in other settings using the same variables are also recommended to validate and strengthen the findings of the study.

Keywords: challenges, blended learning, school performance

1. Introduction

Blended learning has been implemented to ensure learning continuity and sustain learner participation, but challenges in Talakag Districts II and III, Bukidnon, have affected school performance, as reflected in declining participation and cohort survival rates and increasing dropout rates. Major barriers include inadequate teacher training and technical support, limited digital resources, poor internet connectivity, lack of learning devices, difficulties in time management, and low student engagement, particularly among learners from disadvantaged households and geographically isolated communities. The continued reliance on printed self-learning modules has helped address the needs of learners without internet access, but gaps in infrastructure, teacher readiness, and home learning conditions remain significant concerns. These challenges highlight the need for community specific and evidence-based interventions to strengthen teaching practices, improve learner participation and academic performance, and promote equitable access to quality education. The study therefore aimed to identify and analyze the barriers to blended learning implementation and provide insights that can guide teachers and policymakers in developing a more supportive, inclusive, and effective learning environment for all learners.

Research Questions

This study aimed to determine the challenges in the implementation of blended learning and district elementary schools' performance in Talakag Districts II and III, Division of Bukidnon, during School Year 2024–2025.

The study sought to answer the following questions:

1. What is the respondents' level of challenges in the implementation of blended learning based on training and support, technical issues, student engagement, digital divide, pedagogical shift, and time management?
2. What is the level of school performance with regard to participation rate, dropout rate, cohort survival rate, and retention rate?
3. Is there a significant relationship between the respondents' level of challenges in the implementation of blended learning and school performance?

Significance

The findings of this study may benefit school officials by guiding them in providing appropriate learning materials, resources, and support to improve blended learning implementation and develop learners' 21st century competencies. Teachers may use the results to identify instructional challenges and improve their teaching strategies to better address learners' needs. Parents may gain a deeper understanding of blended learning difficulties and recognize the importance of active involvement and communication with teachers in supporting their children's progress. Learners may benefit from improved learning practices that enhance their educational experiences and academic outcomes. Future researchers may also use the findings as a reference for further studies on digital literacy, learning outcomes across different learning modalities, and the long-term effects of blended learning in basic education.

Scope and Limitations

This study focused on determining the challenges in the implementation of blended learning and district elementary schools' performance during School Year 2024–2025. The respondents were the 200 Grade 5 and Grade 6 teachers in the 25 public elementary schools of Talakag Districts II and III. The independent variable, challenges in the implementation of blended learning, was limited to six indicators: training and

support, technical issues, student engagement, digital divide, pedagogical shift, and time management. The dependent variable, school performance, was limited to four indicators: participation rate, dropout rate, cohort survival rate, and retention rate.

Literature Review

Challenges in the Implementation of Blended Learning

Blended learning has become an important instructional approach that combines face to face and online learning, but its effective implementation is affected by inadequate teacher training and institutional support, technical difficulties, limited student engagement, the digital divide, pedagogical changes, and time management concerns. Hodges et al. (2020) emphasized the importance of careful planning and appropriate instructional design, while Philipsen et al. (2019) highlighted the need for continuous, relevant professional development to strengthen teachers' competence and confidence. Technical problems, including unreliable internet connectivity, insufficient devices, and limited digital literacy, can disrupt instruction and create unequal learning opportunities, particularly for learners in disadvantaged communities (Barrot et al., 2021). Moreover, student engagement depends on meaningful teacher interaction, timely feedback, clear instructions, and supportive home learning environments (Martin & Bolliger, 2020). The digital divide further limits equitable participation because learners differ in their access to technology, digital skills, and opportunities to use online resources effectively (van Dijk, 2020). Blended learning also requires teachers to adopt learner centered strategies, integrate synchronous and asynchronous activities, and provide differentiated instruction while managing increased workloads and competing responsibilities. Broadbent and Poon (2021) highlighted the importance of planning, goal setting, and self-regulation in helping learners manage their time and complete academic tasks. Therefore, successful blended learning requires adequate technological resources, sustained professional development, strong institutional support, inclusive instructional practices, and effective time management to ensure meaningful participation and improved learning outcomes.

