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The Impact of Digital Learning Competence on the Academic Performance of the Junior High School Students in Liloy I District Schools Division of Zamboanga Del Norte

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ABSTRACT: This study aimed to assess the digital learning competence of junior high school students in Liloy District I, Schools Division of Zamboanga del Norte, and determine its influence on their academic performance during School Year 2025–2026. A descriptive-correlational research design was employed, involving 345 respondents. The data were analyzed using weighted mean, standard deviation, and Spearman Rank-Order Correlation Coefficient (Spearman's rho), with JAMOVI as the statistical software.Findings revealed that the respondents demonstrated a high level of digital learning competence, with peer management emerging as their strongest area and digital reading as their weakest. This suggests that while students possess strong collaborative and technology-related skills, they still need further support in developing critical engagement, analysis, and evaluation of digital texts. Other dimensions, including technology use, cognitive processing, time management, and motivation, were also rated positively. In terms of academic performance, the respondents achieved an Outstanding level (AWV = 4.73), with 73.91% obtaining grades ranging from 90 to 100. However, the results showed that digital learning competence and academic performance were not significantly related. Based on these findings, the study recommends that DepEd officials develop targeted instructional resources, strengthen teacher training on higher-order digital literacy, and implement equity-focused programs for low-income learners. School heads and teachers may design collaborative learning activities that build on students' strong peer management skills while enhancing critical digital reading and evaluation through a progressive grade-level curriculum. Students, meanwhile, may use the findings as a basis for reflecting on the importance of digital learning in their academic success.

KEYWORDS: digital learning competencies, academic performance, JHS students, Philippines

INTRODUCTION

Digital learning competence has become a key requirement in 21st-century education as technology increasingly shapes how students access information, communicate, and learn inside and outside the classroom. The integration of digital tools in teaching and learning environments supports academic growth and prepares learners for lifelong learning in a rapidly changing society. Kallas and Pedaste (2022) emphasized that digital learning competence involves the appropriate combination of skills, knowledge, and attitudes needed to use technology effectively for learning tasks. In the Philippine context, Espinosa et al. (2025) noted that when teachers and learners especially in rural areas have adequate digital tools and support, digital skills development becomes more feasible and can help strengthen learning outcomes.

Empirical studies also suggest that digital competence can contribute to stronger academic performance by improving how students engage with learning resources and complete academic tasks. Mehrvarz et al. (2021) found that digital competence supports academic achievement by enhancing students' use of ICT tools and encouraging digital informal learning, which expands learning beyond formal classroom instruction. Similarly, Rodafinos et al. (2024) reported that students with higher digital competence, particularly when paired with acceptance of technology, tend to demonstrate better academic outcomes. These findings indicate that digital learning competence is not only about technical skills but also about the ability to apply digital tools strategically to support learning, performance, and achievement.

In addition, the shift toward curriculum reforms and digitally mediated instruction has strengthened the need to embed digital literacy into core learning processes. Gac-Ang et al. (2025) reported that teachers viewed the MATATAG curriculum as supportive of student learning growth, especially in foundational skills such as reading, writing, collaboration, and self-confidence, through the integration of digital learning competencies. Arifin et al. (2024) likewise argued that digital literacy is a foundational competency for both students and teachers, enabling more interactive,

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collaborative, and contextualized learning experiences. Scheel et al. (2022) further explained that digital competences, together with self-organization and independent learning abilities, influence students' acceptance of digital learning an essential factor for effective implementation and sustained engagement in digital education.

Despite these promising findings, challenges remain that may limit the development and impact of digital learning competence, particularly in resource-constrained contexts. Samane-Cutipa et al. (2022) highlighted that economic limitations, weak internet connectivity, and insufficient learning technologies can hinder competence development and contribute to digital illiteracy. Similarly, Mangarin and Climaco (2024) observed that Filipino learners, especially in rural settings, often demonstrate lower levels of digital literacy, which may affect how well they benefit from technology-enhanced learning. These conditions suggest an important research gap: while many studies examine digital learning competence and academic performance, most focus on higher education populations or generalized settings, leaving limited evidence on junior high school students in specific rural districts. Thus, this study addresses this gap by assessing the digital learning competence of junior high school students in Liloy I District, Schools Division of Zamboanga del Norte, and examining its influence on academic performance, with the aim of informing context-appropriate interventions for curriculum support, teacher development, and equitable access to digital learning opportunities.

LITERATURE REVIEW

Digital Learning Competence

Recent research suggests that students' digital learning competence including effective technology use, self-regulated learning strategies (time management, cognitive processing, motivation), and proficiency in navigating digital content plays a significant role in academic performance. Using data from over 17,000 undergraduates, Cabero-Almenara et al. (2022) found that higher levels of digital competence are associated with better academic outcomes. Moreover, Zakir et al. (2025) demonstrated that digital literacy enhances digital competence and self-efficacy, which in tum positively influences academic performance, indicating that digital competence and associated self-regulatory behaviors mediate the pathway from technology use to achievement. Meanwhile, Barrot (2023) highlights the strong social orientation of Filipino learners and its positive role in collaborative online learning environments.

