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RESEARCH ARTICLE

ICT INTEGRATION AND LEARNERS' ACADEMIC PERFORMANCE IN ARALING PANLIPUNAN IN THE JUNIOR HIGH SCHOOL

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Abstract

This descriptive-correlational study examined the relationship between Information and Communication Technology (ICT) integration and learners' academic performance in Araling Panlipunan in the Junior High School. The study involved Social Science teachers and student respondents from Angadanan National High School, Angadanan West District, Isabela. Data were collected using a validated questionnaire adapted from Gulbahar and Guven (2008) and analyzed using frequency, percentage, mean, ANOVA, and Pearson Product Moment Correlation. Findings revealed that most teachers demonstrated positive perceptions toward ICT integration and possessed high levels of ICT competence, supported by training and teaching experience. Students also expressed favorable perceptions regarding ICT-supported learning, particularly in improving engagement, communication, and knowledge acquisition. Significant differences were found in students' perceptions when grouped according to gender, types of gadgets used, and exposure to social networking sites. Results further revealed a significant relationship between students' perceptions of ICT integration and their academic performance in Araling Panlipunan. However, no significant relationship was found between teachers' perceptions and student academic performance. The findings indicate that structured ICT integration contributes positively to learning outcomes when supported by teacher competence, appropriate resources, and institutional support. Continuous professional development, improved infrastructure, and strategic ICT policies are recommended to strengthen technology integration in social science instruction.

Keywords: ICT integration, academic performance, Araling Panlipunan, teacher perception, student perception, junior high school

Introduction

Education in the 21st century emphasizes the integration of Information and Communication Technology (ICT) as a means of improving the quality of teaching and learning. ICT plays a significant role in supporting interactive instruction, promoting learner-centered environments, and developing higher-order thinking skills among students. The Department of Education has continuously promoted ICT integration in basic education to ensure that Filipino learners develop digital literacy skills necessary in a global knowledge-based society.

Technology integration enhances teaching efficiency and increases access to diverse instructional resources. ICT allows teachers to present lessons using multimedia tools, digital applications, and online platforms that improve student participation and engagement. In social science subjects such as Araling Panlipunan, ICT supports the development of analytical thinking and contextual understanding of historical and societal issues.

Despite government initiatives and technological advancements, challenges in ICT integration remain evident. These include limited infrastructure, insufficient training, unequal access to devices, and varying levels of teacher competence. Previous studies emphasize that effective ICT integration depends not only on availability of technology but also on pedagogical design and teacher readiness.

While several studies have examined ICT integration in subjects such as Science and Mathematics, limited research focuses on its application in Araling Panlipunan. This creates a gap in understanding how technology can support social science learning outcomes. Therefore, this study investigates the relationship between ICT integration and learners' academic performance in Araling Panlipunan in the Junior High School.

The study also supports Sustainable Development Goal 4 (Quality Education), which emphasizes equitable access to inclusive and effective learning opportunities through technology integration.

Statement of the Problem

This study aimed to determine the relationship between ICT integration and learners' academic performance in Araling Panlipunan in the Junior High School.

Specifically, this study sought to answer the following questions:

1. What is the profile of teacher-respondents in terms of sex, teaching experience, highest educational attainment, types of gadgets used, classroom applications used, number of ICT trainings, and ability to handle ICT in teaching?
2. What are the demographic characteristics of student-respondents in terms of sex, grade level, types of gadgets used, social networking sites used, and first quarter grade in Araling Panlipunan?
3. What are teachers' perceptions and the effective elements of ICT integration in teaching?
4. What are students' perceptions and the effective elements of ICT integration in learning?
5. Are there significant differences in perceptions of ICT integration when respondents are grouped according to their profile variables?

6. Is there a significant relationship between ICT integration and ´ nts' academic performance in Araling Panlipunan??

RELATED LITERATURE AND STUDIES

The Internet is a powerful resource to support learners' natural curiosity. The Internet rethinks the idea of the teacher as the sole source of knowledge, by providing a vast world of information. Using the Internet, teachers can focus less on being the centre of learning and allow for more discoveries on the part of the student. Instead of being passive recipients listening to their teachers, students can devise their own ways of gathering information. Effective use of the Internet can help teachers move toward facilitating constructivist learning environments. (El-Hindi, 1998).

