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Digital Resiliency and Professional Development Opportunities on Teachers' Media Literacy Competence

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Abstract : This study explores the professional development opportunities, digital resilience initiatives, and media literacy competence of public school teachers. It addresses key research questions regarding the accessibility, quality, and impact of professional development, as well as teachers' awareness of digital risks, implementation of resilience strategies, and institutional support for media literacy education. The findings reveal that while teachers value collaboration in their professional development, barriers such as inadequate resources and scheduling issues hinder their participation. Despite a high awareness of digital risks, gaps remain in discussing these issues with students and addressing cyberbullying. The analysis indicates significant positive relationships between teachers' media literacy competence and both professional development opportunities (correlation coefficient 0.801) and digital resilience initiatives (correlation coefficient 0.748). Regression analysis further highlights that awareness, implementation, and institutional support are critical predictors of media literacy competence, explaining approximately 80.5% of the variance. The study concludes that enhancing collaborative training, improving logistical support for professional development, and investing in digital resilience initiatives are essential for equipping teachers with the skills needed to navigate the digital landscape effectively. Additionally, fostering parental engagement in media literacy discussions can strengthen the overall educational framework. By addressing these recommendations, schools can significantly improve teachers' capabilities and better prepare them to guide students through the challenges of an increasingly digital world.

Key Words - Professional Development, Digital Resilience, Media Literacy, Teacher Competence, and Educational Support

I. INTRODUCTION

In today's rapidly evolving educational landscape, the importance of digital resiliency and professional development opportunities for teachers cannot be overstated. As public school teachers in the Division of Bukidnon - San Fernando I navigate the challenges of integrating technology into their classrooms, understanding how these factors influence their media literacy competence becomes essential.

To begin with, research shows that good professional development can really improve how teachers teach. According to PowerSchool (2023), ongoing learning not only helps teachers sharpen their skills but also leads to better results for students. Moreover, studies reveal that when teachers receive high-quality professional development, they are more likely to use effective teaching strategies (EPI, 2022). On the other hand, many teachers say they don't have enough access to quality professional development. This raises concerns about whether these programs can truly create meaningful changes in the classroom.

Along with professional development, digital resilience programs are just as important for helping teachers deal with the challenges that come with digital risks. Eri et al. (2024) propose a framework to help teachers improve their digital skills, emphasizing that being resilient is crucial as they adapt to new technologies. Furthermore, research shows that having strong digital resilience allows teachers to handle stress better and maintain their well-being in today's complex educational environments (Gratacós et al., 2023).

Shifting to another important topic, teachers' media literacy skills are essential in today's digital world. Hobbs and Coiro (2015) argue that teaching media literacy is key to helping students think critically about the information they encounter. Moreover, Leu et al. (2015) highlight how new forms of literacy affect learning, pointing out that teachers need to improve their own skills just as much as their students do. Similarly, Mihailidis and Thevenin (2013) emphasize the importance of using media literacy to encourage critical thinking in students.

With this context in mind, this study aimed to look into the professional development opportunities and digital resilience programs that public school teachers in Bukidnon - San Fernando I experience. Specifically, examined how these factors connect to teachers' media literacy skills by focusing on five main research questions. By examining accessibility, quality, and impact of professional development; awareness of digital risks; implementation of resilience strategies; and support systems for media literacy education, this research sought to provide insights that can inform future teacher training programs and ultimately enhance educational practices in the region.

1.1 RESEARCH QUESTIONS

1. What level of professional development opportunities do public school teachers experience in terms of:
    a. Accessibility of Professional Development;
    b. Quality of Professional Development; and
    c. Impact on Teaching Practice?
2. What level of digital resilience initiatives do public school teachers have in terms of:
    a. Awareness of Digital Risks;
    b. Implementation of Resilience Strategies; and
    c. Support Systems for Digital Resilience?
3. What is the level of media literacy competence of public school Teachers in terms of:
    a. Personal Media Literacy Skills;
    b. Pedagogical Competence in Media Literacy; and
    c. Institutional Support for Media Literacy Education?
4. Is there a significant relationship between public school teachers' media literacy competence on:
    a. Professional development opportunities; and
    b. Digital resilience initiatives?
5. Is there any variable, singly or in combination, that best predicts public school teachers' media literacy competence?

II. RESEARCH METHODOLOGY

This study employed a quantitative research design, focusing on collecting numerical data through structured questionnaires. The aim was to assess public school teachers' experiences regarding professional development opportunities, digital resilience initiatives, and media literacy competence. This approach allowed for statistical analysis to identify trends and relationships among the variables.

