
Digital Readiness, Learning Engagement, And Academic Resilience Among Elementary, Secondary, And Tertiary Learners: A Cross-Level Study in Bohol And Cebu**Jennifer Keith M. Sobiono¹, Joy Marie S. Gambot², Hardy R. Abella³**

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ABSTRACT

This study examined the levels of digital readiness, learning engagement, and academic resilience among elementary, secondary, and tertiary learners in Bohol and Cebu during the Academic Year 2025–2026. Specifically, it aimed to determine the learners' level of digital readiness in terms of technical competence and digital literacy, access to digital infrastructure, online learning self-efficacy, and adaptability to digital learning environments; assess their level of learning engagement across behavioral, emotional, and cognitive domains; and evaluate their level of academic resilience in terms of persistence, coping strategies, self-confidence, and recovery from academic setbacks. Furthermore, the study investigated the significant relationships among the three variables and examined differences when learners were grouped according to educational level and geographical location. The study also served as the basis for the development of a Cross-Level Digital Resilience Enhancement Framework.

A comparative-correlational research design was employed using a quantitative approach. Data were gathered from 120 respondents selected through stratified sampling, consisting of 40 elementary learners from Magkaya Elementary School, 40 secondary learners from Panghagban High School in Bohol, and 40 tertiary learners from the University of Cebu Lapu-Lapu and Mandaue. A validated survey questionnaire was used as the primary data-gathering instrument. Statistical tools such as frequency, percentage, weighted mean, Pearson product-moment correlation, and Analysis of Variance (ANOVA) were utilized to analyze the data. The findings revealed that learners demonstrated generally high levels of digital readiness (overall mean = 4.03), learning engagement (overall mean = 4.05), and academic resilience (overall mean = 4.10), all interpreted as "Agree." Among the dimensions, technical competence and digital literacy obtained the highest rating, while adaptability and coping with academic challenges reflected relatively lower but still favorable levels.

The results further indicated significant positive relationships between digital readiness and learning engagement ($r = 0.68$, $p < 0.05$), digital readiness and academic resilience ($r = 0.65$, $p < 0.05$), and learning engagement and academic resilience ($r = 0.72$, $p < 0.05$), suggesting that learners who are digitally prepared tend to be more engaged and resilient in their academic tasks. In terms of group differences, significant variations were found in digital readiness and academic resilience across educational levels, while learning engagement showed no significant difference. Additionally, geographical location significantly influenced digital readiness and learning engagement but did not significantly affect academic resilience. These findings imply that digital preparedness plays a crucial role in enhancing both engagement and resilience, although contextual and developmental factors also contribute to variations.

Based on the results, the study concludes that digital readiness is a key predictor of learning

engagement and academic resilience in technology-mediated learning environments. It highlights the need for targeted interventions that strengthen digital skills, improve access to infrastructure, and enhance learners' adaptability, motivation, and coping strategies. The proposed Cross-Level Digital Resilience Enhancement Framework provides a structured approach for improving digital learning outcomes across different educational levels and contexts. The study contributes to the advancement of sustainable and inclusive digital education aligned with contemporary educational demands.

Keywords: Digital Readiness, Learning Engagement, Academic Resilience, Digital Literacy, Online Learning Self-Efficacy, Educational Technology, Cross-Level Study, Philippines

1. THE PROBLEM AND ITS RESEARCH SCOPE INTRODUCTION

Rationale of the Study

The rapid transformation of education through digitalization has become a global priority, aligned with the goals of United Nations Sustainable Development Goals (SDGs), particularly **SDG 9: Industry, Innovation, and Infrastructure**, which emphasizes the development of resilient infrastructure and the promotion of inclusive and sustainable innovation in all sectors, including education. The integration of digital technologies into learning environments has significantly reshaped instructional delivery, learner engagement, and academic outcomes worldwide. In this context, digital readiness, student engagement, and academic resilience have emerged as critical determinants of educational success in the 21st century (Jallali et al., 2026; Dejene & Tilahun, 2024). Global studies highlight that students who are digitally prepared are more capable of navigating complex learning environments, demonstrating higher engagement and sustained academic performance (Ayanwale et al., 2025; Huda, 2024). Moreover, digital transformation has reinforced the need for adaptive learning systems that cultivate resilience and flexibility among learners in technologically mediated environments (Koten & Simarmata, 2025).

At the global level, digital readiness is increasingly recognized as a multidimensional construct encompassing access to technology, digital literacy, and self-regulated learning capabilities. Research indicates that students' readiness for online learning significantly influences their engagement, satisfaction, and academic achievement (Weng & Wirda, 2025; Alanoglu et al., 2025). Similarly, digital literacy has been shown to enhance learners' capacity for self-directed learning, thereby improving engagement and academic persistence (Getenet et al., 2024; Dayon et al., 2025). In addition, digital resilience, defined as the ability to adapt and thrive in digital learning environments, plays a crucial role in enabling students to cope with academic challenges and technological disruptions (Kurniadi et al., 2022; Avdiel & Blau, 2025). Empirical evidence further suggests that resilience is strongly associated with emotional engagement, cognitive adaptability, and overall academic well-being (Jang et al., 2022; Izadpanah, 2022).

In the Philippine context, the shift toward digital and blended learning has been accelerated by the COVID-19 pandemic, exposing both opportunities and challenges in the country's educational system. The Department of Education (DepEd) and the Commission on Higher Education (CHED) have implemented digital learning initiatives; however, disparities in infrastructure, internet connectivity, and digital competence remain significant barriers (Almerez & Duping, 2022; Kong et al., 2024). Studies

conducted in developing regions reveal that limited access to digital tools and insufficient technological preparedness negatively impact student engagement and academic performance (Mojumder et al., 2025; Ethe & Avbenagha, 2025). Furthermore, Filipino learners often encounter digital stress, reduced motivation, and challenges in adapting to online learning environments, highlighting the need to strengthen both digital readiness and resilience (El-Gazar et al., 2024; Mahdi & Dewi, 2025).

At the national and institutional levels, digital readiness is not limited to technological access but also includes pedagogical support, teacher competence, and institutional preparedness. Research shows that teachers' digital competence significantly influences students' learning engagement and outcomes (Le et al., 2025; Getenet et al., 2024). Additionally, institutional efforts toward blended and flexible learning environments enhance student adaptability and academic resilience (Timbol, 2026; Orphanidou et al., 2024). These findings underscore the importance of a holistic approach to digital education, where technological, psychological, and instructional factors interact to support learner success (Jallali et al., 2026; Huda, 2024).

In local contexts such as **Bohol and Cebu**, where educational institutions have adopted varying levels of digital and blended learning modalities, challenges related to digital access, engagement, and resilience are more pronounced. Students from rural and geographically isolated areas often experience limited internet connectivity, lack of digital devices, and reduced academic support, which hinder their ability to fully engage in online learning (Kong et al., 2024; Mojumder et al., 2025). At the same time, learners in urban settings may experience digital fatigue, increased academic pressure, and psychological stress, which also affect their resilience and engagement (Ayanwale et al., 2025; Mahdi & Dewi, 2025). These disparities highlight the need for localized studies that examine how digital readiness influences learning engagement and academic resilience across different educational levels and contexts.