Digital learning competence has repeatedly been identified as a significant predictor of academic success among higher-education students. Digital Competence of Higher Education Students as a Predictor of Academic Success by Cabero-Almenara et al. (2022) analyzed data from over 17,000 students and found that those who had never repeated a year demonstrated significantly higher levels of digital competence compared to their peers who had repeated a year. Similarly, The Role of Digital Competences in the Academic Success of Digital Natives by Surducan and Valadas (2025) found that increased digital proficiency particularly frequent and effective technology use was associated with higher levels of academic success among university students, as reflected in course completion rates and lower failure incidence. These studies collectively suggest that digital competence, encompassing information-handling, communication, content creation, and effective tool usage, substantially contributes to better academic outcomes.

Technology Use

Beyond mere access to technology, the quality of digital competence including self-regulated learning skills and digital literacy also influences how effectively students manage their learning in digital environments. In Digital Literacy and Academic Performance: The Mediating Roles of Digital Informal Learning, Self-Efficacy and Students' Digital Competence, Zakir et al. (2025) demonstrated that digital literacy improvements lead to enhanced digital competence and self-efficacy, which in turn positively influence academic performance, indicating mediation effects rather than a direct correlation. Moreover, Exploring the Impact of Digital Competence and Technology Acceptance on Academic Performance in Physical Education and Sports Science Students by Rodafinos and Barkoukis (2024) found that while digital competence alone did not directly predict academic performance, when combined with positive attitudes and intentions to use technology (i.e., technology acceptance), students showed higher academic achievement.

Barrot (2023), a study on using ChatGPT for second language writing: pitfalls and potentials, show that students are "digital natives," as they are confident in using technology to complete tasks or browse information in ICT. While, Magno & Lizada (2023), similarly stated in the study on teacher job performance through achievement goals, instructional strategies, and student engagement in the Philippine setting that students are demonstrating strong awareness of using technology to retrieve information, complete tasks, and read on a digital platform.

Cognitive Processing

Digital technologies have been shown to influence cognitive processing in ways that enhance learning, particularly by engaging students in deeper mental activities such as critical thinking, comprehension, and information integration. Di Giacomo et al. (2017) found that digital experience during childhood and early education can significantly shape cognitive development: children exposed to interactive digital tasks demonstrated improved performance on cognitive tests, suggesting that digital stimulation supports cognitive processing and learning readiness. Similarly, a recent study by Limniou et al. (2021) conducted during a shift to remote online learning showed that students' "digital capabilities" (including their ability to navigate and process digital information independently) were positively associated with academic performance, underlining how individual cognitive processing skills mediate the effect of digital competence on learning outcomes.

Digital reading skills

Digital reading skills defined as the ability to read, interpret, and comprehend texts presented in digital formats have been shown to significantly influence students' reading comprehension and learning outcomes. For instance, Dinda et al. (2025) demonstrated in a quasi-experimental study that using a digital-reading platform improved eleventh-grade students' reading comprehension compared to traditional methods, suggesting that frequent and structured practice with digital texts can strengthen comprehension skills and reading performance. Similarly, in a study with pre-service

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teachers, Zhang (2025) found that higher levels of digital literacy (which includes digital reading skills) were positively correlated with improved reading comprehension scores, indicating that being adept at navigating and critically evaluating digital texts supports academic reading success.

Time Management

Research consistently shows that time management the ability to plan, schedule, and allocate one's time effectively for academic tasks plays a significant role in academic success. For instance, Lourenço and Paiva (2024) found that among primary school students, effective planning of both short-term and long-term time management significantly predicted higher academic performance, highlighting that well-structured time allocation supports better learning outcomes. Similarly, Wolters and Brady (2021) argued from a self-regulated learning perspective that time management is not just a scheduling skill but a strategic process embedded in phases of forethought, performance, and reflection essential for engagement, reduced procrastination, and improved grades. These findings confirm that in digital or traditional learning environments, students who manage their time effectively tend to perform better academically. Additionally, the challenges and opportunities for educators and students in the new normal by Torres & Ortega-Dela Cruz (2022) identify that effective time management is a well-documented predictor of academic success in digital learning, directly impacting the ability to engage deeply with content and meet academic deadlines.