2.1 Research Setting

The research was conducted in public schools within Division of Bukidnon, San Fernando 1. These schools were selected to provide a diverse representation of educational environments, ensuring that the findings were relevant to various contexts within the district. The study took place during the academic year 2024-2025, capturing current practices and experiences of teachers.

2.2 Participants of the Study

The participants in this study consisted of public school teachers of Division of Bukidnon- San Fernando 1, from different grade levels and subject areas. A total of 130 teachers were targeted to participate, providing a representative sample of the teaching population in the district. This diversity helped ensure that the results reflected a wide range of perspectives and experiences.

2.3 Sampling Procedures

Participants were selected using purposive sampling. This method involved intentionally choosing teachers who met specific criteria, such as having experience in professional development programs or involvement in digital resilience initiatives. By focusing on these criteria, the study aimed to gather insights from those most knowledgeable about the topics being investigated.

2.4 Data Gathering Procedure

Data was collected using paper-and-pencil questionnaires distributed to the selected participants. The questionnaires consisted of closed-ended questions designed to gather quantitative data on teachers' experiences with professional development, digital resilience, and media literacy. Teachers were given one week to complete and return the questionnaires. To ensure confidentiality, no identifying information was collected.

2.5 Data Analysis

After collecting the completed questionnaires, quantitative data was analyzed using statistical software. This analysis included calculating mean scores for each variable, as well as performing correlation and regression analyses to identify relationships between professional development opportunities, digital resilience initiatives, and media literacy competence. The results provided valuable insights into how these factors interacted and influenced each other among public school teachers.

III. RESULTS AND DISCUSSION

This section presents the results and discussion based on research questions regarding public school teachers' professional development opportunities, digital resilience initiatives, and media literacy competence. It examines the accessibility, quality, and impact of professional development, alongside teachers' awareness of digital risks and resilience strategies. The study also evaluates personal media literacy skills, pedagogical competence, and institutional support. Furthermore, it explores the relationships between media literacy competence and both professional development and digital resilience initiatives, aiming to identify predictive variables. The findings will illuminate how these factors interact in the educational landscape.

Professional Development Opportunities of Public School Teachers' Experiences

Table 1- Summary of Mean Scores in Professional Development Opportunities of Public School Teachers' Experiences

Parameter	Mean	SD	Qualifying Statement
Accessibility of Professional Development	3.80	0.63	High
Quality of Professional Development	4.13	0.56	High
Impact on Teaching Practice	4.23	0.50	High
Overall Mean	4.05	0.50	High

Scale	Range	Descriptive Rating	Quantitative Interpretation
5	4.51-5.00	Strongly Agree	Very High
4	3.51-4.50	Agree	High
3	2.51-3.50	Neutral	Moderate
2	1.51- 2.50	Disagree	Low
1	1.00-1.50	Strongly Disagree	Very Low

The data summarized in Table 1 provides valuable insights into the experiences of public school teachers regarding professional development (PD) opportunities. The key parameters assessed include Accessibility of Professional Development, Quality of Professional Development, and Impact on Teaching Practice. The mean scores for these parameters are notably positive: 3.80 for accessibility, 4.13 for quality, and 4.23 for impact, resulting in an overall mean of 4.05. These scores indicate a general agreement among teachers that PD opportunities are not only available but also effective in enhancing their teaching practices. Such findings align with existing literature that emphasizes the importance of high-quality PD in fostering teacher effectiveness and improving student outcomes (Darling-Hammond et al., 2017).

The high mean score for Quality of Professional Development (4.13) suggests that teachers perceive the training they receive as relevant and beneficial to their professional growth. Research indicates that effective PD should be tailored to teachers' needs and provide opportunities for practical application in the classroom (Garet et al., 2016). This focus on quality is essential, as it ensures that teachers can engage with new strategies and content knowledge that can be directly applied to their teaching contexts. As such, the positive ratings reflect a commitment among educators to continuous learning and improvement, which is crucial in adapting to the rapidly changing educational landscape.

In terms of Accessibility of Professional Development, the mean score of 3.80 indicates that teachers generally feel these opportunities are within reach. Accessibility encompasses various factors, including time availability, location, and format of PD offerings. When PD is easily accessible, teachers are more likely to participate actively, leading to better implementation of new practices in their classrooms (PowerSchool, 2023). This accessibility is particularly important in diverse educational settings where teachers may face different challenges based on their unique circumstances.