Moreover, academic resilience has been identified as a key factor in sustaining student engagement and academic success. Studies demonstrate that resilience enhances learners' ability to cope with academic challenges, maintain motivation, and persist in their studies despite difficulties (Wulandari & Khoirunnisa, 2026; Özbay, 2026). In digital learning environments, resilience is further strengthened by self-efficacy, digital skills, and social support systems (Sujiarto et al., 2022; Arbulú Pérez Vargas et al., 2024). Additionally, digital literacy and critical thinking have been found to contribute significantly to resilience development, particularly among students facing socio-economic and technological challenges (Chaudhuri et al., 2025).

Despite the growing body of literature, there remains a significant gap in research that simultaneously examines **digital readiness, learning engagement, and academic resilience across multiple educational levels**. Most existing studies focus on these variables independently or within a single educational context (Jang et al., 2022; Kurniadi et al., 2022; Getenet et al., 2024). Furthermore, limited studies have explored these relationships within both rural and urban settings, particularly in the Philippine context. Given the increasing demand for sustainable and inclusive digital education aligned with SDG 9, there is a need to investigate how these variables interact to influence student outcomes in diverse learning environments (Jallali et al., 2026; Koten & Simarmata, 2025).

Therefore, this study aims to bridge this gap by examining how **digital readiness predicts**

learning engagement and academic resilience among elementary, secondary, and tertiary learners in Bohol and Cebu. By adopting a cross-level and contextualized approach, the study contributes to the development of evidence-based policies and instructional strategies that promote equitable, resilient, and sustainable digital learning environments. Ultimately, the findings will provide valuable insights for educators, policymakers, and institutions in enhancing student engagement, strengthening resilience, and ensuring quality education in the digital age (Dejene & Tilahun, 2024; Dara et al., 2026).

Theoretical Background

The present study is anchored on the premise that digital readiness, learning engagement, and academic resilience are interrelated constructs that collectively shape student success in technology-mediated learning environments. These constructs are supported by multiple theoretical perspectives, including Academic Resilience Theory, Digital Resilience Theory, Digital Literacy and Competence Frameworks, Engagement Theory, Sustainable Education Theory, and Preparedness Theory. Each theory provides a distinct lens in explaining how learners adapt, participate, and succeed in digital education contexts.

Academic Resilience Theory Concepts.

Academic resilience refers to students' capacity to overcome academic challenges, persist in learning tasks, and achieve positive educational outcomes despite adversity (Wulandari & Khoirunnisa, 2026; Sun & Liu, 2023). It encompasses cognitive, emotional, and behavioral processes that enable learners to sustain motivation and performance under pressure.

Assumptions.

This theory assumes that resilience is not an innate trait but a dynamic and developable capacity influenced by internal factors such as self-efficacy and motivation, as well as external factors such as instructional support and learning environments (Amoadu et al., 2025; Jang et al., 2022). It further posits that engagement and self-regulation are key mechanisms that strengthen resilience outcomes (Izadpanah, 2022).

Application to the Study.

In digital learning contexts, academic resilience explains how students maintain engagement and performance despite technological challenges. Empirical evidence shows that resilience predicts academic well-being and educational attainment in online learning environments (Sun & Liu, 2023; Ge, 2025). Thus, this theory supports the study by positioning academic resilience as a key outcome variable influenced by digital readiness and engagement.

Digital Resilience Theory

Concepts.

Digital resilience extends traditional resilience by focusing on learners' ability to adapt, recover, and thrive in digital environments, particularly in situations involving technological disruptions, digital stress, and online learning demands (Kurniadi et al., 2022; Zayed, 2024).

Assumptions.

This theory assumes that digital environments introduce unique challenges, including cognitive overload, technological barriers, and reduced social interaction. It posits that students with higher digital resilience are better equipped to manage these challenges through adaptability, emotional regulation, and problem-solving skills (Avdiel & Blau, 2025; Özbay, 2026).

Application to the Study.

Digital resilience provides a framework for understanding how learners respond to the demands of online education. It supports the idea that digital readiness contributes to resilience development, enabling students to cope with stress and sustain engagement (Arbulú Pérez Vargas et al., 2024). Therefore, this theory reinforces the role of resilience as both an outcome and a protective factor in digital learning.

Digital Literacy and Competence Framework

Concepts.

Digital literacy refers to the ability to effectively use digital tools, access information, and engage in online learning activities. It includes technical skills, cognitive processing, and ethical use of technology (Suri et al., 2025; Getenet et al., 2024).

Assumptions.

This framework assumes that digital literacy is a prerequisite for effective learning engagement and academic success in digital environments. It also posits that digital competence is multidimensional, encompassing knowledge, skills, attitudes, and self-efficacy (Le et al., 2025; Shi et al., 2025).

Application to the Study.

Digital literacy serves as a foundation for digital readiness, influencing students' ability to engage in learning tasks and develop resilience. Studies indicate that digital literacy enhances self-directed learning and engagement, which in turn supports academic resilience (Alanoglu et al., 2025; Dayon et al., 2025). Thus, this framework supports the study by identifying digital readiness as an antecedent variable.

Engagement Theory

Concepts.

Engagement theory focuses on students' active involvement in learning activities, encompassing behavioral, emotional, and cognitive dimensions (Ayanwale et al., 2025; Huda, 2024). It emphasizes participation, interaction, and motivation as key drivers of learning outcomes.

Assumptions.

The theory assumes that meaningful learning occurs when students are actively engaged in tasks that promote collaboration, problem-solving, and critical thinking. It also posits that engagement is influenced by both individual readiness and environmental factors (Yamson et al., 2025).

Application to the Study.

In digital learning environments, engagement acts as a mediating variable between digital readiness and academic resilience. Research shows that online learning readiness significantly predicts engagement, which in turn influences academic outcomes (Weng & Wirda, 2025; Nurqamarani, 2023). This theory supports the study by explaining how engagement translates readiness into resilience.

Sustainable and Future-Oriented Education Theory

Concepts.

This theory is grounded in the principles of sustainable development and Industry 5.0, emphasizing human-centered, adaptive, and technology-integrated learning systems (Jallali et al., 2026; Valášková et al., 2025).

Assumptions.

It assumes that education systems must develop learners who are adaptable, innovative, and resilient in rapidly changing environments. It also highlights the importance of integrating technology with human skills such as critical thinking and collaboration (Koten & Simarmata, 2025).

Application to the Study.

This perspective supports the inclusion of digital readiness and resilience as key competencies for future learners. It emphasizes that resilient learners are products of digitally enriched and adaptive educational systems (Naseer et al., 2025; Mahdi & Dewi, 2025).