Peer Management

Peer relationships and collaborative peer-management strategies have been repeatedly shown to influence academic performance through social support, engagement, and motivation. For example, Liu et al. (2024) found that among junior high school students, positive peer relationships such as closeness, number of supportive friends, and quality of friendships were significantly associated with higher academic achievement; the study further demonstrated that this effect is mediated by increased learning motivation and engagement. Similarly, Roy and Swargiary (2024) used a quasi-experimental design to show that peer teaching where students teach or tutor their classmates led to significant improvements in academic performance among high school students, along with gains in engagement and social-emotional well-being. Together, these studies suggest that when peer interactions are structured and positive whether through peer teaching or supportive peer relationships peer management becomes a powerful facilitator of academic success.

Furthermore, Barrot (2023) shows that such social-digital competencies are crucial, as effective collaboration in virtual spaces, characterized by clear communication, role definition, and resource sharing, is strongly linked to enhanced engagement and academic performance. While, Alvarez (2024) noting that while Filipino students excel in harmonious social interaction, facilitating critical, constructive debate in online collaborative tasks requires targeted pedagogical support.

Will Management

Research indicates that students' ability to exercise will management including volitional control, persistence, and effort regulation significantly influences academic success. For example, Lourenço et al., (2025) demonstrated among primary-school learners that those who regularly used volitional control strategies (e.g., self-regulation of attention, effort, and study behaviors) achieved substantially higher academic outcomes compared to peers who did not employ such strategies. In a similar vein, Ragusa et al. (2023) found that academic self-regulation particularly the capacity to manage effort, resist procrastination, and sustain study motivation (i.e. will management) was inversely associated with procrastination and academic stress, and positively associated with better academic performance and resilience.

Academic Performance

Research shows that effective self-regulated learning (SRL) strategies including goal-setting, planning, monitoring, digital learning competence, and effort regulation are strongly associated with improved academic performance. For instance, a systematic review by Waheed (2025) concluded that SRL strategies form the foundation for academic success, demonstrating that students who actively manage their digital learning processes consistently achieve better grades. Similarly, a meta-analysis by Theobald (2021) found that SRL training programs lead to a moderate but statistically significant improvement in academic performance among university students.

According to Deped.gov.ph (2015), student's grades are based on DepEd Order No.8 s. 2015, which measures the students' ability, skills, and knowledge in various areas that would also be assessed to whether the students' performance is enough to move to the next grade level. Academic performance is influenced by a constellation of factors, such as personal, social, digital, and institutional variables. For example, a recent comprehensive review by Suleiman et al. (2024) identified that study hours, prior academic scores, and engagement in extracurricular activities significantly predict student performance. Another study by Mensah (2024) emphasized that support systems, access to internet resources, and personal and psychological factors also impact academic outcomes, indicating that academic performance is multifaceted and shaped by external as well as internal conditions. Altogether, these insights suggest that while digital learning competence matter, academic performance also depends on the broader educational environment, resource availability, and support systems surrounding the student.

Conceptual Framework

The conceptual framework of the study is presented in Figure 1. It identifies digital learning competence as the independent variable, measured across indicators: technology use, cognitive processing, digital reading skill, time management, peer management, and will management. These dimensions are assessed through 41 questionnaire items intended to determine the respondents' level of digital learning competence. The dependent variable is students' academic performance, which is measured using the DepEd grading system.

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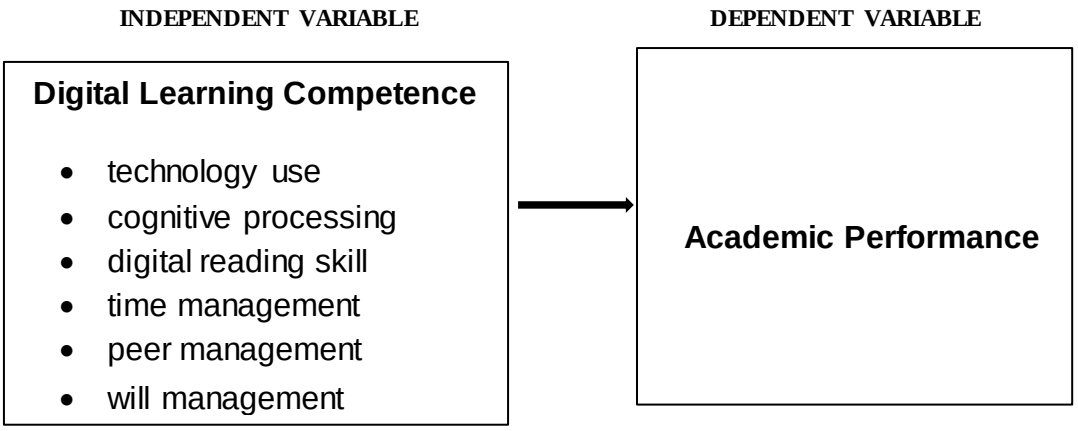


Figure 1. Conceptual Framework of the Study

Statement of the Problem

This study aimed to assess the digital learning competence and its influence on the academic performance of junior high school students in Liloy I District, Schools Division of Zamboanga del Norte, during the School Year 2025–2026.

