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Peer Tutoring in Teaching Araling Panlipunan 10

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ABSTRACT

This study assessed the effectiveness of peer tutoring in teaching Araling Panlipunan 10 among Grade 10 students of Sta. Lucia National High School during the school year 2024–2025. Using a descriptive–correlational research design, the study examined the relationship between students' academic performance and the challenges they encountered in applying the peer tutoring strategy through modular learning. Forty-two students participated, and data was collected through a validated questionnaire and academic performance records. Results revealed that students achieved a "Very Satisfactory" performance across topics such as Climate Change, Solid Waste Management, and Illegal Logging. Challenges like limited access to printed materials and home distractions were noted but did not significantly affect performance. Findings indicated a low positive correlation between challenges and academic outcomes, implying that peer tutoring remained effective despite difficulties. The study concluded that integrating peer tutoring with modular learning enhances comprehension, collaboration, and motivation among learners. It recommends strengthening the strategy by providing sufficient materials, structured guidance, and teacher facilitation to maximize its effectiveness in Social Studies instruction.

KEYWORDS: *Academic Performance, Araling Panlipunan 10, Collaborative Learning, Demographic Profile, Descriptive–Correlational, Peer Tutoring, Self Learning Module, Sta. Lucia National High School, Asturias, Cebu, Philippines.*

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1. THE PROBLEM AND ITS SCOPE

INTRODUCTION

Rationale of the Study

With the emergence of global crises brought about by natural disasters such as earthquakes, typhoons, and other calamities, many institutions have faced multiple challenges that have significantly affected the quality and continuity of instructional delivery (Mir et al., 2025). The challenge lies in the role of teachers as to respond to the problems in sustaining quality education as the goal of the Department of Education (Baena-Morales et al., 2024). In response to the call in the delivery of quality education, teachers might appreciate, abreast and realize of what is the meaning of becoming a teacher as a source of learning. Learning is what the teacher needs to work to be useful for them. The following are some conventional means of need-based learning: discussion, group work, mentoring and peer tutoring. (Gehreke et al., 2024). These strategies typically used to improve students' learning.

The Shift Paradigm for teachers adjusting to the new normal has been an issue since teachers experienced different struggles in the delivery of the teaching and learning instructions. According to Bell, et al. (2024) the whole idea of drawering up lessons and teaching outlines for this disaster is way more daunting than before, because it doesn't stop to ensuring that learning gets transferred to learners but whether any such is truly going to make it.

Due to the minimal classroom interactions this school year, teachers were required to modify their instructional approaches to promote effective student understanding and learning. (Sert et al., 2025). Managing virtual classroom behavior is also an existing problem since the teacher can no longer monitor the actual performance of the students.

Thus, one of the learning delivery modalities being adopted by the public school is using the SLM and its instructions in teaching. This is commonly called the modular approach to teaching and learning.

(Mesutoglu et al., 2024). Thus, modular approach of learning will give learners enough time to study at their own pace, analyze, and answer all the activities in the self-learning modules according to their ability and needs at home.

According to Figueiredo and García-Peñalvo (2024), modular teaching focuses on each student as an individual with unique abilities, interests, and learning goals. Its primary aim is to help learners develop independent thinking while recognizing and respecting their individuality. Emphasis is placed on one-to- one learning, considering each student's aspirations and personal experiences. To ensure quality education, teachers must personalize and individualize instructional programs. When teachers are committed to individualized learning, they can engage in personal discussions with students and provide tailored support. This approach promotes the development of self-reliant and confident learners. Moreover, through individualized learning, students are given opportunities to explore their interests and satisfy their curiosity in more meaningful and modern ways (Alizadeh et al., 2024).

However, nowadays, learners find it boring and tiresome to study in social studies. The real challenge faced by the students is to practice independent learning because it induces learning with minimum teacher direction and supervision. There is a vast amount of information and activities that need to be answered from different historical and philosophical topics to various contemporary issues. Hence, educators must integrate peer tutoring to entice students to learn the subject (Botelho & Boubaker, 2024).

To address the identified gap in modular learning in Social Studies, this study used peer tutoring in teaching as an intervention strategy. According to Mägi et al. (2024), peer tutoring is a cooperative learning strategy that involves pairing students who work toward a common goal within an asymmetrical learning relationship, where one student provides guidance to another. Peer tutoring is a teaching strategy in which students work collaboratively to support one another's learning, with one student assuming the role of the tutor and another acting as the tutee. This approach helps students develop skills in managing and planning learning activities, working cooperatively, giving and receiving feedback, and reflecting on their own learning progress. Peer tutoring has been shown to have a positive effect on students' academic performance, motivation, and social interaction (Lin, 2024). Because of its interactive nature, peer tutoring enables tutors to better understand the learning level of their tutees and clarify concepts related to the lesson. (Lin, 2024). Because of its interactive nature, peer tutoring enables tutors to better understand the learning level of their tutees and clarify concepts related to the lesson.

Modular instruction, on the other hand, is a widely used printed teaching approach that follows a structured format designed to meet learners' needs. The modular teaching approach supports both remedial instruction for slow learners and enrichment activities for fast learners, allowing instruction to be adjusted based on individual learning pace. (Liu et al., 2025). One effective way of supporting and remediating slow learners is using instructional modules. Modules can serve as valuable tools in the teaching and learning process because they allow students to study at their own pace while reinforcing key concepts.