Grabe (2001) stated that technology should facilitate meaningful learning in the classroom. Also, it should engage the thinking, decision making, problem solving and reasoning behaviours of students.

Levin et al. (2002) point out those students think of the Internet as an important way to collaborate on project work with classmates more effective. They referred that the Internet provides ways of presenting material that differs from how it is presented in class and it is also a resource that is always available, patient and non-judgmental.

The 2002 Revised Basic Education Curriculum (RBEC) is a curricular change instituted by the Philippine government which recognizes that ICT skills are of paramount importance in alleviating poverty and in achieving competitive advantage in the global economic arena. Among its salient features is the inclusion of basic learning competencies in computer skills in both elementary and secondary education.

The primary factor that influences the effectiveness of learning is not the availability of technology, but the pedagogical design for effective use of ICT. The computer should be fitted into the curriculum, not the curriculum into the computer. Therefore, effective ICT integration should focus on pedagogy design by justifying how the technology is used in such a way and why. Effective ICT integration into the learning process has the potential to engage learners (Wang & Woo, 2007).

In summary, the reviewed literature affirms that ICT has the potential to enhance teaching effectiveness and student learning when supported by appropriate pedagogy, teacher competence, infrastructure, and institutional planning. However, challenges such as limited resources, uneven implementation, and insufficient empirical evidence remain evident. These findings provide a strong foundation for the present study, which examines ICT integration and learners' academic performance in Araling Panlipunan in the Junior High School.

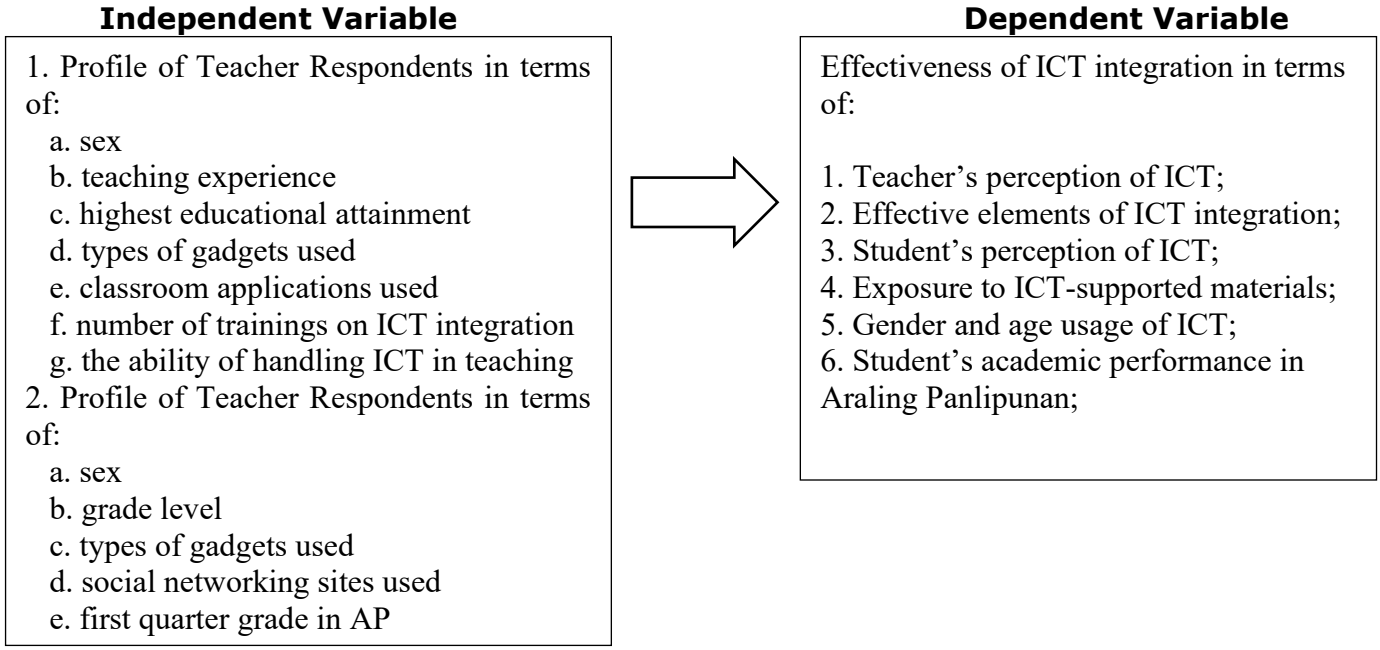
In the study conducted by Mahyoob (2020) found that students experienced major technical challenges in online learning, including unstable internet connectivity, difficulty accessing learning platforms, and problems downloading instructional materials. The study revealed low levels of learner satisfaction, as many students struggled to adapt to technology-mediated instruction, indicating that access to devices alone does not guarantee effective learning.