Specifically, it sought to answer the following questions:

1. What is the respondents' perceived level of digital learning competence in terms of:
   - 1.1. technology use;
   - 1.2. cognitive processing;
   - 1.3. digital reading skill;
   - 1.4. time management;
   - 1.5. peer management; and
   - 1.6. will management?
2. What is the respondents' level of academic performance?
3. Is there a significant relationship between the perceived level of digital learning competence and level of academic performance?

Hypotheses

1. There is no significant relationship between the perceived level of digital learning competence and level of academic performance.

MATERIALS AND METHODS

Research Design

This study employed a quantitative survey using a descriptive-correlational design to examine the digital learning competence of junior high school students and its relationship with their academic performance. The descriptive component was used to determine the level of students' digital learning competence and academic performance, while the correlational component was used to test the association between these variables without manipulating the study conditions. The survey method was appropriate because it allowed the researcher to collect standardized self-reported data from a large group of respondents efficiently through a structured questionnaire.

Respondents and Sampling Procedure

The respondents of the study were 345 junior high school students enrolled in Grades 7 to 10 in the four public secondary schools of Liloy I District during School Year 2025–2026. The total population was 3,339 students. The sample size was determined using the Raosoft sample size calculator, and the respondents were selected through stratified sampling to ensure proportional representation across schools and grade levels. This sampling procedure was employed to reduce sampling bias and to ensure that all subgroups in the population were adequately represented.

Data Sources and Research Instrument

The study used two sources of data. The first source was a structured questionnaire administered to the student respondents to measure their digital learning competence. The second source was the students' academic performance records, which were obtained from their respective class advisers.

The questionnaire consisted of three parts. Part I measured digital learning competence using an instrument adapted from Yang et al. (2021). The instrument covered six dimensions: technology use, cognitive processing, digital reading skill, time management, peer management, and will management. Part II reflected the students' academic performance based on their actual grades taken from school records.

Ethical Considerations

Prior to data collection, the study secured approval from the Research and Ethics Committee of Andres Bonifacio College, Inc. Permission to conduct the study was also obtained from the relevant school authorities and the Schools Division Office. The study observed the ethical principles of voluntary participation, informed consent, confidentiality, and anonymity. The respondents were informed of the purpose of the study, the nature of their

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participation, and their right to withdraw at any time without penalty. To protect their identity, no personally identifying information was disclosed in the reporting of the findings, and all data collected were used strictly for research purposes.

Data Gathering Procedure

The researcher followed the required institutional procedures before conducting the study. A formal request letter to administer the study was first submitted by the adviser to the Dean of the Graduate School of Andres Bonifacio College, Inc., Dipolog City. Upon approval, the endorsement letter was forwarded to the Schools Division Office through the District Supervisor. The request was then submitted to the DepEd Research and Ethics Committee for evaluation and approval. After ethics clearance was granted, the researcher coordinated with the principals of the participating schools to secure permission for questionnaire administration and access to students' academic records.

After all approvals had been obtained, the researcher personally administered the questionnaire to the selected respondents in their respective schools. Before distribution, the researcher explained the purpose of the study and provided instructions for completing the instrument. The completed questionnaires were retrieved immediately after administration. Academic performance data were subsequently obtained from the students' class advisers. All responses were then checked, coded, tabulated, and encoded for statistical analysis.

Statistical Analysis

The data were analyzed using Microsoft Excel Data Analysis ToolPak and JAMOVI statistical software. Both descriptive and inferential statistics were used to address the objectives of the study.

Weighted mean was used to determine the level of digital learning competence and academic performance, while standard deviation was computed to determine the variability of responses. To determine the relationship between digital learning competence and academic performance, the Spearman Rank-Order Correlation Coefficient (Spearman's rho) was used. Correlation coefficients were interpreted as follows: ±0.50 to ±1.00 = high correlation, ±0.30 to ±0.49 = moderate correlation, ±0.10 to ±0.29 = low correlation, ±0.01 to ±0.09 = negligible correlation, and 0.00 = no correlation. All statistical tests were conducted at the 0.05 level of significance.