Preparedness Theory

Concepts.

Preparedness theory focuses on students' readiness to transition and adapt to new learning environments, particularly in higher education and digital contexts (Mabulana, 2025).

Assumptions.

The theory assumes that students' preparedness influences their ability to engage, adapt, and succeed in academic settings. It also recognizes structural and contextual factors such as access, infrastructure, and institutional support (Mojumder et al., 2025; Kong et al., 2024).

Application to the Study.

Preparedness theory supports the role of digital readiness as a critical factor in sustaining engagement and resilience. It highlights how preparedness gaps can hinder academic success, particularly in digital learning environments (Dejene & Tilahun, 2024).

The integration of these theories provides a comprehensive framework explaining the relationships among digital readiness, learning engagement, and academic resilience.

First, Digital Literacy and Preparedness Theories establish that digital readiness is a foundational requirement for effective participation in online learning. Students who possess adequate digital skills, access, and self-efficacy are more capable of navigating digital platforms and engaging in learning activities (Le et al., 2025; Alanoglu et al., 2025).

Second, Engagement Theory explains how digital readiness translates into active participation. When students are prepared, they are more likely to exhibit behavioral, emotional, and cognitive engagement, which enhances their learning experiences (Ayanwale et al., 2025; Weng & Wirda, 2025).

Third, Academic and Digital Resilience Theories demonstrate that sustained engagement leads to the development of resilience. Engaged learners develop coping strategies, adaptability, and persistence,

enabling them to overcome academic challenges in digital environments (Sun & Liu, 2023; Kurniadi et al., 2022).

Finally, Sustainable Education Theory situates these relationships within the broader context of future-ready education, emphasizing the importance of resilience and adaptability in achieving long-term academic and professional success (Jallali et al., 2026; Koten & Simarmata, 2025).

This pathway highlights that digital readiness serves as the starting point, engagement acts as the mechanism, and resilience emerges as the outcome of effective digital learning experiences.

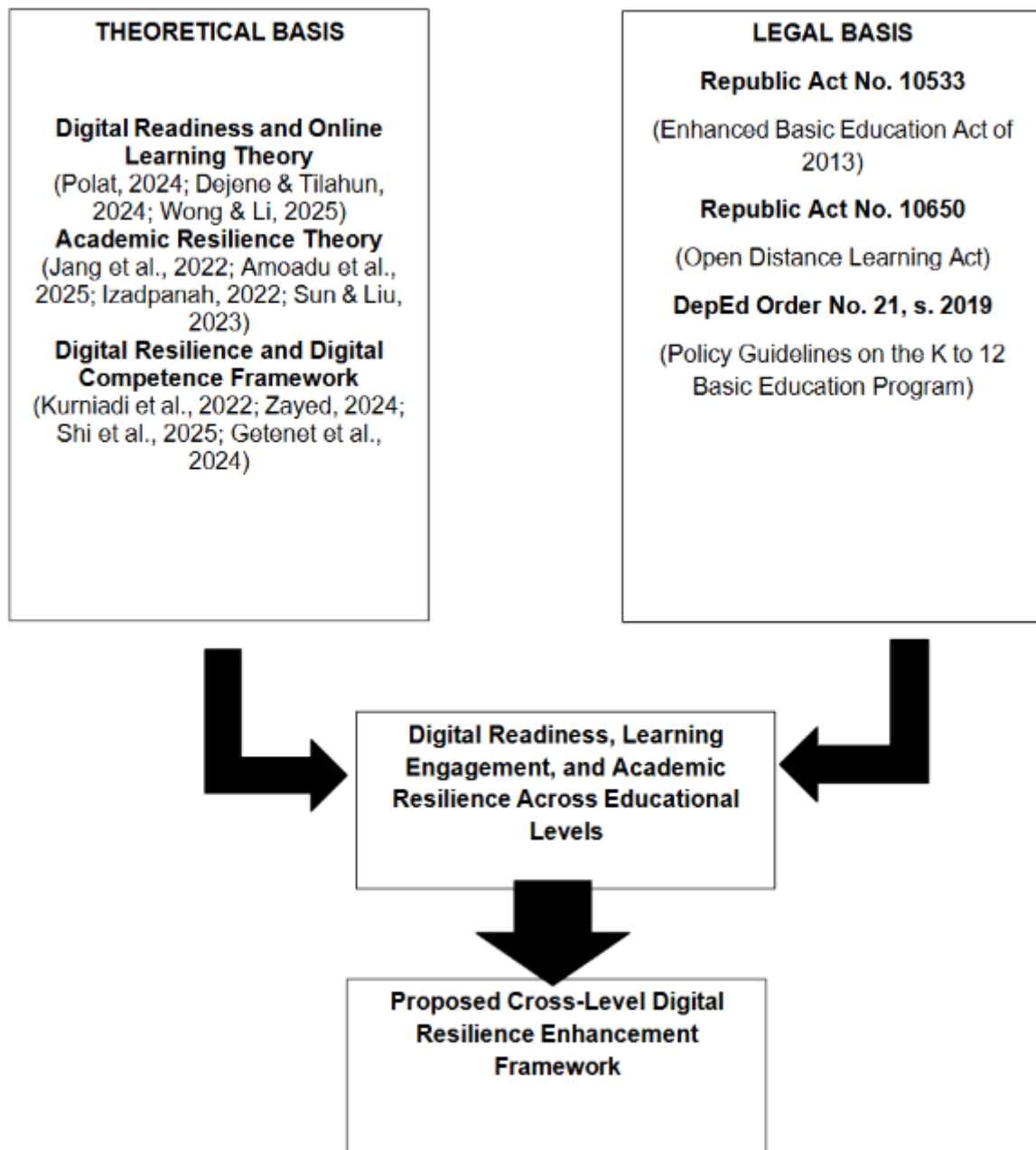


Figure 1. Theoretical Background

THE PROBLEM

Statement of the Problem

This study examined the levels of digital readiness, learning engagement, and academic resilience among elementary, secondary, and tertiary learners in Bohol and Cebu during the Academic Year 2025–2026. It further aimed to determine the relationships among these variables and to develop a Cross-Level Digital Resilience Enhancement Framework.