The Impact on Teaching Practice, with a mean score of 4.23, highlights the perceived effectiveness of PD initiatives in transforming classroom practices. Teachers who engage in high-quality PD often report increased confidence in their teaching abilities and a greater willingness to experiment with new instructional strategies (Nelson & Thornburgh, 2023). This positive impact not only enhances teacher performance but also benefits student learning outcomes by providing students with more engaging and effective educational experiences.

While the overall perception of PD opportunities is encouraging, there remains a need for ongoing improvement in both the quality and relevance of these programs. PowerSchool's report indicates that only about 40% of educators feel they receive quality PD tailored to their specific needs (PowerSchool, 2023). Addressing this gap is essential to ensure that all teachers have access to meaningful learning experiences that truly enhance their professional growth. By investing in targeted, high-quality professional development initiatives, schools can better equip teachers to meet the diverse needs of their students and foster an environment of continuous improvement.

Table 2- Summary of Mean Scores in Digital Resilience Initiatives of Public School Teachers

Parameter	Mean	SD	Qualifying Statement
Awareness of Digital Risks	3.96	0.59	High
Implementation of Resilience Strategies	3.79	0.63	High
Support Systems for Digital Resilience	3.79	0.77	High
Average Mean	3.85	0.60	High

Scale	Range	Descriptive Rating	Quantitative Interpretation
5	4.51-5.00	Strongly Agree	Very High
4	3.51-4.50	Agree	High
3	2.51-3.50	Neutral	Moderate
2	1.51- 2.50	Disagree	Low
1	1.00-1.50	Strongly Disagree	Very Low

The data summarized in Table 2 provides an overview of the digital resilience initiatives among public school teachers, focusing on three key parameters: Awareness of Digital Risks, Implementation of Resilience Strategies, and Support Systems for Digital Resilience. The mean scores for these parameters are 3.96 for awareness, 3.79 for implementation, and 3.79 for support systems, resulting in an average mean of 3.85. These scores indicate a high level of agreement among teachers regarding their preparedness to handle digital challenges in educational settings. This positive perception is crucial as it reflects teachers' recognition of the importance of digital resilience in today's technology-driven learning environments.

The high mean score of 3.96 for Awareness of Digital Risks suggests that teachers are well-informed about the potential dangers associated with digital technologies, such as cyberbullying, misinformation, and privacy concerns. Research indicates that awareness is the first step in developing effective strategies to mitigate these risks (Ribble, 2015). By understanding the landscape of digital threats,

teachers can better prepare themselves and their students to navigate these challenges safely and responsibly. This awareness is essential not only for personal safety but also for fostering a culture of digital citizenship among students.

In terms of Implementation of Resilience Strategies, the mean score of 3.79 indicates that teachers are actively employing strategies to enhance their digital resilience. This includes integrating safe online practices into their teaching and encouraging students to engage critically with digital content. Studies have shown that when educators implement resilience strategies, they can create a safer and more supportive learning environment (Beauchamp, 2021). The ability to effectively implement these strategies is vital as it directly impacts how students learn to manage their own interactions with technology.

The parameter Support Systems for Digital Resilience also received a mean score of 3.79, indicating that teachers feel they have access to adequate resources and support mechanisms to bolster their digital resilience efforts. This support may come from school administrations, professional development programs, or collaborative networks among educators. Research by Hollis and Kauffman (2020) emphasizes the importance of these support systems in enhancing teachers' confidence and competence in managing digital risks effectively. When teachers feel supported, they are more likely to adopt and sustain resilience strategies in their classrooms.

Overall, the average mean score of 3.85 reflects a strong commitment among public school teachers to develop their digital resilience capabilities. However, while these scores are encouraging, there remains room for improvement in providing comprehensive training and resources that address emerging digital challenges. By continuing to invest in professional development focused on digital resilience, schools can empower educators to better equip themselves and their students to thrive in an increasingly complex digital landscape.

Table 3- Summary of Mean Scores in Media Literacy Competence of Public School Teachers

Parameter	Mean	SD	Qualifying Statement
Personal Media Literacy Skills	3.88	0.58	High
Pedagogical Competence in Media Literacy	3.93	0.61	High
Institutional Support	3.76	0.67	High
Average Mean	3.86	0.56	High

Scale	Range	Descriptive Rating	Quantitative Interpretation
5	4.51-5.00	Strongly Agree	Very High
4	3.51-4.50	Agree	High
3	2.51-3.50	Neutral	Moderate
2	1.51- 2.50	Disagree	Low
1	1.00-1.50	Strongly Disagree	Very Low

The data summarized in Table 3 provides an insightful overview of the media literacy competence among public school teachers, focusing on three key parameters: Personal Media Literacy Skills, Pedagogical Competence in Media Literacy, and Institutional Support. The mean scores for these parameters are 3.88 for personal skills, 3.93 for pedagogical competence, and 3.76 for institutional support, resulting in an average mean of 3.86. These scores indicate a high level of agreement among teachers regarding their competence in media literacy, which is crucial in an era where digital media plays a significant role in education and daily life.