RESULTS

Table 1: Perceived Level of Digital Learning Competence in Terms of Technology Use

A. Technology Use	AWV	SD	Description	Interpretation
1. I can use the map to plan the travel routes before going to a strange place.	3.86	1.03	Agree	High
2. I can use the road sign to find the destination in a strange place.	4.04	0.86	Agree	High
3. I can check the instructions to operate correctly for unfamiliar home appliances.	4.46	0.74	Strongly Agree	Very High
4. I can use the digital tools to create multimedia works (such as pictures, animation, video, etc.)	4.13	0.93	Agree	High
5. I can identify the key points of the video or audio information	3.73	0.85	Agree	High
6. I can complete the learning tasks assigned by the teacher by using various resources comprehensively, such as teaching materials, supplementary materials, and network resources	4.25	0.83	Strongly Agree	Very High
7. I can choose the appropriate means of communication to share my own multimedia works with my classmates, such as through QQ, email, U-disk, etc.	3.61	0.99	Agree	High
8. I will evaluate, modify, and improve my own multimedia works.	3.87	0.92	Agree	High
9. I will compare the authenticity and reliability of the information from newspaper, broadcast, network, etc.	3.73	1.05	Agree	High
Overall	**3.96**	**0.83**	**Agree**	**High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 1 reveals that the junior high school students in Liloy I District had a high level of digital learning competence in terms of technology use (AWV = 3.96). The highest-rated indicators were their ability to follow digital instructions for practical tasks (AWV = 4.46) and use various resources to complete teacher-assigned tasks (AWV = 4.25). These findings show that students are generally confident in using digital tools for

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academic and practical purposes.This suggests that the respondents possess a strong foundation in basic and functional technology use. However, the relatively lower ratings in comparing the reliability of information (AWV = 3.73) and evaluating and improving their own digital outputs (AWV = 3.87) indicate that their higher-order digital skills are less developed. Thus, while students are capable of accessing and using technology, they may still need guidance in critical evaluation, digital creation, and responsible use of information. The findings imply that educators should not only sustain students' operational technology skills but also strengthen instruction in critical and creative digital literacy. This is important because higher-order digital competencies are essential for academic success and responsible digital citizenship. The present result supports earlier studies showing that students are generally confident in using technology for information access and task completion, but need further support in developing critical evaluation and deeper digital engagement (Barrot, 2023; Magno & Lizada, 2023; Alvarez, 2024; Torres & Ortega-Dela Cruz, 2022).

Table 2: Perceived Level of Digital Learning Competence in Terms of Cognitive Processing

B. Cognitive Processing	AWV	SD	Description	Interpretation
1. I can find the main points that need to be remembered from the teacher's lecture or presentation.	4.14	0.83	Agree	High
2. I can find important information from the class discussion.	4.33	0.83	Strongly Agree	Very High
3. I will combine the teacher's lecture, textbook, and class discussion to better understand the learning content.	4.27	0.82	Strongly Agree	Very High
4. Iwill link the new learning content with the knowledge that has already been mastered.	3.90	0.90	Agree	High
5. I will list the important points before the exam, and try my best to remember them.	4.34	0.95	Strongly Agree	Very High
6. I often review the contents of the lesson after class.	3.71	1.04	Agree	High
7. I will often browse the textbooks and notes, and find out the most important content.	3.90	0.97	Agree	High
Overall	**4.09**	**0.74**	**Agree**	**High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 2 reveals that the junior high school students in Liloy I District had a high level of digital learning competence in terms of cognitive processing (AWV = 4.09). The highest-rated indicators were listing points for memorization before exams (AWV = 4.34) and extracting important points from discussions (AWV = 4.33), showing that students are strong in identifying key information and preparing for academic tasks. These findings indicate that the respondents are proficient in using digital and conventional strategies for organizing information and supporting academic performance. However, the relatively lower ratings in reviewing lesson content after class (AWV = 3.71) and integrating new knowledge with prior understanding (AWV = 3.90) suggest that reflective and metacognitive aspects of learning are less developed. This means that while students perform well in surface-level processing and exam preparation, they still need to strengthen deeper cognitive skills such as synthesis, reflection, and self-regulated learning. The findings imply that teachers should build on students' existing strengths in information organization and study preparation by integrating activities that promote deeper understanding and reflective learning through digital tools. This is important to ensure that digital learning supports not only immediate academic tasks but also sustained and meaningful learning. The result is supported by previous studies showing that students are generally effective in technology-based information processing and task completion, yet require further scaffolding in higher-order cognitive and self-regulated learning skills (Magno & Lizada, 2023; Barrot, 2023; Alimen et al., 2023).