Similarly, Alawamleh et al. (2020) reported that students preferred face-to-face instruction over online learning due to difficulties in communication, low motivation, limited understanding of lessons, and feelings of isolation. These findings suggest that effective ICT integration requires not only technological tools but also strong pedagogical strategies that support interaction and engagement. In support of this, Elfirdoussi et al. (2020) emphasized

that online learning environments may not always be as engaging as traditional classrooms, highlighting the importance of balanced instructional approaches that combine technology with meaningful teacher guidance.

In another study, Taiman (2020) revealed that most students relied on smartphones for online learning but encountered technical problems such as slow processing speed and limited storage capacity. This indicates that although mobile devices increase access to ICT, their limitations may affect the quality of learning experiences. Likewise, Dube (2020) identified several barriers to ICT-based learning, including poor internet connectivity, lack of access to devices, financial constraints, and non-conducive learning environments. These challenges were particularly evident among students living in rural areas, where access to stable internet connection remains limited.

Furthermore, Xu (2021) reported that although students were able to adapt to online learning, many experienced decreased motivation, weaker self-regulation skills, and difficulty completing learning tasks independently. The study emphasized the need for strong teacher guidance and structured learning activities to ensure effective ICT-supported instruction.



METHODOLOGY

Research Design

This study utilized the descriptive-correlational research design to determine the relationship between ICT integration and learners' academic performance in Araling Panlipunan in the Junior High School. The descriptive method was used to describe the profile of the respondents and their perceptions regarding ICT integration, while the correlational approach was employed to determine the relationship between ICT integration and students' academic performance.

Instrument of the Study

The study utilized a structured questionnaire to gather data on the respondents' profile and perceptions regarding ICT integration in teaching and learning. The instrument was adapted and modified from Gulbahar and Guven (2008) to suit the objectives of the present study. The questionnaire was divided into sections covering teacher profile, student profile, teachers' perception of ICT integration, students' perception of ICT integration, and the effectiveness of ICT-supported learning materials.

Statistical Tools

Frequency and percentage distribution were used to describe the profile of the respondents. Mean and standard deviation were used to determine the level of perception on ICT integration. Analysis of Variance (ANOVA) was utilized to determine the significant difference in perceptions when respondents were grouped according to profile variables. Pearson Product Moment Correlation (Pearson r) was used to determine the significant relationship between ICT integration and learners' academic performa[illegible] in Araling Panlipunan.

FINDINGS

Table 1: Profile of Teacher Respondents

Profile	Frequency n=10	Percent
Gender		
Male	4	40.00
Female	6	60.00
Teaching experience		
1–5 years	2	20.00
6–10 years	3	30.00
11–15 years	3	30.00
16–20 years	2	20.00
Highest educational attainment		
Masters Graduate	5	50.00
Masters Undergraduate	5	50.00
Types of gadgets used		
Smartphone	7	70.00
Tablet/iPad	3	30.00
Classroom applications used		
PowerPoint/Google	3	30.00
PowerPoint/ChatGPT/Google	4	40.00
PowerPoint/ChatGPT/Canva/Google	3	30.00
Trainings on ICT integration		
1–2 years	3	30.00
3–4 years	7	70.00
Ability in handling ICT		
Low	0	0.00
Medium	4	40.00
High	6	60.00

Table 1 presents the profile of the teacher-respondents in terms of sex, teaching experience, highest educational attainment, types of gadgets used, classroom applications used, number of ICT trainings attended, and ability in handling ICT in teaching. The data show that the majority of the respondents were female (60%), with most having 6–15 years of teaching experience. In terms of educational attainment, half of the teachers were

master's degree holders, while the remaining respondents were currently pursuing graduate studies.