According to DepEd Order No. 32, s. 2020, also known as the Guidelines on the Engagement of Services of Learning Support Aides to Reinforce the Implementation of the Basic Education Learning Continuity Plan (BE-LCP) in Times of Disasters, modular learning is a form of distance education that utilizes Self-Learning Modules (SLMs). These modules are based on the Most Essential Learning Competencies (MELCs) identified by the Department of Education (Tolentino, 2024). The modules contain motivational activities and assessment components, making them comprehensive learning guides for both teachers and students.

This researcher has been teaching social science for ten years in Sta. Lucia National High School and has observed the dismal occurrence of social science results in public schools. It then becomes a challenge for the teachers to innovate and to make the lessons much more interactive and self-motivating to the learners. Furthermore, the researcher identified gaps in students' academic performance prior to the COVID-19 pandemic. Even before these recent disruptions, most forms of learning assessment relied heavily on students' physical presence, whether for delivering instructional content or monitoring daily learner progress. The recent school closures have made it necessary to explore alternative methods that ensure assessment continues to provide meaningful feedback. In response, the researcher sought to enhance modular teaching in Social Science for Grade 10 students at Sta. Lucia National High School during the 2024–2025 academic year.

Moreover, this research study seeks to contribute to the sustainable development goal of ensuring inclusive and equitable education, as well as lifelong learning opportunities for all learners, regardless of race, culture, or economic background. The aim is to

provide equitable and high-quality education that results in relevant and effective learning outcomes. Ensuring quality education for all reinforces the widely held view that education is one of the most powerful and proven tools for promoting sustainable development. Every learner has the right to access quality education. Equity in education is realized when all students are treated fairly and have access to comparable resources, enabling them to graduate well-prepared for future success beyond high school.

Theoretical-Conceptual Background

This study assumed that using peer tutoring strategy can improve modular teaching in the new normal among grade 10 Araling Panlipunan students. Thus, the study is anchored on Lev Vygotsky (1978) Social Constructivist Theory and Constructivist Learning Theory by Jean Piaget (1972), and Albert Bandura's Social Learning Theory.

According to the theory of social constructivism, individuals develop their understanding of the world through interactions with their culture and society (Clarke, 2024). Knowledge is constructed and refined through social negotiation and by evaluating the validity of individual understanding. In essence, every interaction or discussion between two or more people provides an opportunity to acquire new knowledge or expand existing knowledge. The exchange of ideas that occurs during human interaction plays a central role in this process.

Applying social constructivist principles in education requires teachers and school leaders to adopt a facilitative role rather than simply delivering information. Educators should guide learning by asking questions that encourage students to explore concepts deeply, regardless of whether their initial answers are correct. Students should be prompted to explain their reasoning rather than relying solely on words, formulas, or equations without justification. Additionally, teachers should foster reflection, helping students critically evaluate and understand their own responses.

According to Piaget (1972), learning is not solely the result of external influences; rather, it is a process of reconstruction within the human mind (Maringanti & Sahu, 2024). Everyone possesses innate abilities and personal concepts, which interact with information from the external environment to create new knowledge. Piaget's (1972) cognitive theory suggests that both tutors and tutees experience cognitive development at every stage of peer tutoring. For instance, when a tutor prepares for a tutoring session, their understanding deepens as they study and organize the relevant material. During the tutoring session itself, the interaction and exchange of ideas between tutor and tutee facilitate accommodation, allowing learning to progress. Equilibrium is achieved when both participants successfully communicate knowledge at the intended level. Additionally, peer tutoring contributes to the development of other important skills, including discussion abilities, confidence, and motivation, for both tutors and tutees.

As supported by Lev Vygotsky (1978) Social Constructivist Theory aims to support teaching and learning based on a constructivist perspective. Vygotsky suggested that the academic performance of slow learners can be enhanced when they participate in collaborative activities, such as peer tutoring. This aligns with key principles of Social Constructivist Theory, which emphasizes social negotiation between the tutor and tutee. Through communication and dialogue, knowledge is co-constructed, benefiting the tutee while also reinforcing the tutor's understanding, as "learning is enhanced through teaching." Additionally, learners tend to find the process more engaging and enjoyable. Social constructivism posits that knowledge develops through social interaction and the use of language, making learning a shared experience rather than an entirely individual one.

Jean Piaget's Constructivist Learning Theory (1972) proposes that learning occurs when individuals actively construct both the processes of learning and their own understanding of knowledge. According to this theory, knowledge is not passively received rather, it must be actively built by the learner, with the teacher serving as a facilitator who supports and guides the construction process.

Knowledge construction is dynamic and requires learners' active engagement, while teachers focus on creating an environment conducive to learning (Chen et al., 2024). In modern classrooms, the integration of technology further supports this process. Technology can function as a learning aid by identifying problems, providing opportunities for practice and rehearsal, and offering necessary support to complete tasks. Additionally, it can enhance students' cognitive abilities and overall learning experience.

Lastly, Bandura's (1986) Social Learning Theory proposes that individuals acquire new behaviors, attitudes, and skills by observing others, particularly peers or role models, and then imitating these behaviors.

In the context of peer tutoring, tutee observe how their tutors explain concepts, solve problems, and demonstrate understanding-encouraging them to imitate and internalize these learning behaviors. Similarly, tutors strengthen their own knowledge and

confidence by teaching others, which reinforces their understanding. This theory supports peer tutoring as an effective approach because it highlights that students can learn not only from teachers but also from their peers through social interaction, observation, and collaboration (Navrátilová & Jurčík, 2025).