School Performance

The implementation of blended learning has influenced school performance indicators, including participation rate, cohort survival rate, retention rate, and dropout rate, particularly in rural communities where learners may experience limited access to technology and learning support. Wang et al. (2021) emphasized that effective course design, accessible learning materials, and teacher presence encourage learner participation, while Martin and Bolliger (2020) highlighted the importance of timely feedback, clear instructions, and meaningful teacher student interaction in sustaining engagement. Cohort survival and retention are strengthened through consistent instructional guidance, parental involvement, academic monitoring, and supportive school environments that encourage learners to continue their education (Azubuike & Aina, 2020). Similarly, Park and Choi (2009) explained that learner motivation, academic assistance, and a sense of belonging contribute to continued participation and persistence in learning. However, inadequate technological resources, unstable internet connectivity, limited supervision at home, low motivation, and insufficient academic support may increase absenteeism, disengagement, and dropout rates. Hart (2020) emphasized the value of positive teacher student relationships, emotional support, and early intervention in helping learners overcome difficulties and remain in school. Therefore, improving school performance indicators in blended learning requires accessible learning resources, effective

teaching strategies, regular communication between schools and families, and timely interventions for learners at risk of dropping out.

2. Methodology

Research Design

This study employed a quantitative descriptive correlational research design to examine the challenges in implementing blended learning and their relationship with school performance in the elementary schools of Talakag Districts II and III. Data were gathered through structured questionnaires administered to Grade 5 and Grade 6 teachers and official school records to assess challenges related to training and support, technical issues, student engagement, the digital divide, pedagogical changes, and time management. The descriptive approach provided a systematic account of existing implementation conditions, while the correlational approach determined the relationships between these challenges and school performance indicators, including participation, dropout, cohort survival, and retention rates. The findings served as a basis for developing informed recommendations to improve blended learning implementation and support better educational outcomes in rural elementary schools.

Participants

The respondents of the study were 200 Grade 5 and Grade 6 teachers from 25 elementary schools in Talakag Districts II and III during School Year 2024 to 2025. District II consisted of 12 schools, while District III comprised 13 schools. These teachers were selected to provide information on the challenges encountered in implementing blended learning in their respective schools. Their responses served as the primary source of data for identifying the difficulties affecting blended learning implementation and examining its relationship with school performance.

Data Collection

The instrument used in gathering the data was a questionnaire composed of two parts. Part I inquired into the challenges in the implementation of blended learning in terms of training and support, technical issues, student engagement, digital divide, pedagogical shift, and time management. The items were adapted and modified from the study of Trust and Whalen (2020) entitled *Should Teachers Be Trained in Emergency Remote Teaching? Lessons Learned From the COVID-19 Pandemic*. Each indicator had 15 items rated on a 4-point scale: 4 – At All Times, 3 – Most of the Time, 2 – Sometimes, and 1 – Never.

Part II gathered data on school performance in School Year 2024–2025 based on participation rate, dropout rate, cohort survival rate, and retention rate. The data for these variables were collected from each school in Talakag Districts II and III through their official school records and reports. These indicators were utilized to assess the overall performance of the schools and to determine their relationship with the variables examined in the study.

Data Analysis

The data gathered through survey questionnaires and official school records were analyzed using descriptive and inferential statistics to examine the challenges in blended learning implementation and their relationship with school performance. Frequency, percentage, mean, and standard deviation were used to summarize teachers' responses regarding training and support, technical issues, student engagement, the digital divide, pedagogical changes, and time management, as well as the schools'

performance indicators, including participation, dropout, cohort survival, and retention rates. Pearson's product moment correlation coefficient was applied at the 0.05 level of significance to determine the strength, direction, and significance of the relationships between blended learning challenges and school performance. Since the performance indicators were based on school level data, the correlation analysis involved 25 schools.

3. Results and Discussions

Problem 1: What is the respondents' level of challenges in the implementation of blended learning based on training and support, technical issues, student engagement, digital divide, pedagogical shift, and time management?