Specifically, this study sought to answer the following questions:

1. What relevant respondents profile was derived in terms of:
 - 1.1 Age
 - 1.2 Gender
 - 1.3 Educational Level
 - 1.4 School Classification
 - 1.5 Access to Digital Devices
 - 1.6 Internet Accessibility and Frequency of Digital Platform Use?
2. What was the level of digital readiness of learners in terms of:
 - 2.1 Technical Competence and Digital Literacy
 - 2.2 Access to Digital Infrastructure and Learning Platforms
 - 2.3 Online Learning Self-Efficacy
 - 2.4 Adaptability to Digital Learning Environments
3. What was the level of learning engagement of learners in terms of;
 - 3.1 Behavioral Engagement
 - 3.2 Emotional Engagement
 - 3.3 Cognitive Engagement
4. What was the level of academic resilience of learners in terms of:
 - 4.1 Persistence in academic tasks
 - 4.2 Coping with Academic Challenges
 - 4.3 Self-Confidence in Learning
 - 4.4 Recovery from Setbacks
5. Is there a significant relationship between digital readiness and learning engagement among learners?
6. Is there a significant relationship between digital readiness and academic resilience among learners?
7. Based on the findings, what Cross-Level Digital Resilience Enhancement Framework can be proposed to strengthen digital readiness, learning engagement and academic resilience among learners?

Null Hypothesis

1. There is no significant relationship between digital readiness and learning engagement among elementary, secondary, and tertiary learners in Bohol and Cebu.
2. There is no significant relationship between digital readiness and academic resilience among learners.

Significance of the Study

This study examined the levels of digital readiness, learning engagement, and academic resilience among elementary, secondary, and tertiary learners in Bohol and Cebu. The findings provide valuable,

evidence-based insights that can inform policies, practices, and future research aimed at strengthening digital learning environments and fostering resilient and engaged learners.

Policy Makers

The findings of this study may assist policymakers in developing and refining national education policies that support digital transformation in education. By identifying key factors influencing digital readiness, engagement, and resilience, the study contributes to the formulation of inclusive and sustainable strategies aligned with global educational goals. The results may also guide the creation of policies that address digital inequality, promote infrastructure development, and ensure equitable access to quality education across regions.

Educational Planners

Educational planners may utilize the findings of this study to design and implement strategic programs that enhance digital learning systems. The cross-level analysis provides insights into the varying needs of learners across elementary, secondary, and tertiary levels, enabling planners to develop targeted interventions. The results can also inform curriculum development, digital integration strategies, and long-term planning for resilient and future-ready education systems.

Department of Education (DepEd) and Commission on Higher Education (CHED)

This study provides empirical evidence that may support the Department of Education (Philippines) and Commission on Higher Education (Philippines) in strengthening digital education initiatives. The findings may guide improvements in learning continuity programs, technology integration, and digital literacy development across basic and higher education. Additionally, the study highlights areas where policy adjustments and support mechanisms are needed to enhance learner engagement and resilience in digital environments.

School Administrators and Academic Leaders

School administrators, including principals, deans, and program coordinators, may benefit from the study by gaining a deeper understanding of how digital readiness influences student engagement and academic resilience. The findings can inform decisions related to infrastructure investment, faculty training, blended learning implementation, and student support services. Moreover, administrators can use the results to design institutional frameworks that promote adaptive learning environments and strengthen students' coping and persistence in academic tasks.

Teachers and Faculty Members

Teachers and faculty members may use the findings of this study to enhance instructional practices in digital and blended learning environments. By understanding the relationship between digital readiness, engagement, and resilience, educators can design more interactive, learner-centered strategies that promote participation, motivation, and critical thinking. The study also supports the integration of technology in teaching while fostering supportive learning environments that develop students' resilience and self-directed learning skills.

Students

Learners are direct beneficiaries of this study as it emphasizes the importance of developing digital

competence, engagement, and resilience in achieving academic success. The findings encourage students to strengthen their adaptability, self-regulation, and persistence in navigating digital learning environments. Improved instructional practices and institutional support informed by this study may also enhance students' overall learning experiences and academic outcomes.

Researchers and Future Studies

This study contributes to the existing body of knowledge on digital education by providing a cross-level analysis of digital readiness, learning engagement, and academic resilience within the Philippine context. Future researchers may use the findings as a reference for further investigations, including longitudinal studies, intervention-based research, and expanded models incorporating digital competence, well-being, and academic performance. The study also opens opportunities for exploring contextual and comparative analyses across different regions and educational settings.

RESEARCH METHODOLOGY

Research Design

This study employed a comparative-correlational research design to examine the levels and relationships among digital readiness, learning engagement, and academic resilience among elementary, secondary, and tertiary learners in Bohol and Cebu during the Academic Year 2025–2026.

The comparative component of the design was utilized to determine the significant differences in the levels of digital readiness, learning engagement, and academic resilience when learners were grouped according to educational level (elementary, secondary, tertiary) and geographic location (Bohol and Cebu). This approach enabled the identification of variations in learners' digital competence, online learning self-efficacy, engagement behaviors, and resilience capacities across different contexts. It also provided insights into how factors such as access to digital resources, institutional support, and learning environments influenced students' engagement and ability to cope with academic challenges.

On the other hand, the correlational component was employed to examine the significant relationships among the key variables of the study. Specifically, it determined the extent to which digital readiness was associated with learning engagement and academic resilience, as well as the relationship between learning engagement and academic resilience. Through quantitative statistical analysis, the study explored how learners' digital preparedness influenced their behavioral, emotional, and cognitive engagement, and how these, in turn, contributed to their persistence, adaptability, and recovery from academic difficulties.

Environment

This study was conducted among elementary, secondary, and tertiary learners in Bohol and Cebu during the Academic Year 2025–2026. These locations were deliberately selected to represent diverse educational environments with varying levels of digital infrastructure, institutional capacity, and learning modalities. Such diversity provides a meaningful context for examining the levels of digital readiness, learning engagement, and academic resilience across different educational settings.

In Bohol, the study focused on selected public elementary and secondary schools under the Buenavista II District. These schools are situated in rural and semi-urban communities where access to digital devices, internet connectivity, and technological resources varies considerably. Despite these limitations, the schools have implemented flexible learning modalities, including modular instruction, blended learning approaches, and the use of mobile-based platforms. These conditions offer a realistic setting for understanding how learners develop adaptability, engagement, and resilience in environments with constrained digital access. The Bohol context is particularly relevant in highlighting issues related to digital inequality, learner coping mechanisms, and the role of community and school support in sustaining learning continuity.

In Cebu, the study was conducted at the University of Cebu Lapu-Lapu and Mandaue, a tertiary institution located in an urban area with more advanced digital infrastructure and institutional support systems. The university utilizes learning management systems (LMS), virtual classrooms, and digital assessment tools as part of its instructional delivery. Learners in this environment are exposed to structured and technology-integrated learning experiences, supported by stable internet connectivity and institutional digital services. This setting provides insights into how digital readiness, engagement, and resilience manifest in a technologically enriched academic environment.

The inclusion of both Bohol and Cebu enables a cross-level and cross-location comparison of learners' experiences. The selected environments represent elementary, secondary, and tertiary education levels, as well as rural, semi-urban, and urban contexts. This variation allows the study to capture differences and similarities in digital readiness, learning engagement, and academic resilience across diverse educational conditions. Ultimately, the research environment strengthens the validity of the study by providing a comprehensive basis for analyzing how digital preparedness influences learner engagement and resilience, and supports the development of a Cross-Level Digital Resilience Enhancement

Framework.