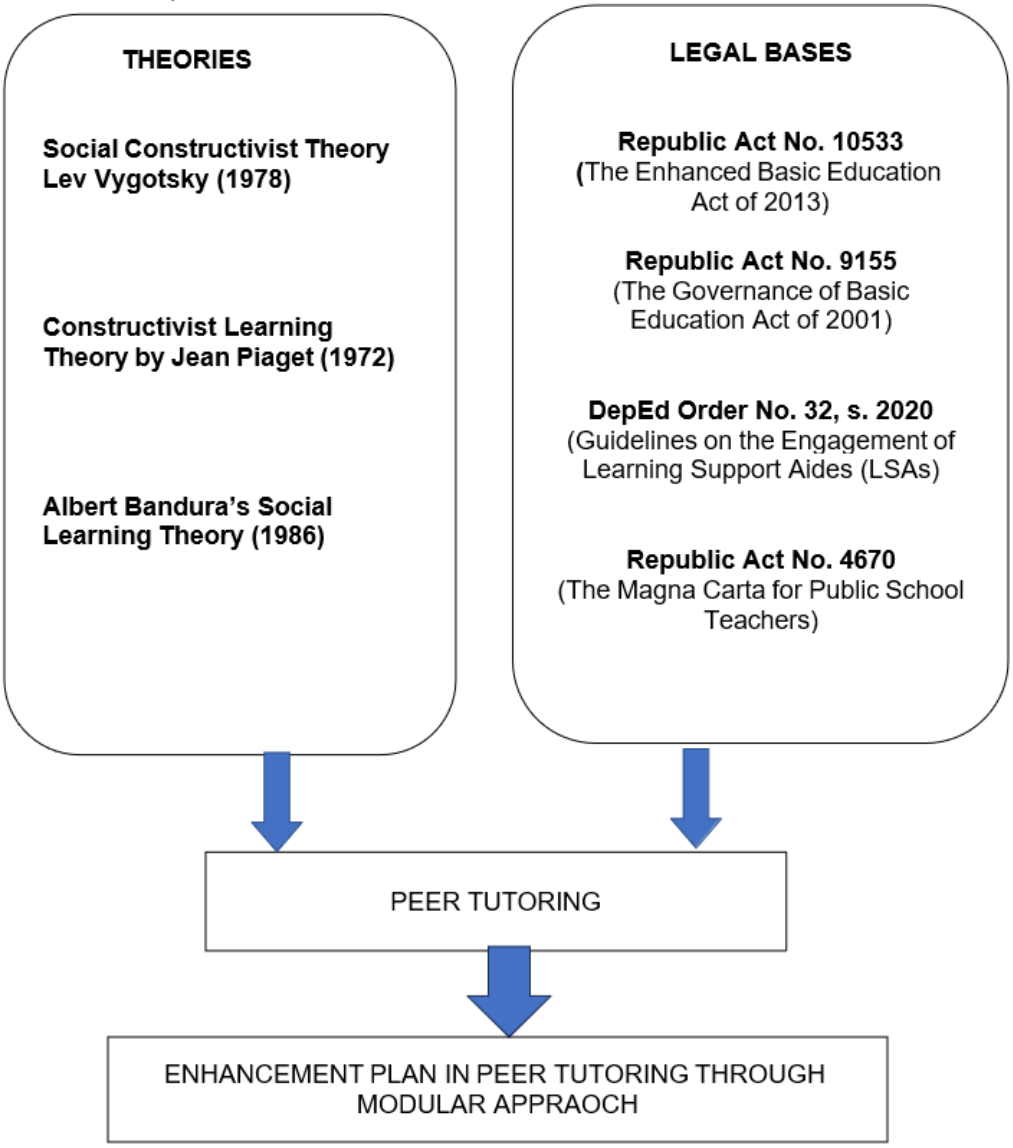

Figure 1 Theoretical – Conceptual Framework

Peer tutoring involves one student assisting or instructing another in academic tasks (Wang, 2024). This approach is grounded in the belief that learning is a social process, where students develop understanding by interacting and sharing knowledge with one another (Kromminga & Codding, 2024). In practice, students are often paired so that a higher-performing student works with a lower- performing peer to facilitate learning.

In peer tutoring, students collaborate in pairs to support each other's learning or practicing academic tasks. Often, teachers have students switch roles during the activity so that the tutor becomes the tutee. This approach allows both students to deepen their understanding, as teaching a concept to someone else reinforces the tutor's own learning.

Peer tutoring typically involves pairing up students of similar age or grade to support each other's learning. This strategy is highly effective for improving academic performance, social skills, and behavior. By engaging in peer tutoring, students have more opportunities to respond to academic material, practice what they are learning, and receive immediate feedback. Unlike large group instruction, where providing individualized feedback to every student is challenging, peer tutoring ensures timely correction for each response. Moreover, students participate in active learning, asking questions, responding to peers, correcting mistakes, and giving positive feedback-rather than passively observing the teacher. Research indicates that active learning approaches like this can significantly enhance student achievement.

Therefore, this strategy is beneficial because it allows students to take on both tutor and tutee roles, creating a more balanced and accepting learning environment. Peer tutoring also encourages students to make decisions throughout the learning process, which helps develop self-management skills and promotes collaboration. Additionally, students are responsible for monitoring and assessing their peers' performance, fostering accountability. The approach increases active participation during lessons and boosts motivation in the learning process. Overall, peer tutoring has been shown to enhance students' academic performance.

In addition, peer tutoring involves students of similar learning levels working collaboratively to support each other's academic progress. This instructional strategy has been successfully applied to help students achieve learning goals. By incorporating peer tutoring, teachers can tailor instruction to individual needs while ensuring that all students are actively engaged in the learning process simultaneously.