Table 1

Summary of the Respondents' Level of Challenges in the Implementation of Blended Learning

Variable	Mean	SD	Interpretation
Training and Support	2.62	0.54	Challenged
Technical Issues	3.51	0.32	Highly Challenged
Student Engagement	2.55	0.45	Challenged
Digital Divide	3.15	0.64	Challenged
Pedagogical Shift	2.11	0.47	Slightly Challenged
Time Management	3.00	0.47	Challenged
Overall	2.82	0.50	Challenged

Table 1 presents the summary of the respondents' level of challenges in the implementation of blended learning, with an overall mean of 2.82 (SD = 0.50), described as Most of the Time and interpreted as Challenged. This indicates that teachers frequently encountered difficulties in implementing blended learning in their respective schools. Among the indicators, technical issues obtained the highest mean of 3.51, interpreted as Highly Challenged, suggesting that unstable internet connectivity, malfunctioning devices, limited access to digital resources, and difficulties using online platforms were major barriers to effective instruction. These problems may disrupt lesson delivery, delay the completion of learning activities, and limit learners' access to instructional materials. In contrast, pedagogical shift obtained the lowest mean of 2.11 (SD = 0.47), described as Sometimes and interpreted as Slightly Challenged, indicating that teachers generally managed to adapt their instructional practices to blended learning, although some may still need support in integrating technology and applying learner centered approaches. The findings suggest that technical difficulties, the digital divide, and time management remain important concerns that can increase teachers' workload and affect student participation, learning experiences, and overall school performance. Addressing these challenges requires schools to strengthen internet connectivity, provide adequate and functional devices, ensure access to appropriate digital learning resources, and establish reliable technical support systems. Furthermore, continuous professional development, clear instructional guidelines, structured lesson planning, and effective time management strategies can help teachers deliver lessons more efficiently and respond to learners' diverse needs. By providing adequate institutional support and improving teachers' capacity to manage blended learning, schools can create a more accessible, engaging, and effective learning environment that promotes learner participation and improves educational outcomes.

Problem 2: What is the level of school performance with regard to participation rate, dropout rate, cohort survival rate, and retention rate?

Table 2
Summary of the Level of School Performance

School Performance		Interpretation
Participation Rate	86.47	Satisfactory
Dropout Rate	2.92	Satisfactory
Cohort Survival Rate	80.13	Fairly Satisfactory
Retention Rate	95.76	Outstanding

Table 2 presents the summary of school performance in Talakag Districts II and III based on four indicators: participation rate, dropout rate, cohort survival rate, and retention rate. The results show that participation rate obtained a mean of 86.47%, interpreted as Satisfactory, while dropout rate recorded a mean of 2.92%, also interpreted as Satisfactory. Cohort survival rate obtained a mean of 80.13%, described as Fairly Satisfactory, whereas retention rate achieved the highest mean of 95.76%, interpreted as Outstanding. These findings indicate that schools generally performed well in keeping learners enrolled, although challenges remain in ensuring consistent participation and successful progression across grade levels. The satisfactory participation rate suggests that most school age children had access to education, but some may still experience barriers related to limited learning resources, poor internet connectivity, financial difficulties, and inadequate support at home. Meanwhile, the satisfactory dropout rate indicates that most learners continued their education, although some remained vulnerable to discontinuing their studies because of personal, family, academic, or socioeconomic circumstances. The fairly satisfactory cohort survival rate suggests that not all learners were able to progress through the expected grade levels, highlighting the need for closer monitoring, learning recovery activities, and timely interventions. In contrast, the outstanding retention rate demonstrates the schools' ability to keep learners within the education system. Overall, the results emphasize the importance of strengthening learner support programs, improving access to learning materials, maintaining regular communication between teachers and parents, and providing additional assistance to struggling learners to improve participation, reduce dropout, and ensure successful educational progression and completion.

Problem 3: Is there a significant relationship between the respondents' level of challenges in the implementation of blended learning and school performance?