Table 3: Perceived Level of Digital Learning Competence in Terms of Digital Reading

C. Digital Reading	AWV	SD	Description	Interpretation
1. I will summarize the points and the structure of the article by drawing pictures or tables after reading.	3.56	1.01	Agree	High
2. I get used to taking notes when I read books, newspaper and magazines.	3.61	1.06	Agree	High
3. When I read the newspaper and magazine, I can transfer the title of the article into questions, to guide my reading.	3.56	0.99	Agree	High

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4. When I learn a new article, I will read the after-class exercises first, and then I read the article.	3.50	1.03	Agree	High
5. After reading the text, I will try to answer the after-class exercises.	3.80	0.97	Agree	High
6. I will regularly review the learning materials that I've seen before after reading.	3.90	0.95	Agree	High
7. When I read the article, I can find out the keywords, details, and the main purpose of it.	3.96	0.94	Agree	High
Overall	**3.70**	**0.77**	**Agree**	**High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 3 reveals that the junior high school students in Liloy I District had a high level of digital learning competence in terms of digital reading **(**AWV = 3.70**).** The highest-rated indicators were locating key textual elements such as keywords, details, and main ideas **(**AWV = 3.96**) and** reviewing materials after reading **(**AWV = 3.90**),** indicating that students are generally capable of identifying important information in digital texts. These findings suggest that the respondents are proficient in basic digital comprehension and information retrieval. However, the relatively lower ratings in summarizing content using pictures or tables **(**AWV = 3.56**) and** using pre-reading strategies such as turning titles into guiding questions **(**AWV = 3.56**)** indicate that more active and strategic reading skills are less developed. This means that while students can access and understand digital texts, they may be less consistent in applying deeper reading strategies that support critical thinking, synthesis, and retention. The findings imply that teachers should strengthen instruction in strategic digital reading by incorporating activities that promote questioning, summarizing, organizing, and critically engaging with digital texts. Enhancing these skills is important to move students beyond simple information location toward deeper and more meaningful learning. This result is consistent with previous studies showing that students are often competent in basic online reading and navigation but need further support in metacognitive and strategic literacy practices essential for academic success in digital environments (Barrot, 2023; Alvarez, 2024; Torres & Ortega-Dela Cruz, 2022).

Table 4: Perceived Level of Digital Learning Competence in Terms of Peer Management

D. Peer Management	AWV	SD	Description	Interpretation
1. I can put forward my opinion to my classmates in the group learning.	4.08	0.97	Agree	High
2. I can actively coordinate to reach a consensus when a dispute arises in the group discussion.	3.94	0.91	Agree	High
3. I can make clear my role and responsibilities when I am in group activities.	4.23	0.86	Strongly Agree	Very High
4. I can listen to my classmates in the group learning.	4.59	0.67	Strongly Agree	Very High
5. I can always have some ways to make my classmates talk freely in group learning.	4.38	0.81	Strongly Agree	Very High
6. I will share the information I have collected with my classmates during study sessions.	4.33	0.85	Strongly Agree	Very High
Overall	**4.26**	**0.77**	**Strongly Agree**	**Very High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 4 reveals that the junior high school students in Liloy I District had a **very** high level of digital learning competence in terms of peer management **(**AWV = 4.26**),** making it the strongest among the measured domains. The highest-rated indicators were listening to classmates during group learning **(**AWV = 4.59**)** and sharing collected information with peers **(**AWV = 4.33**),** showing that students possess strong collaborative and interpersonal skills in digital learning situations. These findings indicate that the respondents are highly capable of working with others, communicating, and participating in cooperative learning activities. However, the relatively lower rating in coordinating to reach consensus during disagreements **(**AWV = 3.94**)** suggests that conflict management and the ability to reconcile differing ideas in digital settings may still need further development. This means that while students are strong in basic collaboration, more complex aspects of peer interaction, such as negotiation and constructive discussion, require additional support. The findings imply that teachers may capitalize on students' strong peer management skills by designing more collaborative digital activities that also develop consensus-building, problem-solving, and critical discussion skills. Strengthening these aspects can help create a more interactive and productive digital learning environment. This result is supported by previous studies showing that collaboration, communication, and resource sharing in virtual settings contribute positively to student engagement and academic performance, although guided support is still needed to improve constructive debate and conflict resolution in online learning (Barrot, 2023; Alvarez, 2024).

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Table 5: Perceived Level of Digital Learning Competence in Terms of Time Management

E. Time Management	AWV	SD	Description	Interpretation
1. I will set a deadline for my learning task.	4.08	1.02	Agree	High
2. I will check the completeness of the task in contrast to the plan when I finish the task.	4.17	0.84	Agree	High
3. I have a plan for the learning tasks that I have to finish every week.	3.92	1.00	Agree	High
4. I have both short-term and long-term plans for my own study.	4.06	0.97	Agree	High
5. I will determine the sequence of tasks based on the importance and urgency of the task when drafting the task plan.	4.08	0.94	Agree	High
6. I can finish the learning task arranged by the teacher on time.	3.92	0.93	Agree	High
Overall	**4.04**	**0.79**	**Agree**	**High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 5 reveals that the junior high school students in Liloy I District had a high level of digital learning competence in terms of time management (AWV = 4.04). The highest-rated indicators were checking task completeness against plans (AWV = 4.17) and setting deadlines (AWV = 4.08), indicating that students are generally aware of the importance of organizing and monitoring their academic tasks. These findings suggest that the respondents possess good planning and prioritization skills in digital learning contexts. However, the relatively lower ratings in consistent weekly planning (AWV = 3.92) and completing teacher-assigned tasks on time (AWV = 3.92) point to a gap between planning and actual task execution. This means that while students understand how to manage their time, sustaining these practices consistently may still be challenging. The findings imply that teachers and school administrators should strengthen students' self-regulation and routine-building skills by providing structured schedules, reminders, and digital planning tools. Such support may help students translate their planning abilities into consistent task completion and improved academic performance. This result is consistent with previous studies showing that although students recognize the value of time management in online and blended learning, they often need guidance to maintain discipline, avoid distractions, and meet deadlines effectively in digital environments (Barrot, 2023; Alvarez, 2024; Torres & Ortega-Dela Cruz, 2022).