Teachers have a responsibility to adopt innovative teaching strategies to engage students and help them grasp concepts effectively. Likewise, it is important to capture students' interest and attention to enhance learning outcomes. In this regard, peer tutoring serves as an effective instructional approach that supports students' academic and personal development.

Moreover, the integration of peer tutoring as an instructional strategy in Araling Panlipunan 10 is grounded on several national education laws and policies that collectively support learner-centered pedagogies, school-level innovation, teacher empowerment, and instructional support systems. These legal bases establish the theoretical framework that justifies and strengthens the implementation of peer tutoring in the Philippine basic education context.

Republic Act No. 10533 (The Enhanced Basic Education Act of 2013)

Republic Act No. 10533, also known as the Enhanced Basic Education Act of 2013, is a law emphasized differentiated instruction and the use of pedagogies that recognize learners' varied abilities, learning styles, and academic needs. These principles justify the application of peer tutoring, as the strategy allows advanced or more proficient learners to assist classmates who require additional support, thereby promoting inclusive and interactive learning. The constructivist nature of peer tutoring-where students actively build knowledge through peer discussions and shared experiences-aligns with RA 10533's emphasis on meaningful, collaborative learning.

In Araling Panlipunan 10, which involves analyzing social, cultural, and political concepts, the act's mandate for deeper understanding and critical thinking further supports the adoption of peer tutoring as an effective instructional approach.

Republic Act No. 9155 (The Governance of Basic Education Act of 2001)

Republic Act No. 9155, also known as The Governance of Basic Education Act of 2001, is a law strengthened the theoretical grounding of peer tutoring by promoting school-based management and empowering teachers to design instructional innovations suited to their learners' context. Through decentralization, the law encourages schools to adopt flexible and responsive teaching methods, enabling educators to address specific learning challenges using strategies that maximize available resources. Peer tutoring fits well within this framework because it utilizes the natural strengths of students to support their peers, creating a collaborative learning environment that fosters both academic improvement and learner autonomy. RA 9155 thus legitimizes peer tutoring as a school-level initiative that enhances student participation and reinforces the teacher's role as facilitator of learning.

In Araling Panlipunan 10, where comprehension levels often vary due to the complexity of historical and socio-political topics, the empowerment granted by RA 9155 allows teachers to implement peer tutoring to improve understanding and performance more effectively.

DepEd Order No. 32, s. 2020 (Guidelines on the Engagement of Learning Support Aides)

DepEd Order No.32, s.2020, also known as Guidelines on the Engagement of Learning Support Aides, is a law contributed to the theoretical background of peer tutoring by highlighting the importance of supplementary academic support in ensuring the continuity of learning, particularly during situations that challenge the traditional learning setup. Although the policy specifically refers to Learning Support Aides (LSAs), its core principle-that learners benefit from additional academic assistance beyond the formal instruction of teachers-parallels the objectives of peer tutoring.

In the context of Araling Panlipunan 10, where some students may struggle with complex themes in history and social studies, the concept of structured learning support embedded in the order reinforces the logical and practical value of peer tutoring as an internal, school-based support mechanism that strengthens academic continuity and learner mastery.

Republic Act No. 4670 (The Magna Carta for Public School Teachers)

Republic Act No. 4670, also known as The Magna Carta for Public Teachers, is a law supported the integration of peer tutoring by ensuring teachers' professional rights, welfare, and opportunities for continuous development. The law encourages educators to employ instructional methods that promote effective learning, while giving them the autonomy to innovate in their teaching practices. This legislative support empowers teachers to adopt strategies such as peer tutoring, which can enhance classroom engagement, strengthen student collaboration, and improve overall academic outcomes.

In teaching Araling Panlipunan 10-where complex topics demand varied teaching techniques-the Magna Carta reinforces the teacher's role in cultivating a learning environment where peer-assisted learning is welcomed as a legitimate and beneficial instructional method.

The study aims to determine peer tutoring as strategy to improve our teaching Araling Panlipunan 10.

Statement of the Problem

This research will determined and analyzed peer tutoring as strategy in teaching Araling Panlipunan 10 at Santa Lucia National High School, Asturias, Cebu during the Academic Year 2024-2025 as basis for enhancements of peer tutoring through modular approach.

Specifically, this study answered the following sub-problems:

1. Using the peer tutoring strategy through modular approach, what is the 1st quarter academic performance of the students in the relation to:

1.1. Climate Change

1.1.1. Explain the causes and effects of climate change on people, the economy, and the environment.

1.1.2. Analyze how human activities make climate change worse.

1.1.3. Propose ways that individuals and communities can help reduce its effects

1.2. Solid Waste

1.2.1. Identify the sources and types of solid waste found in the community.

1.2.2. Explain how improper waste disposal affects people's health, the environment, and the economy.

1.2.3. Demonstrate proper solid waste management practices such as reducing, reusing, recycling, and recovering in school and community settings.

1.3. Illegal Logging

1.3.1. Explain the causes and effects of illegal logging on the environment and society.

1.3.2. Analyze how human greed and poverty contribute to the continuation of illegal logging.

1.3.3. Suggest community programs and government actions to stop illegal logging and protect forests.

2. What are the challenges and difficulties of the students in using peer tutoring strategy through modular approach.

3. Is there a significant relationship between students' academic performance and the challenges and difficulties they encounter while using peer tutoring as a strategy within the modular approach?

4. Based on the findings, what enhancements can be made in peer tutoring modular approach?

Hypothesis of the Study

H_{o1}: There is no significant relationship between students' academic performance in Climate Change and the challenges they encounter during peer tutoring as a strategy in the modular approach.