The high mean score of 3.88 for Personal Media Literacy Skills suggests that teachers feel confident in their ability to critically analyze and engage with various media forms. This competence is essential as it enables educators to model effective media consumption for their students, fostering critical thinking and discernment when navigating information online (Hobbs, 2017). The ability to evaluate sources, understand media messages, and recognize bias is increasingly important in today's information-rich environment, where misinformation can easily spread.

In terms of Pedagogical Competence in Media Literacy, the mean score of 3.93 indicates that teachers believe they are well-equipped to teach media literacy skills to their students. Research by Buckingham (2020) emphasizes the importance of integrating media literacy into the curriculum to prepare students for responsible citizenship in a digital world. Teachers who feel competent in this area are more likely to incorporate media literacy concepts into their lessons, thereby enhancing students' ability to critically engage with media content and develop essential skills for the future.

The parameter of Institutional Support received a mean score of 3.76, suggesting that while teachers feel they have some support from their institutions regarding media literacy education, there may still be areas for improvement. Institutional support can include access to resources, training programs, and collaborative opportunities that empower teachers to effectively teach media literacy (Mihailidis & Viotty, 2017). Strengthening this support is vital for ensuring that educators can confidently implement media literacy initiatives in their classrooms.

Furthermore, the average mean score of 3.86 reflects a strong commitment among public school teachers to develop their media literacy competencies. However, there remains a need for ongoing professional development and institutional support to enhance these skills further. By investing in comprehensive training and resources focused on media literacy education, schools can better equip teachers to foster critical thinking and responsible media engagement among students, ultimately contributing to a more informed and discerning society.

Correlation Analysis of the Relationship Between Public School Teachers' Media Literacy Competence on Professional Development Opportunities and Digital Resilience Initiatives

Table 4- Summary of Correlation Analysis Result of the Relationship Between Public School Teachers' Media Literacy Competence on Professional Development Opportunities and Digital Resilience Initiatives

Variables	Pearson Correlation (R)	Significance (p-value)
Institutional Overall		
Professional Development Opportunities	0.801	0.000
Digital Resilience Initiatives	0.748	0.000

The correlation analysis summarized in Table 4 examines the relationship between public school teachers' media literacy competence and two key factors: Professional Development Opportunities and Digital Resilience Initiatives. The Pearson correlation coefficients indicate a strong positive relationship between these variables, with a correlation of 0.801 (p < 0.001) for Professional Development Opportunities and 0.748 (p < 0.001) for Digital Resilience Initiatives. These results suggest that as teachers' media literacy competence increases, their access to professional development opportunities and their engagement in digital resilience initiatives also improve significantly.

The high correlation coefficient of 0.801 for Professional Development Opportunities indicates that teachers who perceive their professional development as effective are likely to have higher media literacy competence. This finding aligns with existing research that emphasizes the importance of quality professional development in enhancing teachers' skills and confidence in media literacy education (Darling-Hammond et al., 2017). When teachers participate in relevant PD programs, they gain the knowledge and strategies necessary to effectively teach media literacy concepts to their students, thereby fostering a more media-literate generation.

Similarly, the correlation of 0.748 with Digital Resilience Initiatives suggests that teachers who engage in resilience-building activities are also more likely to demonstrate higher levels of media literacy competence. This relationship highlights the interconnectedness of digital resilience and media literacy, as both competencies are essential for navigating the complexities of digital information and technology in educational settings (Ribble, 2015; Beauchamp, 2021). By equipping teachers with the skills to manage digital risks and implement resilience strategies, schools can enhance their overall media literacy competence.

These findings underscore the necessity for educational institutions to prioritize both professional development opportunities and digital resilience initiatives as integral components of teacher training programs. By fostering an environment where teachers feel supported in their professional growth and equipped to handle digital challenges, schools can significantly improve teachers' media literacy skills. This not only benefits educators but also enhances students' learning experiences by ensuring they receive instruction from knowledgeable and competent teachers.