Figure 3. Locale of the Study

Respondents



The respondents of this study were learners from elementary, secondary, and tertiary levels in selected institutions in Bohol and Cebu during the Academic Year 2025–2026. Specifically, the study included learners from Magkaya Elementary School (elementary level) and Panghagban High School (secondary level) under the Buenavista II District, Bohol Division, as well as learners from the University of Cebu Lapu-Lapu and Mandaue (tertiary level) in Mandaue City, Cebu.

For the purpose of this study, the respondents were categorized as follows:

- Elementary learners – pupils enrolled in Magkaya Elementary School who are engaged in foundational learning and early exposure to digital and blended learning environments;
- Secondary learners – students enrolled in Panghagban High School who experience more structured academic tasks and increased integration of digital platforms in instruction;
- Tertiary learners – college students enrolled at the University of Cebu Lapu-Lapu and Mandaue who are exposed to advanced digital learning systems, independent learning tasks, and technology-enhanced instruction.

The study employed a stratified sampling technique to ensure proportional representation of learners across the three educational levels. This approach allowed for a balanced comparison of digital readiness, learning engagement, and academic resilience among elementary, secondary, and tertiary

learners.

The inclusion criteria were as follows:

- a) learners were officially enrolled in the selected institutions during the Academic Year 2025–2026;
- b) learners had at least one (1) semester of learning experience in their respective institution; and
- c) learners voluntarily agreed to participate in the study, with parental consent secured for elementary and minor secondary learners.

This selection ensured that all respondents had sufficient exposure to digital learning environments, blended instruction, and academic activities necessary to provide meaningful and informed responses.

Table 1. Distribution of Respondents by Educational Level and Institution

School / Institution	Elementary	Secondary	Tertiary	Total	Percentage (%)
Magkaya Elementary School (Bohol)	40	–	–	40	33%
Panghagban High School (Bohol)	–	40	–	40	33%
University of Cebu Lapu-Lapu and Mandaue (Cebu)	–	–	40	40	34%
Total	40	40	40	120	100%

The table shows that a total of 120 learners participated in the study, with equal representation from elementary, secondary, and tertiary levels. This balanced distribution supports the study’s objective of conducting a cross-level analysis of digital readiness, learning engagement, and academic resilience.

Furthermore, the inclusion of learners from both Bohol (rural and semi-urban basic education settings) and Cebu (urban tertiary education setting) ensured diversity in terms of digital access, learning experiences, and institutional support. This diversity strengthened the validity of the study by enabling meaningful comparisons across different educational contexts and contributed to the development of a Cross-Level Digital Resilience Enhancement Framework.

2. REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents the literature and empirical studies related to the present investigation on digital readiness, learning engagement, and academic resilience among learners in Bohol and Cebu. The review is organized by major themes to establish conceptual clarity and strengthen the alignment of the study variables. Specifically, the discussion is grouped into literature on digital readiness, literature on learning engagement, and literature on academic resilience, followed by studies that explain the interrelationships among these constructs in digital and blended learning settings. To address the need for stronger local grounding, the review integrates both international and Philippine-based studies. Through this thematic organization, the chapter establishes the research gap and justifies the need for a cross-level investigation involving elementary, secondary, and tertiary learners.

Related Literature

Digital readiness has become a central concept in contemporary education because the success of online and blended learning is no longer determined solely by access to technology, but also by learners' competence, confidence, adaptability, and willingness to participate in digitally mediated instruction. Polat (2024) described readiness, resilience, and engagement as three foundational pillars of effective online education, emphasizing that learners must be technologically, cognitively, and emotionally prepared to function successfully in digital environments. This view broadens digital readiness beyond hardware and internet access by recognizing the importance of self-regulation, motivation, and adaptability. In the same direction, Dejene and Tilahun (2024) explained that e-learning readiness includes preparedness for technological use, the ability to interact with learning systems, and the capacity to sustain participation in virtual settings. Their discussion suggests that readiness is not static but shaped by institutional conditions and learner characteristics. El-Kasaby et al. (2024) further argued that digital readiness predicts academic well-being during digital learning because it improves students' capacity to navigate academic demands with confidence and cognitive flexibility. Similarly, Kong et al. (2024) showed that academic readiness during pandemic learning was strongly influenced by access to digital infrastructure and supportive learning conditions, demonstrating that readiness is both individual and environmental in nature. These works collectively establish that digital readiness is a multidimensional construct involving access, competence, adaptability, and self-belief.

The literature also emphasizes that digital literacy serves as a major component of digital readiness because learners cannot fully engage in technology-supported education without the ability to use, evaluate, and apply digital tools meaningfully. Suri et al. (2025) noted that digital literacy should be viewed as a broad competency that includes operational skills, critical evaluation of digital information, and purposeful use of technological tools for learning. Their review of assessment instruments demonstrates that digital competence is multidimensional and cannot be reduced to mere familiarity with devices. AlGhannama et al. (2025) supported this by developing a comprehensive digital literacy scale that measures both basic operational skills and critical digital literacy, suggesting that learners' readiness must be understood through validated dimensions. Alanoglu et al. (2025) found that online learning readiness and digital literacy jointly support self-directed online learning, especially during emergency remote teaching. Likewise, Dayon et al. (2025) reported that online learning readiness predicts student

engagement and positive language learning attitudes, indicating that learners who are more digitally prepared tend to participate more actively in instruction. In hybrid learning, Nurqamarani (2023) found that digital literacy and academic self-efficacy significantly shape student engagement, reinforcing the argument that digital competence enables learners to become more involved, motivated, and persistent. These studies show that digital readiness is strengthened when digital literacy is paired with confidence and meaningful academic use of technology.

Another recurring theme in the literature is that readiness must be considered at both learner and institutional levels. Wong and Li (2025) proposed that technology-enabled institutional readiness is essential for agile-blended learning because effective digital education requires aligned infrastructure, policies, support systems, and innovation strategies. Huda (2024) likewise found that learners' experiences are influenced by both accessibility and adaptability of digital platforms, suggesting that digital readiness is partly dependent on how institutions design and support technological environments. Le et al. (2025) demonstrated that teacher digital readiness affects instructional integration and student engagement, indicating that student outcomes are linked to the competence of educators who implement digital tools in classroom practice. Amemasor et al. (2025) further explained that digital professional development and professional learning communities strengthen school digital preparedness and instructional integration. These perspectives highlight that digital readiness is not merely a personal learner attribute but a systemic condition supported by schools, universities, teachers, and policy structures. In the Philippine context, Almerex and Duping (2022) documented how higher education institutions responded to disruptions through flexible learning and adaptive leadership, illustrating that institutional readiness is critical to educational continuity. Timbol (2026) also showed that sustaining blended learning in a Philippine higher education setting requires faculty preparation, institutional support, and consistent technological investment. These local contributions are important because they show that readiness in Philippine education depends not only on learners' abilities but also on the quality of institutional implementation.