H_{a1}: There is a significant relationship between students' academic performance in Climate Change and the challenges they encounter during peer tutoring as a strategy in the modular approach.

H_{o2}: There is no significant relationship between students' academic performance in Solid Waste Management and the challenges they encounter during peer tutoring as a strategy in the modular approach.

H_{a2}: There is a significant relationship between students' academic performance in Solid Waste Management and the challenges they encounter during peer tutoring as a strategy in the modular approach.

H_{o3}: There is no significant relationship between students' academic performance in Illegal Logging and the challenges they encounter during peer tutoring as a strategy in the modular approach.

H_{a3}: There is a significant relationship between students' academic performance in Illegal Logging and the challenges they encounter during peer tutoring as a strategy in the modular approach.

Significance of the Study

The primary aim of this study is to evaluate the effectiveness of peer tutoring using the modular learning approach in teaching Araling Panlipunan 10 at Sta. Lucia National High School during the School

Year 2024–2025. The findings are expected to offer meaningful insights for educators, administrators, and other stakeholders in the educational community.

Department of Education (DepEd). The findings of this study may provide valuable guidance to DepEd in enhancing the implementation of modular learning and strengthening support mechanisms for teachers. Integrating peer tutoring into learning modules may help DepEd strengthen the implementation of the Basic Education Learning Continuity Plan (BE-LCP) and support students in achieving the intended learning competencies, even in modular or distance learning environments.

School Administrators. School heads and administrators may use the findings of this study as a reference in crafting programs and interventions aimed at improving academic performance in Social Studies. The research can also serve as a basis for implementing peer-assisted learning systems within the school to promote collaborative and inclusive education. It further supports the Department of Education's goal of providing quality, equitable, and accessible education for all learners.

Parents. Parents will benefit from this study as it can help them understand how peer tutoring contributes to their children's academic improvement and social development. It will also encourage parental support for peer-based activities at home, fostering an environment conducive to learning and collaboration.

Teachers. Teachers will benefit from this study as it introduces an effective instructional strategy that can enhance classroom interaction and improve student learning outcomes. The findings will help teachers design more engaging and interactive modular lessons, address the diverse learning needs of students, and reduce academic gaps among learners. Moreover, peer tutoring can lessen teachers' workload in monitoring student progress while ensuring that learners remain motivated and guided throughout the learning process.

Students. This study will directly benefit students by offering an alternative learning strategy that promotes cooperation, active participation, and deeper understanding of lessons in Araling Panlipunan. Through peer tutoring, students are encouraged to learn collaboratively, share ideas, and strengthen their academic performance even in a modular learning setup. This approach fosters self-confidence, social interaction, and independent learning-key components in sustaining quality education despite limited teacher supervision.

Future Researchers. This study may serve as a reference and guide for future researchers interested in examining topics related to peer tutoring, modular learning, and students' academic performance. It may also provide baseline data for studies involving other learning areas or different grade levels, contributing to the growing body of knowledge on effective strategies in modular and blended education.

RESEARCH METHODOLOGY

Design

This study utilized a quantitative descriptive–correlational research design to examine the relationship between students' academic performance and the challenges they face in peer tutoring under the modular learning approach in Araling Panlipunan 10.

This research design was selected because it enables the researcher to describe current conditions and examine the degree of association between variables without altering them (Pantilgan, 2019). Descriptive research focuses on providing an accurate depiction of existing practices, behaviors, and conditions, whereas correlational research investigates whether a relationship exists between two or more variables and assesses the strength of that relationship.

To ensure that the respondents accurately represented the target population, the study utilized the purposive sampling technique, a non-probability sampling method that involves selecting individuals who meet specific criteria relevant to the study's objectives. In this research, participants were purposely chosen from Grade 10 students who were actively engaged in modular learning and exposed to peer tutoring activities in Araling Panlipunan. This technique was appropriate because it allowed the researcher to focus on respondents who could provide reliable and meaningful data regarding their learning experiences.

Data were gathered through a structured survey questionnaire using a Likert scale to measure respondents' challenges and perceptions of peer tutoring, while academic performance data were collected from their modular assessments. The responses were analyzed using descriptive statistical tools such as the weighted mean to summarize the data and correlational analysis to determine the relationship between students' performance and the challenges they encountered in peer tutoring.

Flow of the Study

The study follows a three-phase procedure, namely: input, process, and output. See Figure 2, the entire research activities.

Input. The input of the study presents the foundational elements necessary for conducting the research. It includes the students' academic performance in Araling Panlipunan 10, which is measured based on the prescribed learning

competencies outlined in the Department of Education curriculum guide. It also involves identifying the students' level of difficulties in applying the peer tutoring strategy within a modular learning approach, providing a clearer understanding of the barriers that hinder effective peer-assisted learning.

Moreover, this study examines the relationship between students' academic performance and the challenges they face in peer tutoring, providing a basis for understanding how these difficulties may affect learning outcomes.

The input also considers the development of possible enhancements or interventions that can improve the implementation of peer tutoring in modular instruction.

To sum up, the input phase establishes the key variables, guiding principles, and preliminary data sources that serve as the groundwork for the research process and subsequent analysis.

Process. The process phase started at the time the necessary communications approved. This phase included the transmittal letter, dissemination of the research questionnaire to the respondent. Research questionnaires were personally distributed, administered, and retrieved by the researcher. After gathering all relevant data, results from the questionnaires were interpreted, analyzed, and treated before conclusion and recommendation were formulated.