Furthermore, most teachers reported using smartphones as their primary gadget in teaching, integrating classroom applications such as PowerPoint, Google, ChatGPT, and Canva to support instruction. In addition, the majority of the respondents had attended 3–4 ICT-related trainings and rated their ability in handling ICT as high. According to Tondeur et al. (2017), teaching experience and professional development significantly influence teachers' confidence and competence in integrating ICT effectively in the teaching-learning process.

Overall, the findings suggest that the teacher-respondents possess adequate professional preparation, technological exposure, and instructional experience, which are important factors in supporting effective ICT integration in Araling Panlipunan instruction.

Table 2: Profile of Student-Respondents

Profile	Frequency n=50	Percent
Sex		
Male	18	36.00
Female	32	64.00
LGBTQIA+	0	0.00
Grade Level		
Grade 7	11	22.00
Grade 8	14	28.00
Grade 9	13	26.00
Grade 10	12	24.00
Types of gadgets used		
Smartphone	43	86.00
Tablet/iPad	7	14.00
Number of social networking sites used		
1-3	39	78.00
4-6	11	22.00
First Quarter grades in Araling Panlipunan		
75-80		
81-85	7	14.00
86-90	8	16.00
91-95	20	40.00
96-100	11	22.00
	4	8.00

Table 2 presents the profile of the student-respondents in terms of sex, grade level, types of gadgets used, number of social networking sites used and first quarter grades in Araling Panlipunan. The data shows that among the 50 student-respondents, the majority were female (64%) and were distributed across Grades 7 to 10. Most students used smartphones (86%) as their main learning device and commonly accessed 1–3 social networking sites. Studies show that access to mobile technology helps increase students' engagement and familiarity with ICT-supported learning (Hew & Brush, 2017).

In terms of academic performance, most students obtained satisfactory to very satisfactory grades in Araling Panlipunan, particularly within the 86–95 range. Research indicates that ICT-supported instruction can improve student engagement and learning outcomes (Hew & Cheung, 2018). These findings suggest that students' exposure to digital technology, especially smartphones, supports meaningful learning and contributes positively to their academic performance.

Table 3: Teacher's perception of ICT in teaching

Teacher's perception of ICT integration in teaching	Mean	Qualitative

			Description
1.	I feel confident learning new computer skills.	3.30	Strongly Agree
2.	I find it easier to teach by using ICT.	3.30	Strongly Agree
3.	I am aware of the great opportunities that ICT offers for effective teaching.	3.40	Strongly Agree
4.	I think that ICT supported teaching makes learning more effective.	3.30	Strongly Agree
5.	The use of ICT helps me to improve teaching with more updated materials.	3.60	Strongly Agree
6.	I think the use of ICT improves the quality of my teaching.	3.40	Strongly Agree
7.	I think the use of ICT helps to prepare teaching resources and materials.	3.30	Strongly Agree
8.	The use of ICT enables my students' to be more active and engaging in the lesson.	3.40	Strongly Agree
9.	I have more time to cater to my students' need if ICT is used in teaching.	3.50	Strongly Agree
10.	I can still have an effective teaching without the use of ICT.	2.80	Agree
11.	I think the use of ICT in teaching is a waste of time.	3.30	Strongly Agree
12.	I am confident that my students learn best with the help of ICT.	3.10	Agree
13.	The classroom management is out of control if ICT is used in teaching.	3.30	Strongly Agree
14.	Students' pay less attention when ICT is used in teaching.	3.10	Agree
15.	Students' makes effort for their lesson if ICT is used in teaching.	3.20	Agree
	Mean	***3.29***	***Strongly Agree***

Table 3 presents the data on teachers' perceptions regarding the use of ICT in teaching. The results show that teachers generally have a very positive perception of ICT integration, with an overall mean of 3.29 interpreted as "Strongly Agree." This indicates that teachers strongly support the use of ICT as an essential component of modern education. Specifically, teachers agreed that ICT helps them access updated instructional materials with a mean of 3.60, improve the quality of teaching with a mean score of 3.40, and enhance student engagement in the classroom with a mean score of 3.40.