Learning engagement is another major construct in the present study and is widely discussed in the literature as a multidimensional process involving behavioral, emotional, and cognitive participation in academic tasks. Ayanwale et al. (2025) emphasized that student engagement in digital learning should not be reduced to platform access or attendance; rather, it must include deeper pedagogical involvement that promotes interaction, motivation, and active learning. This position is consistent with the work of Huda (2024), who argued that the design and accessibility of digital platforms influence learners' satisfaction and engagement by shaping how they interact with instructional content. Weng and Wirda (2025) found that online learning readiness significantly affects student engagement, satisfaction, and achievement in higher education, suggesting that learners who are better prepared for online instruction are more likely to participate meaningfully and persist in learning tasks. Nuwanthika and Thathsarani (2025) similarly showed that digital learning readiness strongly facilitates motivation, engagement, and academic performance, further reinforcing the importance of readiness as an antecedent of engagement. In practical terms, these studies indicate that engagement in digital settings is a consequence of both personal preparedness and educational design.

The literature further shows that engagement is strengthened when digital environments are interactive, learner-centered, and supportive of self-regulation. Mahdi and Dewi (2025) found that interactive technology increases participation, motivation, and positive attitudes toward learning. Usman

et al. (2025) likewise concluded that game-based learning enhances behavioral, emotional, and cognitive engagement across educational levels by promoting active participation and enjoyment. Deslis et al. (2025) reported that digital storytelling fosters conceptual understanding and collaborative learning in mathematics education, showing that engagement is strengthened when learners are allowed to construct meaning through creative digital tools. Getenet et al. (2024) found that digital literacy, efficacy, and positive attitudes influence online learning engagement among preservice teachers, suggesting that engagement is affected not only by instructional tools but also by learners' beliefs about their ability to use them. Yamson et al. (2025), however, warned that engagement can decline when students experience fatigue, infrastructural limitations, and motivational challenges in post-pandemic online learning. Mojumder et al. (2025) reached a similar conclusion, noting that abrupt transitions between learning modes expose preparedness gaps and reduce sustained involvement. These studies show that engagement can be enhanced by thoughtful digital pedagogy but weakened by poor planning, digital fatigue, and lack of learner support.

In the Philippine setting, engagement in digital and blended learning has also been shaped by accessibility, preparedness, and institutional adaptation. Dayon et al. (2025) provided evidence that readiness predicts engagement in English education, indicating that student involvement is strengthened when learners possess the confidence and capability to navigate digital tasks. Almercz and Duping (2022) highlighted that institutional flexibility and leadership responses during disruption were crucial to sustaining academic participation in higher education. Timbol (2026) further showed that blended learning sustainability depends on maintaining student motivation, improving communication, and strengthening support structures. Tabanao (2025), while focusing on Alternative Learning System students, emphasized preparedness and resilience as conditions that support continuity in educational participation. Together, these local studies suggest that learning engagement in the Philippines is shaped by a combination of learner readiness, institutional support, and contextual realities such as access disparities and flexible learning implementation.

Academic resilience, the third major variable of the present study, is extensively described in the literature as the capacity of learners to persist, adapt, and recover when confronted with academic difficulties. Jang et al. (2022) argued that digital reading practices strengthen motivational and cognitive engagement, which in turn support resilience in literacy learning. Their study suggests that resilience grows when learners remain mentally invested in learning tasks despite challenges. Izadpanah (2022) also found that flipped teaching positively affects academic resilience, self-directed learning, and learner autonomy, implying that instructional models that encourage active participation can build stronger adaptive capacities. Sun and Liu (2023) demonstrated through structural equation modeling that academic resilience predicts academic well-being and educational attainment in online classes, while student engagement serves an important mediating role. Ge (2025) further explained that resilience contributes to online emotional engagement through self-regulated learning efficacy, self-control, and cognitive reappraisal. These findings indicate that resilience is closely tied to learners' internal regulation, confidence, and willingness to remain involved in learning even under stress.

The literature also shows that resilience in digital education has a specifically technological dimension often referred to as digital resilience. Kurniadi et al. (2022) found that digital resilience is associated with stronger academic skills, adaptability, and problem-solving in online learning contexts.

Zayed (2024) likewise reported that digital resilience and social support function as protective factors against digital stress and contribute positively to academic well-being. Arbulú Pérez Vargas et al. (2024) showed that digital skills and mobile self-efficacy mediate the influence of stress on academic engagement, suggesting that resilience in virtual environments is strengthened when learners have both technical competence and confidence. Chaudhuri et al. (2025) further found that digital literacy and critical thinking training enhance resilience among vulnerable adolescents, showing that resilience can be intentionally developed through competence-building interventions. In higher education, Ang et al. (2022) demonstrated that a digital resilience skills enhancement program improved resilience and metacognitive self-regulation among undergraduate students. Özbay (2026) added that educational resilience in crisis depends on adaptation and community response during emergency online learning. These studies collectively show that resilience in modern education is not simply emotional endurance, but an adaptive process supported by digital skills, self-efficacy, social support, and strategic coping.

The relationship between resilience and engagement is especially important in the present study. Wulandari and Khoirunnisa (2026) found that academic resilience is a determinant of student engagement, directly linking learners' adaptive capacities with their participation in academic work. Amoadu et al. (2025) similarly concluded that academic resilience and motivation significantly predict engagement among rural and urban high school students. Annisa et al. (2025) reported that resilience and self-regulation contribute significantly to academic achievement, implying that resilient learners remain focused and productive even under academic pressure. Sujiarto et al. (2022) found that social support, digital literacy, and self-efficacy positively affect academic resilience, further suggesting that resilience does not develop in isolation but through a network of personal and contextual resources. Huang (2022) showed that digital readiness influences e-learning satisfaction through psychological capital, reinforcing the importance of positive psychological resources in digital learning. Together, these studies imply that resilience and engagement are mutually reinforcing: engaged learners are more likely to develop resilience, and resilient learners are more likely to remain engaged.

Another important body of literature concerns future-readiness, sustainability, and long-term adaptability in digital education. Jallali et al. (2026) proposed a multidimensional framework in which AI integration, engagement, and digital resilience support sustainable learning in higher education. Valášková et al. (2025) examined digital readiness across the European Union and found major disparities in structural determinants, demonstrating that readiness is also a developmental and policy issue. Koten and Simarmata (2025) argued that integrating digital technology with character education supports the development of a resilient generation prepared for Industry 5.0. Dara et al. (2026) emphasized that adaptability and digital competence are thresholds for graduate work readiness, extending the value of readiness beyond academic settings into employment and lifelong learning. Naseer et al. (2025) found that project-based learning with industry collaboration enhances future readiness, collaboration, and adaptability. Orphanidou et al. (2024) further argued that sustainable education amidst digitalization should preserve cultural grounding while promoting innovation. These studies are relevant because they show that digital readiness, engagement, and resilience are not only immediate educational concerns but also long-term competencies connected to future academic and professional success.