In conclusion, the strong correlations between public school teachers' media literacy competence and both professional development opportunities and digital resilience initiatives highlight the importance of comprehensive training programs that address these areas. By investing in targeted professional development and resilience-building strategies, educational institutions can empower teachers to effectively navigate the digital landscape, ultimately contributing to a more informed and critical-minded student body.

Regression Analysis on Public School Teachers' Media Literacy Competence

Table 5- Summary of Regression Analysis Result on Public School Teachers' Media Literacy Competence

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.423	.196		2.162	.032
Accessibility Mean	.094	.053	.107	1.763	.080
Quality Mean	.043	.071	.043	.599	.551
Impact Mean	.053	.071	.048	.748	.456
Awareness Mean	.245	.063	.258	3.916	.000
Implementation Mean	.217	.062	.246	3.528	.001
Support Mean	.245	.048	.340	5.163	.000
R= 0.897	R² = 0.805		Adjusted R²= 0.796	Std Error= 0.251	

The regression analysis summarized in Table 5 provides insights into the factors influencing public school teachers' media literacy competence. The analysis includes several parameters, such as Accessibility Mean, Quality Mean, Impact Mean, Awareness Mean, Implementation Mean, and Support Mean. The results indicate that certain variables significantly contribute to teachers' media literacy competence, with Awareness Mean (B = 0.245, p < 0.001), Implementation Mean (B = 0.217, p < 0.001), and Support Mean (B = 0.245, p < 0.000) showing strong positive relationships. This suggests that as teachers become more aware of digital risks and implement resilience strategies, their media literacy competence improves significantly.

The regression coefficients indicate that for every unit increase in awareness of digital risks, there is a corresponding increase of 0.245 in media literacy competence, holding all other factors constant. Similarly, the implementation of resilience strategies contributes positively with a coefficient of 0.217. These findings align with existing literature that emphasizes the importance of awareness and proactive strategies in enhancing media literacy among educators (Ribble, 2015; Beauchamp, 2021). The significant impact of these variables underscores the necessity for professional development programs that focus on increasing teachers' awareness and equipping them with effective implementation strategies.

While the coefficients for Accessibility Mean (B = 0.094, p = 0.080) and Quality Mean (B = 0.043, p = 0.551) were not statistically significant at conventional levels, they still provide valuable insights into the overall context of media literacy education. The lack of significance might suggest that while accessibility and quality are important, they may not directly influence media literacy competence as strongly as awareness and implementation do. This highlights a potential area for further research to explore how these factors interact within the broader framework of media literacy education.

The overall model shows a strong fit with an R² value of 0.805, indicating that approximately 80% of the variance in media literacy competence can be explained by the included predictors. This high explanatory power suggests that focusing on awareness, implementation, and support systems can effectively enhance teachers' media literacy skills. Given the increasing importance of digital literacy in education today, it is crucial for educational institutions to prioritize these areas in their professional development initiatives.

Thus, the regression analysis demonstrates that enhancing public school teachers' media literacy competence is significantly influenced by their awareness of digital risks and their ability to implement resilience strategies effectively. By investing in targeted

professional development that addresses these areas, schools can empower educators to navigate the complexities of media in today's digital landscape more effectively.

IV. CONCLUSIONS

The findings of this study reveal significant insights into the professional development opportunities, digital resilience initiatives, and media literacy competence of public school teachers. Teachers highly value collaborative training, which is essential for enhancing their teaching practices. However, barriers such as inadequate resources and inconvenient scheduling limit their participation in professional development programs. Additionally, while teachers demonstrate a strong awareness of digital risks, they face challenges in effectively discussing these issues with students and addressing cyberbullying. The study also highlights a strong positive relationship between teachers' media literacy competence and both professional development opportunities and digital resilience initiatives.

V. RECOMMENDATIONS

To improve the effectiveness of professional development programs, schools should prioritize collaborative training that addresses logistical challenges, such as offering flexible scheduling and ensuring adequate resources are available. Follow-up support after initial training sessions is also crucial for reinforcing learning and promoting ongoing development. Furthermore, investing in comprehensive digital resilience training will equip teachers with the skills necessary to navigate today's digital landscape effectively.

Additionally, enhancing parental engagement in media literacy discussions can create a supportive community around students' learning. Schools should consider organizing workshops or informational sessions for parents to foster collaboration between home and school. By implementing these recommendations, educational institutions can significantly enhance teachers' capabilities and better prepare them to guide students through the complexities of an increasingly digital world.

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