Moreover, while teachers acknowledged that effective teaching can still be achieved without ICT with a mean score of 2.80, they clearly disagreed with the idea that ICT is a waste of time with a mean score of 3.30. This suggests that teachers recognize ICT as a valuable support tool rather than a replacement for traditional teaching methods. However, some concerns were noted, particularly in managing classroom control and maintaining student focus when using ICT, as reflected in mean scores of 3.30 and 3.10, respectively.

These findings are supported by Teo (2017), who emphasized that teachers' positive attitudes toward ICT significantly influence their willingness to integrate technology into their teaching practices. Similarly, Sang et al. (2015) found that teachers tend to view ICT as a complementary tool that enhances, rather than replaces, conventional teaching strategies.

Overall, the data indicate that teachers demonstrate strong acceptance of ICT integration and recognize its benefits in improving instructional delivery. At the same time, they remain aware of certain challenges in classroom management, highlighting the need for balanced and well-structured use of technology in teaching.

Table 4: The effective elements of ICT integration in teaching.

	Effective elements in ICT integration in teaching and learning	Mean	Qualitative Description
1.	The ICT facilities in my school are well-functioning and can be used.	2.80	Agree
2.	The technical supports are provided if teachers are faced with difficulties.	1.70	Strongly Disagree
3.	Little access to ICT prevents me from using it in teaching.	2.50	Disagree
4.	Lack of supports from the school top management discourages me	2.50	Disagree

	from using ICT.		
5.	Teaching time are not enough for me to use the ICT for teaching and learning purposes.	2.80	Agree
6.	There is enough training and professional development provided for teachers about ICT use in teaching.	3.30	Strongly Agree
7.	All ICT tools in my school go to waste and less used by teachers.	1.20	Strongly Disagree
8.	Teachers are given more time to learn and be comfortable with the use of ICT in teaching	3.40	Strongly Agree
9.	Teachers are given more time to learn and be comfortable with the use of ICT in teaching.	4.00	Strongly Agree
10.	Teachers are given the freedom to design their own teaching with the helps from the ICT.	4.00	Strongly Agree
	Mean	***2.82***	***Agree***

Table 4 presents the data on the effective elements of ICT integration in teaching. The results show that teachers generally agree on the importance of ICT integration with a mean score of 2.82, particularly emphasizing the need for sufficient time to explore digital tools and design technology-supported lessons (mean = 4.00). This indicates that teachers recognize the value of preparation time and professional autonomy in successfully integrating ICT into their instructional practices.

However, the table also reveals several challenges that may affect the effective use of ICT in teaching. Among the identified barriers are inadequate technical support with a mean score of 1.70, limited access to ICT resources with a mean score of 2.50, and insufficient administrative or leadership support with a mean score of 2.50. These results suggest that although teachers are willing to integrate ICT in teaching, the lack of consistent technical assistance and institutional support may hinder sustained and effective implementation.

On the other hand, teachers disagreed with the statement that ICT resources are underutilized with a mean score of 1.20, indicating that they are actively engaging with available technologies in their teaching practices. This implies that teachers demonstrate initiative and readiness to integrate ICT despite existing limitations.

According to Lawless and Brown (2015), adequate technical support and strong administrative assistance are essential factors that influence successful ICT integration in schools. Without sufficient institutional support systems, the potential of ICT to enhance teaching effectiveness may not be fully realized.

Overall, the findings indicate that while teachers value ICT integration and actively utilize available technologies, the success of ICT implementation depends on improved infrastructure, reliable technical support, and stronger institutional leadership to ensure consistent and meaningful integration of technology in teaching.