Output. The third phase of the study served as the springboard in enhancement and modification of modular learning methods that would help improve the teaching and learning instruction and performance of Grade 10 Araling Panlipunan in Cebu Province for the school year 2024-2025.

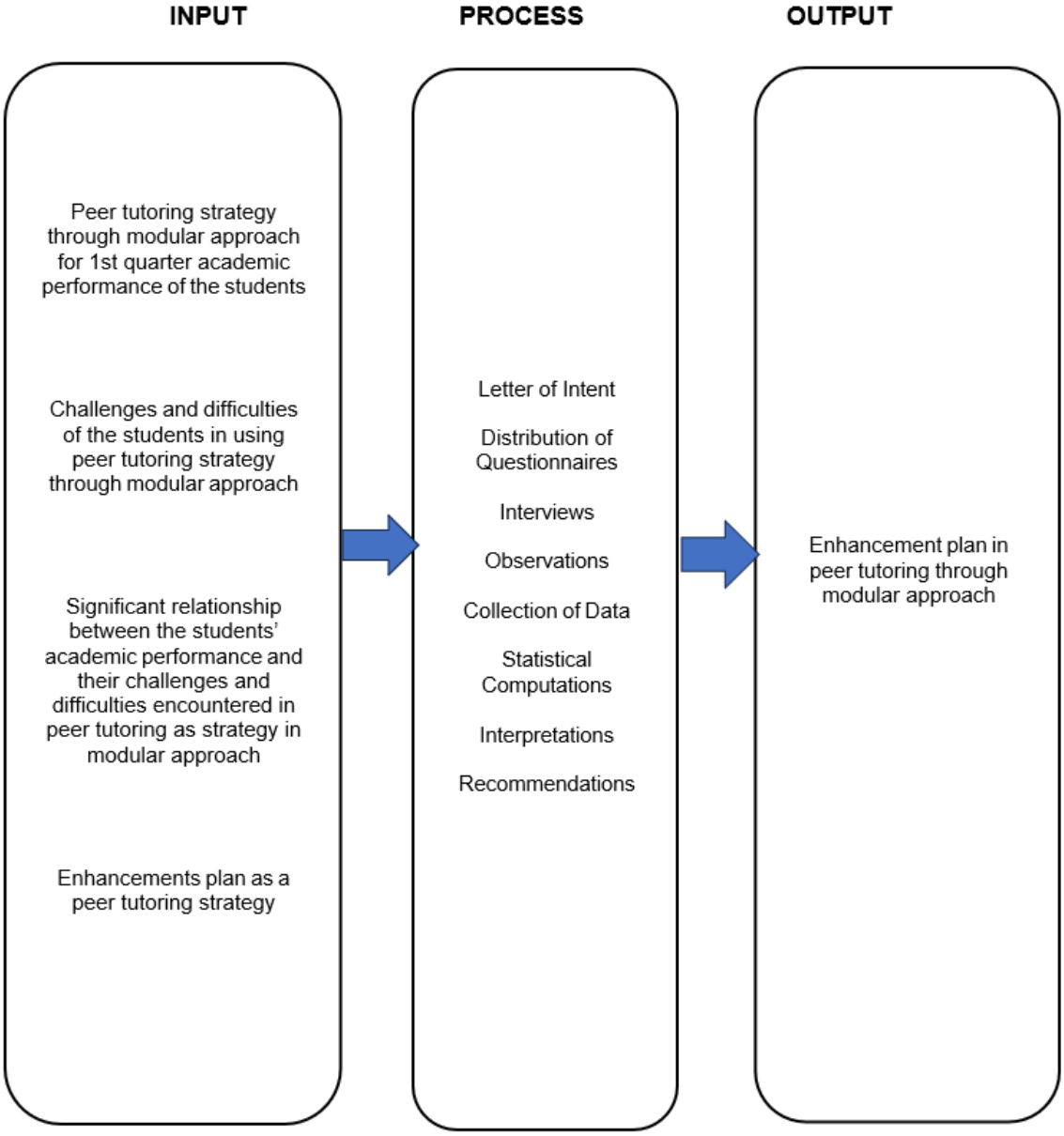

Figure 2. Flow of the Study

Peer Tutoring Strategy through Modular Approach and Students' Academic Performance. Implementing peer tutoring as a strategy within modular learning significantly contributes to improving students' academic performance during the second quarter. This approach allows learners to support one another by clarifying lessons, explaining difficult concepts, and sharing study techniques within their learning modules. Through peer assistance, students strengthen their understanding and confidence, which contributes to better mastery of competencies (An & Guo, 2024). Furthermore, peer tutoring fosters collaboration, active participation, and self-directed learning, which are essential in the modular learning setup. As students interact and exchange ideas, their comprehension deepens, resulting in improved academic achievement and performance outcomes.

Challenges and Difficulties of Students in Using Peer Tutoring through Modular Approach. Despite its benefits, students face several challenges and difficulties in using the peer tutoring strategy through modular learning. Common issues include unequal participation between tutors and tutee, lack of confidence among peer tutors, limited teacher guidance, and time constraints in completing activities. Some students struggle with communication barriers, unclear module instructions, or a lack of motivation to engage fully in the process. These difficulties can lessen the effectiveness of peer tutoring, especially when tutors themselves have insufficient mastery of the lesson. To overcome these problems, teachers must provide consistent monitoring, guidance, and appropriate pairing of students based on their learning levels to ensure productive peer interactions (Kos, 2025)**.**

Significant Relationship between Students' Academic Performance and Their Challenges and Difficulties in Peer Tutoring. The study found a significant relationship between students' academic performance and the difficulties they experience during peer tutoring within the modular learning approach. Students who experiences fewer challenges in peer tutoring often demonstrate higher academic performance, as they are more focused and motivated to complete modular tasks (Jafarian & Kramer, 2025). Conversely, students who encounter more difficulties-such as lack of cooperation, confusion in lessons, or poor peer coordination-tend to achieve lower performance levels.