Table 3
Result of the Test on the Relationship Between the Respondents' Level of Challenges in the Implementation of Blended Learning and School Performance

Challenges in the Implementation of Blended Learning	School Performance						Overall
	Statistical Tool	Participation Rate	Dropout Rate	Cohort Survival Rate	Sur-	Retention Rate	

Training and Support	r value	-.139 ^{NS}	.179 ^{NS}	-.202 ^{NS}	-.307 ^{NS}	-.366 ^{NS}
	p value	.51	.39	.33	.14	.07
Technical Issues	r value	-.320 ^{NS}	.012 ^{NS}	.156 ^{NS}	-.372 ^{NS}	-.090 ^{NS}
	p value	.12	.95	.46	-.119 ^{NS}	.67
Student Engagement	r value	.017 ^{NS}	-.218 ^{NS}	-.106 ^{NS}	-.290 ^{NS}	-.092 ^{NS}
	p value	.93	.30	.61	.16	.66
Digital Divide	r value	-.454 ^S	.019 ^{NS}	.052 ^{NS}	-.190 ^{NS}	-.225 ^{NS}
	p value	.02	.93	.80	-.170 ^{NS}	.28
Pedagogical Shift	r value	-.080 ^{NS}	-.103 ^{NS}	-.263 ^{NS}	.42	-.321 ^{NS}
	p value	.70	.62	.21		.12
Time Management	r value	-.216 ^{NS}	-.192 ^{NS}	-.165 ^{NS}		-.265 ^{NS}
	p value	.30	.36	.43		.20

Table 3 presents the correlation between the challenges in implementing blended learning and school performance in Talakag Districts II and III in terms of participation rate, dropout rate, cohort survival rate, retention rate, and overall school performance. The findings revealed only one statistically significant relationship among the variables, specifically between the digital divide and participation rate, which showed a moderate negative correlation ($(r=-.45)$, $(p=.02)$). This indicates that greater difficulties in accessing internet connectivity, digital devices, and digital learning resources were associated with lower participation rates. Meanwhile, training and support, technical issues, student engagement, pedagogical shift, and time management showed no statistically significant relationships with the school performance indicators. These results suggest that although schools experienced various challenges in implementing blended learning, unequal access to digital resources was the most evident factor associated with learner participation. Therefore, strengthening digital infrastructure, providing appropriate learning devices, improving digital literacy, and enhancing collaboration among schools, local government units, and community partners are essential to promoting equitable access to education. Furthermore, continuous teacher training, improved instructional strategies, effective time management, and sustained learner support should remain priorities to strengthen blended learning implementation and improve educational outcomes.

4. Conclusion and Recommendations

Conclusion

Based on the findings, it is concluded that teachers were challenged in implementing blended learning, with technical issues, particularly access to reliable technology and internet connectivity, as the greatest challenge. Despite these challenges, the schools maintained satisfactory overall performance, with outstanding retention but only fairly satisfactory cohort survival. Furthermore, the challenges in implementing blended learning were generally not significantly related to school performance, except for

the digital divide, which was negatively related to the participation rate. Hence, the null hypothesis was rejected only for the relationship between digital divide and participation rate and was accepted for all other relationships.

Therefore, providing reliable technological resources, internet access, and technical assistance is essential to support effective blended learning. Continued learner support can also help sustain positive school performance outcomes.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are offered:

1. Teachers should be provided with targeted training and professional development on innovative, learner-centered, and blended teaching strategies to strengthen their pedagogical practices and encourage more interactive and collaborative learning activities.
2. Schools should strengthen programs and monitoring strategies that improve participation and cohort survival, while sustaining the strong retention rate through continued learner support, early intervention, and regular follow-up of at-risk learners, particularly in schools with low cohort survival and high dropout rates.
3. Schools should provide accessible digital devices, internet support, and alternative learning resources to learners with limited connectivity to improve participation in blended learning.
4. The Schools Division Office of Bukidnon and the Municipal Government of Talakag may prioritize internet connectivity projects, device-lending programs, and community learning hubs in Districts II and III, particularly in schools with the lowest participation rates, since the digital divide was the only challenge significantly related to school performance.
5. School heads may assign or train ICT coordinators to provide on-site technical support and may institutionalize Learning Action Cell (LAC) sessions, peer mentoring, and collaborative lesson planning focused on blended teaching and basic technical troubleshooting.
6. Future researchers may replicate this study in other districts or divisions with a larger number of schools, use learner-level data, and employ a mixed-methods design to validate and deepen the findings.

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