Table 5: The Student's Perception and the Elements of Effectiveness of ICT Integration in Learning

Effectiveness of ICT integration in learning	**Mean**	**Qualitative Description**
1. ICT allows students' to be more creative and imaginative in the learning process	3.30	Strongly Agree
2. The use of ICT enhances my communication skill.	3.34	Strongly Agree
3. The use of ICT increases my confidence to participate actively in the class.	3.18	Agree
4. I learn more effectively with the use of ICT in the teaching-learning process.	3.28	Strongly Agree
5. The use of ICT helps me to broaden my knowledge	3.28	Strongly Agree
6. The use of ICT helps me to improve my ability specifically in	3.22	Agree

	reading and writing.		
7.	I am more behaved and under control with the use of ICT.	3.06	Agree
8.	The use of ICT enables me to express my ideas and thoughts better.	3.30	Strongly Agree
9.	The use of ICT promotes active and engaging lesson for my best learning experience.	3.30	Strongly Agree
	Mean	***3.25***	***Agree***

Table 5 presents the data on students' perceptions regarding the effectiveness of ICT integration in learning. The results show that students generally perceive ICT as beneficial in supporting their learning, with an overall mean score of 3.25 interpreted as "Agree." Students agreed that ICT enhances communication with a mean score of 3.34, encourages creativity and increases engagement during learning activities with a mean score of 3.30. The findings also indicate that ICT helps broaden students' knowledge and supports understanding of lessons with a mean score of 3.28, and improves self-expression with a mean score of 3.30.

Although slightly lower, the mean scores related to improvement in reading and writing skills with a mean score of 3.22 and behavior with a mean score of 3.06 still indicate positive perceptions, suggesting that ICT contributes to learning development in various aspects. Students also agreed that ICT promotes active participation in classroom activities (mean = 3.18), which supports the implementation of learner-centered teaching approaches.

These findings suggest that students consider ICT as a helpful and relevant learning tool that supports meaningful learning experiences. However, the results also imply the need for proper guidance to ensure balanced and responsible use of technology. According to Hew and Cheung (2018), ICT increases students' motivation and engagement in learning tasks. Similarly, Selwyn (2016) emphasized that while ICT provides learning benefits, its use should be guided to prevent distractions and ensure that technology contributes positively to academic performance.

Overall, the results indicate that students positively perceive ICT integration as supportive of communication, participation, and knowledge development, highlighting the importance of structured ICT use in enhancing learning outcomes.

Table 6: The Student's Perception and the Elements of Effectiveness of ICT Integration under Exposure to ICT Supported Materials.

	Exposure of students to ICT supported materials	**Mean**	**Qualitative Description**
1.	I usually have unlimited access to ICT supported materials and this has affected my academic performance negatively	2.64	Agree
2.	I engage in academic discussions using ICT supported materials and this has improved my academic performance	3.12	Agree
3.	I make use of ICT supported materials to disseminate knowledge to my classmate	3.14	Agree
4.	The usage of ICT in learning has helped me improved my grades	3.26	Strongly Agree
5.	Engaging on academic discussions with the use of ICT supported teaching reduces my rate of understanding	2.78	Agree
6.	I use materials gotten from internet sites to complement what I have been taught in class	3.12	Agree
7.	I will perform well in my academics even if I stop using ICT supported materials	2.90	Agree
	Mean	***2.99***	***Agree***

Table 6 presents the data on students' perceptions regarding the effectiveness of ICT-supported learning materials. The results show that students generally consider ICT-supported materials helpful in improving their academic performance, with an overall mean

interpreted as "Agree" with a mean score of 2.99. Specifically, students agreed that ICT helps improve their grades with a mean score of 3.26, enhances sharing of ideas with classmates with a mean score of 3.14, and supports meaningful classroom discussions with a mean score of 3.12. These findings indicate that ICT contributes positively to collaborative learning and academic engagement.