Measures to Improve Peer Tutoring Implementation. To maximize the benefits of peer tutoring under the modular approach, several measures can be implemented. Teachers should provide orientation and training sessions for both tutors and tutees to develop communication, leadership, and collaboration skills. Modules should be designed with clear instructions and guided activities that promote teamwork and accountability. Regular monitoring and evaluation of peer interactions can help teachers identify difficulties early and provide timely feedback or interventions. Moreover, incorporating motivational strategies such as recognition or reward systems can sustain student engagement in peer learning. By strengthening these measures, schools can ensure that peer tutoring becomes a more effective and sustainable approach to improving academic performance and promoting collaborative learning in modular education.

Environment

The researcher conducted the study in Sta. Lucia National High School, District of Asturias 2 which belongs to the Division of Cebu Province. It was the first secondary school in the Municipality of Asturias, which was established in 1981 and is in Sta. Lucia, Asturias, Cebu. It is considered the biggest school in the District of Asturias 2 with its growing population with a total enrolment of 1,757 students, 57 teaching staff, 4 non-teaching staff, 3 utility staff, and a principal for school year 2024-2025. The school offers a complete Junior High School and Senior High School curriculum. Its Senior High School Department offers an Academic Track specializing in Humanities and Social Sciences (HUMSS), and a Technical-Vocational Track with strands on Home Economics (HE), Information and Communications Technology (ICT), and Electrical Installation and Maintenance (EIM).

Sta. Lucia National High School is 1.3 kilometers (km) away from the Barangay Hall of Sta. Lucia and is 13.1 kilometers (km) away from the town proper of Asturias. The Municipality of Asturias is now a first-class municipality in the northwestern area of Cebu and is approximately 71 kilometers (km) away from the city via the Trans-central Highway. The Municipality of Asturias consists of 27 barangays. The Municipality of Balamban surrounds it from the south, the Municipality of Tuburan from the north, the City of Danao from the east, and the waters of Tañon Strait from the west.

Sta. Lucia National High School occupies an area of one hectare and is strategically located in front of the Sta. Lucia Municipal Cemetery along the municipal road to Tuburan, providing safe access and minimizing flood risks due to a nearby concrete bridge connecting neighboring barangays. The school community is known for being warm, cooperative, industrious, and value-oriented, which has contributed to a safe and secure environment free from human-induced hazards and crime over the past three years.

Figure 3. Map of the Research Environment

Respondents

The respondents of this study were Grade 10 Junior High School students at Sta. Lucia National High School during the 2024 –2025 school year, who participated in modular learning using the peer tutoring strategy. A simple random sampling method was used to select the section that participated in the study. The total number of respondents was 42 students, consisting of 17 male and 25 female learners, as shown in Table 1. These students were chosen because they actively experienced the peer tutoring method in their modular classes, making them suitable participants for identifying the strategy's effectiveness, challenges, and relationship to academic performance. The balanced representation of both male and female respondents ensures that the findings reflect diverse perspectives and learning experiences within the Junior High School level.

Table 1 Distribution of Respondents

Respondents	N (Population)	Sample Size	Percentage (%)
Male Students	17	17	40.48%
Female Students	25	25	59.52%
TOTAL	**42**	**42**	**100%**

The distribution of respondents in Table 1 reflects a well-balanced representation of Junior High School learners directly engaged in modular learning using the peer tutoring strategy. Out of the total 42 respondents, 25 or 59.52% were female students, while 17 or 40.48% were male students. The data show that female students slightly outnumbered their male peers in the selected Grade 10 section at Sta. Lucia National High School during the 2024–2025 school year.

The predominance of female respondents suggests that more female students were actively involved in the implementation of the peer tutoring approach within the modular learning setup. This may also reflect the general enrollment trend in Junior High School, where female participation is often slightly higher. On the other hand, the substantial number of male respondents ensures that both genders are well represented, allowing the study to capture a balanced view of students' experiences, challenges, and performance outcomes under the peer tutoring strategy.

This distribution supports the reliability of the findings by ensuring that the perspectives and learning conditions of both male and female students are considered. The diverse composition of respondents provides a solid foundation for analyzing how peer tutoring influences academic performance and how challenges in modular learning may differ across genders.

Demographic Profile of Respondents by Age

The age profile of the respondents is important for understanding the characteristics that may affect their learning experiences and participation in peer tutoring as a teaching strategy for Araling Panlipunan 10. In this study, the age distribution shows a clear concentration of younger participants, with the majority (61.90%) being 14 to 15 years old. This indicates that the research primarily focuses on early high school students, who are likely at a developmental stage where guidance, peer interaction, and structured learning strategies are especially impactful.

Meanwhile, students aged 16 to 17 comprise 28.57% of the sample, and those aged 18 to 19 make up only 9.52%, while no participants fall below 14 years old or above 20 years. This pattern demonstrates that older students are minimally represented, and the findings of this study are largely reflective of the experiences of younger learners.

This age distribution highlights the need for peer tutoring strategies that are age- appropriate, engaging, and tailored to the distinct learning needs of early high school students. Tailoring instructional approaches to this age group ensures that learning interventions, like peer tutoring and modular activities, resonate with their developmental stage and effectively enhance both academic performance and participation in collaborative learning.