Table 6: Perceived Level of Digital Learning Competence in Terms of Will Management

F. Will Management	AWV	SD	Description	Interpretation
1. I think that as long as you spare no effort, I can acquire the knowledge.	3.43	1.11	Agree	High
2. I think that as long as the method is appropriate, I can acquire the knowledge.	4.18	0.92	Agree	High
3. As for me, achieving excellent scores makes me feel happiest.	4.67	0.74	Strongly Agree	Very High
4. I'm interested in the learning content of the school.	4.14	0.92	Agree	High
5. I believe that I can get a good result in any course.	3.65	0.96	Agree	High
6. I can recognize my own advantages and disadvantages.	4.35	0.79	Strongly Agree	Very High
Overall	**4.07**	**0.74**	**Agree**	**High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 6 shows that the junior high school students in Liloy I District had a high level of digital learning competence in terms of will management **(**AWV = 4.07**).** The highest-rated indicators were feeling happy when obtaining excellent scores **(**AWV = 4.67**)** and recognizing one's own strengths and weaknesses **(**AWV = 4.35**),** indicating that students are highly motivated by achievement and possess good self-awareness. These findings suggest that the respondents have a strong desire to succeed and are aware of their personal capabilities. However, the relatively lower rating in believing that effort alone ensures learning **(**AWV = 3.43**)** indicates that students may place more value on outcomes than on persistence and effort. This implies that while they are motivated to perform well, their belief in the role of sustained effort in achieving learning may be less developed. The findings imply that teachers should strengthen students' motivational self-regulation by promoting a growth mindset**,** emphasizing that learning improves through effort, persistence, and strategy, not only through grades or outcomes. This is particularly important in digital learning, where students

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often need to work independently and persist through distractions and challenges. The result supports previous studies showing that while performance-oriented motivation may encourage engagement in digital tasks, resilience and sustained learning are more strongly supported by intrinsic motivation and belief in effort (Barrot, 2023; Alvarez, 2024).

Table 7: Summary of the Perceived Level of Digital Learning Competence

	AWV	SD	Description	Interpretation
A. Technology Use	3.96	0.83	Agree	High
B. Cognitive Processing	4.09	0.74	Agree	High
C. Digital Reading	3.70	0.77	Agree	High
D. Peer Management	4.26	0.77	Strongly Agree	Very High
E. Time Management	4.04	0.79	Agree	High
F. Will Management	4.07	0.74	Agree	High
Overall	**4.02**	**0.71**	**Agree**	**High**

AWV=Average Weighted Value, SD=Standard Deviation

Table 7 summarizes the students' perceived level of digital learning competence. Overall, the junior high school students in Liloy I District rated their digital learning competence as high (AWV = 4.02). Peer Management emerged as the strongest domain (AWV = 4.26), indicating very high confidence in collaborative digital behaviors such as listening, sharing information, and working with classmates. This supports evidence that Filipino learners' strong social orientation contributes positively to participation and engagement in collaborative digital learning (Barrot, 2023). In contrast, Digital Reading obtained the lowest mean (AWV = 3.70), although still within the high range. This indicates a relative weakness in strategic and critical engagement with digital texts, consistent with findings that learners may be proficient in navigating online information but less skilled in deeper reading, evaluation, and synthesis required for academic learning (Alvarez, 2024). The remaining domains technology use, cognitive processing, time management, and will management be all rated high, suggesting that students feel generally capable in using digital tools, organizing tasks, and sustaining motivation. The pattern implies a key imbalance: students are strong in social-collaborative digital skills but comparatively weaker in higher-order digital literacy. Thus, instruction should intentionally use collaborative strengths (peer management) to scaffold critical digital reading and analysis through structured group tasks, guided evaluation activities, and progressive literacy supports. Such an approach aligns with recommendations that emphasize strengthening critical and evaluative competencies as essential for meaningful learning and responsible participation in digital environments (Torres & Ortega-Dela Cruz, 2022).