However, some concerns were also observed. A number of students expressed that too much exposure to ICT may negatively affect academic performance with a mean score of 2.64, and some believed that online discussions may reduce their understanding of lessons with a mean score of 2.78. In addition, students agreed that learning can still take place even without ICT with a mean score of 2.90, suggesting that technology is viewed as a support tool rather than a complete replacement for traditional teaching methods.

These results imply that ICT-supported materials are beneficial when used appropriately and with proper guidance. The findings support the idea that technology becomes more effective when it is carefully planned and integrated into instruction.

Overall, the results indicate that students recognize the academic value of ICT-supported materials, particularly in improving participation, collaboration, and learning outcomes, while emphasizing the importance of guided and responsible use of technology in the teaching-learning process.

Table 7: The Student's Perception and the Elements of Effectiveness of ICT Integration under Gender Usage of ICT Supported Materials.

	Gender usage of ICT supported materials	Mean	Qualitative Description
1.	Male and female students use ICT supported materials differently in different frequencies	3.14	Agree
2.	Female students use ICT supported materials more to explicitly foster social connections	3.00	Agree
3.	Gender determines the level of use of ICT supported materials	2.54	Agree
4.	Males are more effective in using ICT supported materials for academic reasons	2.56	Agree
	Mean	***2.81***	***Agree***

Table 7 presents the data on students' perceptions of ICT use in relation to gender. The results show that students generally perceive that gender influences ICT use, with an overall interpretation of "Agree" and a mean score of 2.81. Specifically, male students are perceived to be more academically focused in using ICT with a mean score of 2.56, while female students are viewed as more socially oriented in their use of ICT with a mean score of 3.00.

Moreover, differences in the frequency of ICT use between male and female students were also observed, with a mean score of 3.14, indicating that usage patterns vary depending on gender. These findings suggest that students engage with ICT in different ways, with variations in purpose, frequency, and application.

Overall, the results imply that gender plays a role in shaping how students utilize ICT in learning, highlighting the need for inclusive and balanced ICT integration strategies that cater to diverse learning preferences and promote equal opportunities for all learners.

Table 8: The Student's Perception and the Elements of Effectiveness of ICT Integration under Age Usage of ICT Supported Materials

Age usage of ICT integration in learning	Mean	Qualitative

			Description
1.	Age has impact on the use of ICT	3.04	Agree
2.	ICT become exciting to use as I grow older	3.02	Agree
3.	ICT is relevant to people of younger generation	3.10	Agree
	Mean	***3.05***	***Agree***

Table 8 presents the data on students' perceptions of ICT use in relation to age. The results show that students generally agree that age influences the use of ICT, interpreted as "Agree" with a mean score of 3.05. The findings indicate that ICT is perceived to be more relevant to younger learners with a mean score of 3.10, suggesting that younger students are more familiar and comfortable using digital technologies for learning.

Furthermore, students also agreed that the use of ICT becomes more interesting and engaging as they grow older, with a mean score of 3.02. This implies that age contributes to learners' level of interest, confidence, and adaptability in using ICT-supported materials.

Overall, the results suggest that age is a factor that influences how students perceive and utilize ICT in learning. Differences in age may affect students' familiarity with technology, level of engagement, and effectiveness in using ICT as a support tool in the teaching-learning process. These findings highlight the importance of designing age-appropriate ICT activities to ensure that technology integration remains relevant, engaging, and responsive to the needs of learners across grade levels.

Table 9: The Relationship Between the Student's Perception on The Level of Effective Use of ICT Integration to their Academic Performance