Related Studies

Empirical studies further reinforce the relationships among digital readiness, learning engagement, and academic resilience across different contexts. Weng and Wirda (2025) found that online learning readiness significantly predicts engagement, satisfaction, and achievement in Indonesian higher education, establishing readiness as a strong antecedent of academic success. Nuwanthika and Thathsarani (2025) similarly confirmed that digital learning readiness influences both student engagement and academic performance in Sri Lanka, with motivation and perceived usefulness also playing important mediating roles. Alanoglu et al. (2025) found that online learning readiness and digital literacy influence self-directed online learning, showing that readiness enables learners to manage their own learning more effectively. El-Gazar et al. (2024) demonstrated that e-learning readiness enhances academic self-efficacy among nursing students, which in turn supports persistence and performance. These studies show a consistent pattern in which digital readiness supports more active engagement and stronger academic functioning.

Studies on engagement likewise show that students' involvement is shaped by technological design, pedagogical approach, and personal preparedness. Nurqamarani (2023) found that digital literacy and academic self-efficacy play important roles in creating student engagement in hybrid learning. Ayanwale et al. (2025) argued that meaningful engagement requires reimagining pedagogy, not simply shifting existing instruction to digital platforms. Mahdi and Dewi (2025) documented that interactive technology improves students' participation and motivation, while Deslis et al. (2025) highlighted how digital storytelling encourages collaborative and conceptual engagement. Getenet et al. (2024) found that preservice teachers' digital efficacy and literacy influence their online engagement, and Huda (2024) showed that accessibility and adaptability of platforms affect learners' satisfaction and participation. These results indicate that engagement is fostered when students feel capable, supported, and intellectually involved.

Empirical work on resilience continues to show that it is a strong predictor of persistence and positive academic outcomes. Sun and Liu (2023) found that academic resilience predicts well-being and educational attainment in online classes. Ge (2025) demonstrated that resilience indirectly predicts emotional engagement through self-regulated learning processes. Jang et al. (2022) showed that motivational and cognitive engagement in digital reading contributes to academic resilience, while Izadpanah (2022) reported that flipped instruction promotes resilience and autonomy. Ang et al. (2022) provided intervention-based evidence that resilience can be strengthened through a learner-centered digital program. Özbay (2026) also documented that educational resilience is essential in crisis-driven online learning. These findings confirm that resilience is both measurable and developable, making it a suitable variable for educational research and intervention design.

Philippine-based studies provide important local grounding for the present work. Almercz and Duping (2022) documented the challenges and responses of Philippine higher education institutions in sustaining academic resilience during disruption, highlighting flexible learning and innovative leadership as critical responses. Tabanao (2025) found that academic resilience supports the preparedness of Alternative Learning System students for tertiary education, which is relevant to cross-level continuity in the Philippine context. Timbol (2026) showed that sustaining blended learning in a Philippine institution requires faculty readiness, student support, and strategic leadership, thereby reinforcing the connection

among readiness, engagement, and resilience. Dayon et al. (2025), whose work is relevant to Philippine education contexts, found that online learning readiness predicts engagement in language education. These studies strengthen the local dimension of the review by showing that digital transformation in the Philippines involves both structural challenges and adaptive practices.

3. SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

This chapter presents the summary, findings, conclusions, and recommendations of the study. The research aimed to examine the level of digital readiness, learning engagement, and academic resilience among learners and to determine the relationships among these variables. The study also explored whether significant differences exist when respondents are grouped according to educational level and geographical location.

A descriptive-correlational research design using a quantitative approach was employed. Data were analyzed across key domains, including technical competence and digital literacy, access to digital infrastructure, online learning self-efficacy, adaptability to digital environments, behavioral engagement, emotional engagement, cognitive engagement, persistence in academic tasks, coping with academic challenges, self-confidence in learning, and recovery from academic setbacks. Statistical tools such as weighted mean, Pearson r correlation, and Analysis of Variance (ANOVA) were used to interpret the data.

Summary

The study assessed the level of digital readiness of learners in terms of technical competence, access to infrastructure, self-efficacy, and adaptability, as well as their level of learning engagement and academic resilience. Results revealed that learners generally demonstrated a high level of digital readiness, particularly in their ability to use digital tools, access learning platforms, and adapt to technological changes.

Similarly, learners exhibited a high level of learning engagement, as evidenced by their active participation, positive emotional involvement, and cognitive investment in academic tasks. In terms of academic resilience, learners showed strong persistence, effective coping strategies, confidence in learning, and the ability to recover from setbacks.

Correlation analysis revealed significant positive relationships among digital readiness, learning engagement, and academic resilience, indicating that these variables are interrelated. Furthermore, analysis of variance showed that educational level and geographical location influenced **certain variables**, particularly digital readiness and academic resilience.

Table 22
Summary Results

Major Area	Key Findings (Quantitative)	Overall Result	Interpretation
Digital Readiness	Mean range: 3.93–4.16 (Agree)	High	Learners are digitally prepared and adaptable
Learning Engagement	Mean range: 4.04–4.06 (Agree)	High	Learners are actively engaged

Academic Resilience	Mean range: 3.99–4.17 (Agree)	High	Learners are resilient and persistent
Digital Readiness vs Engagement	$r = 0.68, p = 0.001$	Significant	Moderate positive relationship
Digital Readiness vs Resilience	$r = 0.65, p = 0.002$	Significant	Moderate positive relationship
Engagement vs Resilience	$r = 0.72, p = 0.000$	Significant	Strong positive relationship
Educational Level Differences	Some $p < 0.05$	Partially Significant	Differences exist in readiness and resilience
Geographical Differences	Some $p < 0.05$	Partially Significant	Location affects readiness and engagement

Findings

The findings revealed that learners generally exhibit **high levels of digital readiness**, particularly in technical competence, digital literacy, and online learning self-efficacy. Learners are capable of using digital tools, accessing online platforms, and adapting to different technological environments. However, minor challenges were observed in time management, technical troubleshooting, and sustaining motivation during digital learning.

In terms of **learning engagement**, learners demonstrated high behavioral, emotional, and cognitive involvement. They actively participate in learning activities, show interest and motivation, and engage in deeper understanding of lessons. However, some learners showed slightly lower engagement in discussion participation and social connectedness.

Regarding **academic resilience**, learners showed strong persistence, positive coping strategies, and confidence in their academic abilities. They are capable of recovering from setbacks and maintaining motivation despite challenges. Nonetheless, some learners experience difficulty in stress management and immediate recovery from academic failures.

Correlation analysis revealed **significant relationships among all variables**, indicating that learners with higher digital readiness tend to be more engaged and resilient. The strongest relationship was found between learning engagement and academic resilience ($r = 0.72$), suggesting that engagement plays a critical role in developing resilience.