Level of Academic Performance

Table 8: Level of Academic Performance

Scale	Range of Values		Description	F	%	AWV	Interpretation
1	1,00-1.80	below 75	Did not meet expectations	0.00	0.00		
2	1.81-2.60	75-79	Fairly Satisfactory	0.00	0.00		
3	2.61-3.40	80-84	Satisfactory	4.00	1.16	**4.73**	**Outstanding**
4	3.41-4.20	85-89	Very Satisfactory	86.00	24.93		
5	4.21-5.00	90-100	Outstanding	255.00	73.91		
		Total		**345.00**	**100.00**		

Table 8 shows that the respondents' academic performance was Outstanding, with an overall average weighted value of 4.73. Most of the students (73.91%) obtained grades within the 90–100 range, while 24.93% were rated Very Satisfactory (85–89). Notably, no student fell under the Fairly Satisfactory or Did Not Meet Expectations categories. These findings indicate that the junior high school students in Liloy I District generally performed at a very high academic level.

The results suggest that the respondents demonstrate strong academic achievement, which may reflect their ability to adapt to current learning demands, including digitally supported instruction. The findings imply that the high academic performance of students in Liloy I District may be supported by their positive level of digital learning competence. Thus, schools should continue strengthening digital learning practices and support systems to sustain and further enhance student achievement. The result also affirms the importance of digital competence as a relevant factor in promoting positive educational outcomes in contemporary learning environments. This pattern is consistent with studies showing that students with stronger digital competence, particularly in technology use and self-regulation, are more likely to perform well academically because they can manage learning tasks and access resources more effectively (Barrot, 2023; Alimen et al., 2023).

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Table 9: Test of Relationship between the Levels of Digital Learning Competence and Academic Performance

Variables Correlated	rho-value	p-value	Interpretation
Digital Learning Competence and Academic Performance	0.102	0.059	small/low positive correlation Not Significant

Table 9 presents the test of the relationship between digital learning competence and academic performance. The result of the Spearman Rank-Order Correlation Coefficient (Spearman's rho) showed a p-value greater than 0.05, indicating that there was no significant relationship between the two variables. Therefore, the null hypothesis was not rejected. This means that although students generally demonstrated high digital learning competence and outstanding academic performance, the two variables were not significantly associated in this study.

This finding suggests that possessing stronger digital learning competence does not necessarily guarantee higher academic performance among the respondents. While digital competence may help students access information, manage tasks, and participate in learning activities, academic achievement appears to be influenced by other factors beyond digital skills alone. Thus, digital competence should be viewed as only one component of student learning rather than a direct predictor of academic success.

The result implies that improving academic performance requires a more comprehensive approach that goes beyond developing digital literacy skills. Schools should continue promoting digital competence, but greater emphasis must also be placed on the quality of instruction, effective integration of technology into teaching, and the provision of supportive learning conditions. This interpretation is consistent with previous studies showing that digital tools and skills alone do not automatically lead to better academic outcomes, as their effectiveness depends on sound pedagogy and broader contextual factors such as socioeconomic support and access to learning resources (Bernardo, 2021; Porio, 2021).

DISCUSSION

The findings indicate that the junior high school students in Liloy I District generally possessed a high level of digital learning competence, with peer management emerging as the strongest domain and digital reading as the lowest, although still within the high category. This suggests that the students were more confident in collaborative, organizational, and motivational aspects of digital learning than in higher-order skills such as critical reading, synthesis, and evaluation of digital texts. At the same time, the respondents demonstrated an outstanding level of academic performance, with the majority obtaining grades within the highest range. These results imply that digital learning competence may serve as an important support for academic success, particularly in helping students manage tasks, use technology effectively, and engage in collaborative learning. However, the comparatively lower performance in digital reading indicates the need for targeted instructional support to strengthen critical and strategic literacy skills in digital environments. The findings further suggest that schools may enhance students' academic outcomes by sustaining their strengths in collaboration and self-management while improving higher-order digital competencies. Nevertheless, the results should be interpreted with caution because the study relied on self-reported data and was limited to respondents from one district only, which may constrain the broader applicability of the findings.

CONCLUSION

This study concludes that the junior high school students in Liloy I District generally demonstrated a high level of digital learning competence and an outstanding level of academic performance. Among the dimensions of digital learning competence, peer management emerged as the strongest, while digital reading was the weakest, although still rated high. This indicates that the students are more capable in collaboration, task organization, and motivational aspects of digital learning than in higher-order skills such as critical reading, analysis, and evaluation of digital texts. Overall, the findings suggest that digital learning competence is an important educational resource that can support students' academic success. However, to further strengthen learning outcomes, greater attention should be given to developing students' strategic and critical digital literacy skills, particularly in digital reading.

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