Effectiveness of ICT integration in learning	r-value	p-value
1. ICT allows students' to be more creative and imaginative in the learning process	0.11 ns	0.45
2. The use of ICT enhances my communication skill.	0.27 ns	0.05
3. The use of ICT increases my confidence to participate actively in the class.	0.05 ns	0.73
4. I learn more effectively with the use of ICT in the teaching-learning process.	0.28 ns	0.05
5. The use of ICT helps me to broaden my knowledge	0.18 ns	0.21
6. The use of ICT helps me to improve my ability specifically in reading and writing.	0.19 ns	0.18
7. I am more behaved and under control with the use of ICT.	0.15 ns	0.29
8. The use of ICT enables me to express my ideas and thoughts better.	0.27 ns	0.06
9. The use of ICT promotes active and engaging lesson for my best learning experience.	0.26 ns	0.07
Exposure of students to ICT supported materials		
1. I usually have unlimited access to ICT supported materials and this has affected my academic performance negatively	0.13 ns	0.37
2. I engage in academic discussions using ICT supported materials and this has improved my academic performance	0.30*	0.03
3. I make use of ICT supported materials to disseminate knowledge to my classmate	0.25 ns	0.08
4. The usage of ICT in learning has helped me improved my grades	0.23 ns	0.10
5. Engaging on academic discussions with the use of ICT supported teaching reduces my rate of understanding	-0.13 ns	0.35
6. I use materials gotten from internet sites to complement what I have been taught in class	0.20 ns	0.17
7. I will perform well in my academics even if I stop using ICT supported materials	0.24 ns	0.09
Gender usage of ICT integration in learning		
1. Male and female students use ICT supported materials differently in different frequencies	0.25 ns	0.08
2. Female students use ICT supported materials more to explicitly foster social connections	-0.04 ns	0.76
3. Gender determines the level of use of ICT supported materials	-0.26 ns	0.07
4. Males are more effective in using ICT supported materials for academic reasons	-0.16 ns	0.27
Age usage of ICT integration in learning		
1. Age has impact on the use of ICT	0.21 ns	0.14
2. ICT become exciting to use as I grow older	0.00 ns	0.99
3. ICT is relevant to people of younger generation	-0.04 ns	0.78

ns = Not Significant *Significant A=Agree SA=Strongly Agree

Table 9 presents the relationship between students' perceptions of ICT integration and their academic performance in Araling Panlipunan. The results reveal that the use of ICT in enhancing communication skills shows a positive relationship with academic performance with a computed correlation value of r = 0.27 and significance value of p = 0.05. This indicates that students who actively use ICT to communicate ideas and exchange information tend to demonstrate better academic outcomes.

Similarly, the use of ICT in promoting active and engaging learning shows a positive association with academic performance with a computed correlation value of r = 0.26 and p = 0.07. This implies that ICT-supported activities that encourage participation, interaction, and collaboration contribute to improved learning experiences among students.

Furthermore, engagement in academic discussions using ICT-supported materials shows a significant positive relationship with students' academic performance with a computed correlation value of r = 0.30 and p = 0.03. This indicates that ICT becomes more effective when it is used as a tool for interaction, discussion, and active participation rather than simply as a source of information.

Overall, the results suggest that ICT integration contributes positively to students' academic performance when technology is used to support communication, collaboration, and meaningful learning activities. These findings highlight that ICT becomes more transformative when learners actively participate in the learning process through ICT-supported discussions and interactive learning experiences.

CONCLUSIONS

The following conclusion was drawn from this study:

1. The teacher-respondents were mostly female, with varied teaching experience, relevant educational attainment, and high ICT competence supported by trainings and use of various digital tools.
2. The student-respondents were mostly female, used smartphones as primary devices, and generally achieved satisfactory to very satisfactory academic performance, indicating accessibility of ICT in learning.
3. Teachers and students both showed positive perceptions toward ICT integration; however, challenges such as limited support, access, and classroom management concerns remain.
4. ICT was perceived as beneficial for communication, engagement, and learning, though its effectiveness depends on proper guidance, balanced use, and consideration of gender and age differences.
5. A significant relationship exists between students' perceptions of ICT use and their academic performance, particularly when ICT is used to support active participation and academic-focused activities.

RECOMMENDATIONS

Based on the results of this study, the following were recommended:

1. Schools may conduct regular ICT trainings and ensure adequate infrastructure and technical support to improve teaching practices.
2. ICT use among students may focus on academic activities, with structured and age-appropriate strategies and equal access to devices.
3. Strong policies may support ICT integration through teacher training, improved access, and institutional support.

4. Future researchers may expand the study by including other subjects, populations, and additional variables for deeper analysis.

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