The ANOVA results indicated that **educational level significantly affects digital readiness and academic resilience**, while learning engagement remains consistent across levels. Additionally, **geographical location influences digital readiness and engagement**, but not academic resilience, suggesting that environmental factors impact access and participation but not necessarily coping ability.

Conclusions

Based on the findings, it can be concluded that learners possess **adequate to high levels of digital readiness, learning engagement, and academic resilience**, enabling them to function effectively in

digital and blended learning environments.

Digital readiness plays a significant role in enhancing both engagement and resilience, as learners who are more competent and confident in using technology are better able to participate actively and cope with academic challenges. Learning engagement, in particular, has a strong influence on academic resilience, indicating that learners who are actively involved in their studies are more likely to persist and succeed despite difficulties.

While differences exist across educational level and geographical location, these variations mainly affect access to resources and readiness rather than learners' intrinsic resilience. Overall, the study highlights the importance of integrating digital competence, engagement strategies, and resilience-building interventions in educational systems.

Recommendations

1. **Enhancement of Digital Literacy Programs.** Schools should provide continuous training to improve learners' technical skills, digital safety awareness, and problem-solving abilities in using technology.
2. **Improvement of Digital Infrastructure.** Institutions should ensure reliable internet connectivity, access to digital devices, and availability of technical support services to minimize learning disruptions.
3. **Promotion of Active Learning Strategies.** Teachers should implement interactive and student-centered approaches such as collaborative activities, discussions, and problem-based learning to enhance engagement.
4. **Strengthening Time Management and Self-Regulation Skills.** Learners should be guided through workshops or structured programs that develop time management, independent learning, and self-discipline.
5. **Support for Emotional and Psychological Well-being.** Schools should provide counseling services, stress management programs, and supportive learning environments to strengthen learners' coping abilities.
6. **Context-Specific Interventions.** Educational policies should consider differences in educational level and geographical location when designing programs to ensure equitable access and support.
7. **Future Research.** Future studies may explore additional variables such as socio-economic status, parental support, and teaching strategies, as well as conduct longitudinal research to examine long-term effects of digital readiness on academic outcomes.

4. OUTPUT OF THE STUDY

DIGITAL LEARNING ENHANCEMENT IMPLEMENTATION PLAN

RATIONALE

The enhancement of **Digital Readiness, Learning Engagement, and Academic Resilience** among learners has become essential in modern education, particularly in the context of technology-driven and blended learning environments. Digital readiness equips learners with the necessary technical competence, access to digital infrastructure, self-efficacy, and adaptability required to function effectively in online and hybrid learning systems. At the same time, learning engagement and academic resilience ensure that learners remain active, motivated, and capable of overcoming academic challenges despite the complexities of digital education.

The results of the study revealed that learners generally demonstrated a high level of digital readiness, engagement, and resilience. However, specific challenges were identified, including difficulties in time management, limited technical support, reduced motivation in online settings, and stress in coping with academic demands. These issues highlight the need for a structured and comprehensive intervention plan to strengthen learners' competencies and address gaps in digital learning experiences.

Thus, a **Digital Learning Enhancement Implementation Plan** is proposed to improve learners' technical skills, engagement levels, and resilience capacities. This plan aims to provide targeted strategies, institutional support, and sustainable practices that will enhance the overall quality of digital learning and academic performance.

OBJECTIVES

This plan aims to:

1. Enhance learners' digital readiness, including technical competence, digital literacy, and adaptability to technology-based learning environments.
2. Improve access to digital infrastructure, platforms, and technical support systems.
3. Strengthen learners' behavioral, emotional, and cognitive engagement in both online and blended learning environments.
4. Develop learners' academic resilience, including persistence, coping strategies, self-confidence, and recovery from setbacks.
5. Promote effective time management, self-regulation, and independent learning skills among learners.
6. Provide continuous training and support for both learners and educators in digital learning practices.
7. Address challenges and barriers related to digital learning to ensure effective and sustainable implementation.

SCHEME OF IMPLEMENTATION

Table 23
Digital Learning Enhancement Implementation Plan

Area of Concern	Objectives	Strategies	Budget (PHP)	Budget Source	Time Frame	Implementors	Evaluative Measures	Actual Accompl.	Remarks
Digital Literacy and Technical Skills	Enhance learners' digital competence and literacy	Conduct ICT training, digital literacy workshops, and hands-on tutorials	50,000	School ICT Fund / DepEd Support	One year	ICT Coordinators, Teachers	Pre-test and post-test results, skill assessment scores	NA	NA
Access to Digital Infrastructure	Improve access to devices and internet connectivity	Provide gadgets, improve Wi-Fi access, establish learning hubs	100,000	LGU / School Fund / Private Partners	One year	School Admin, LGU Partners	Number of learners with access, connectivity reports	NA	NA
Online Learning Self-Efficacy	Strengthen learners' confidence in digital learning	Conduct orientation programs, mentoring, and guided online learning sessions	40,000	School Fund	One year	Teachers, Guidance Counselors	Self-efficacy survey results, participation rates	NA	NA
Adaptability to Digital Learning	Improve learners' ability to adjust to digital environment	Introduce flexible learning systems and platform	30,000	School Fund	One year	Teachers, ICT Staff	Adaptability assessment, feedback surveys	NA	NA

	ents	training sessions							
Behavioral Engagement	Increase participation in academic activities	Use interactive teaching strategies, gamification, and collaborative tasks	35,000	School Fund	One year	Teachers	Attendance, task completion rates	NA	NA
Emotional Engagement	Enhance motivation and positive learning attitudes	Conduct motivational programs, peer support groups, and recognition systems	25,000	School Fund	One year	Teachers, Counselors	Motivation survey, student feedback	NA	NA
Cognitive Engagement	Promote higher-order thinking and deep learning	Implement problem-based learning, critical thinking activities, and research tasks	30,000	School Fund	One year	Teachers	Academic performance, assessment results	NA	NA
Academic Resilience (Persistence)	Strengthen learners' determination and perseverance	Provide goal-setting workshops and academic coaching	20,000	School Fund	One year	Teachers, Mentors	Task completion rates, persistence indicators	NA	NA
Coping with Academic	Improve stress management and	Conduct stress management	25,000	School Fund /	One year	Guidance Counselors	Stress assessment, coping skill	NA	NA

Challenges	problem-solving skills	seminars and counseling sessions		External Partners			evaluation		
Self-Confidence in Learning	Build learners' confidence in academic abilities	Implement mentoring programs and positive reinforcement strategies	20,000	School Fund	One year	Teachers	Confidence surveys, academic outcomes	NA	NA
Recovery from Academic Setbacks	Enhance learners' ability to recover from failures	Provide remedial programs, feedback sessions, and reflection activities	25,000	School Fund	One year	Teachers	Improvement rates, recovery indicators	NA	NA

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