Instruments

The study utilized a research survey questionnaire adapted from Celeste et al. (2024) to collect data on peer tutoring within modular learning. The instrument was designed to assess students' challenges they encountered while engaging in peer tutoring activities. Its' component contained behavioral statements measured using a Likert scale to assess the level of difficulty experienced by students in the peer tutoring approach. Respondents indicated their degree of agreement with each statement by checking the corresponding response that best described their experience. The data gathered provided quantitative insights of peer tutoring strategy in enhancing student learning outcomes under the modular learning modality.

Data Gathering Procedures

The data collection process for this study was carefully planned and executed to ensure the accuracy, reliability, and validity of the information obtained on peer tutoring within modular learning among Junior High School students.

Preliminary Preparation. Prior to the actual data gathering, the researcher sought formal approval from the School Principal of Sta. Lucia National High School to conduct the study. A request letter was submitted, clearly stating the objectives and purpose of the research. Upon receiving approval, the researcher finalized an adopted research survey questionnaire which is a Likert-scale behavioral questionnaire assessing the challenges and experiences of students in peer tutoring to ensure that it accurately measured the intended variables.

Distribution of Questionnaire. Once all approvals were secured, the researcher personally distributed the research instruments to the selected respondents-Grade 10 Junior High School students of Sta. Lucia National High School who participated in peer tutoring sessions. Before administering the questionnaires, the researcher explained the study's objectives and assured the respondents that their answers would be treated with confidentiality and used solely for research purposes. The behavioral questionnaire was then administered to gather insights into their perceptions, difficulties, and attitudes toward peer tutoring. Throughout the process, the researcher closely monitored the activity to ensure that the respondents understood the instructions and answered the items honestly and independently. After all respondents had completed the questionnaires and tests, the researcher immediately retrieved the accomplished forms to maintain data accuracy and prevent loss of

responses. The data gathered were then organized, tallied, and encoded for analysis. The results were statistically analyzed, interpreted, and examined to assess peer tutoring strategy and the challenges experienced by both teachers and students. The entire procedure ensured that the findings of the study were valid, reliable, and reflective of the actual learning experiences of Junior High School students under modular learning.

Statistical Treatment

The data gathered in this study were analyzed using appropriate statistical tools to effectively address the research objectives. Frequency counts and simple percentages were used to describe the respondents' demographic profile, particularly their sex and overall distribution, enabling the researcher to present the data in a clear and systematic manner. The weighted mean was used to evaluate the level of challenges and difficulties students experienced while using the peer tutoring strategy in modular learning, as well as to assess their perceptions of its effectiveness in enhancing academic performance.

Additionally, the Pearson Product-Moment Correlation Coefficient (Pearsonr) was employed to investigate the relationship between students' academic performance and the challenges they encountered while using the peer tutoring strategy. This statistical test helped determine whether the effectiveness of peer tutoring was positively or negatively correlated with students' performance outcomes.

All collected data were handled with strict confidentiality and analyzed at a 5% level of significance ($p < 0.05$) to ensure the reliability and validity of the results. These statistical treatments collectively provided a strong foundation for interpreting the results, identifying relationships among variables, and drawing meaningful conclusions regarding the impact of peer tutoring on students' learning performance under modular instruction.

Scoring Procedure

The scoring procedure in this study was designed to assign numerical values to the respondents' answers, ensuring consistency, accuracy, and objectivity in data analysis. A standardized five-point Likert scale was employed to assess students' challenges and difficulties in using the peer tutoring strategy within modular learning, as well as their perceptions of its effectiveness in improving academic performance. Each statement in the questionnaire was rated based on the respondent's degree of agreement or manifestation, allowing for a systematic evaluation of their experiences and attitudes toward peer tutoring. The total scores were then tabulated, averaged, and interpreted using statistical tools such as the weighted mean and Pearson correlation to draw valid conclusions.

Assessment Scale for Level of Difficulties and Effectiveness of Peer Tutoring Strategy

Weight	Scale	Category	Verbal Description
5	4.51-5.00	Very Highly Effective (VHE)	Indicates that the respondents experienced very high levels of difficulty or effectiveness in peer tutoring; the strategy is fully demonstrated and consistently applied.
4	3.51-4.50	Highly Effective (HE)	Suggests that the respondents encountered or demonstrated a high degree of difficulty or effectiveness; peer tutoring is effective but may require minor improvement.
3	2.51-3.50	Moderately Effective (ME)	Reflects an average level of difficulty or effectiveness; peer tutoring is somewhat effective but inconsistently applied.
2	1.51-2.50	Effective (E)	Shows that the respondents experienced minimal difficulty or found peer tutoring less effective; improvements are needed for better results.
1	1.00-1.50	Not Effective (NE)	Indicates that the respondents experienced very low levels of difficulty or effectiveness; peer tutoring is poorly applied and needs substantial revision.

This scoring procedure provided a clear framework for quantifying the respondents' perceptions, ensuring accurate interpretation of their experiences with peer tutoring in modular learning. Through this scale, the study systematically identified which aspects of the peer tutoring strategy were most effective and which required improvement, thereby supporting the development of recommendations for enhancing academic performance among Junior High School students.

Assessment Scale in terms of Agree

Weight	Scale	Category	Verbal Description
5	4.51–5.00	Strongly Agree (SA)	The respondents strongly agree with the statements, indicating an exceptional level of agreement and strong belief in the effectiveness of the peer tutoring strategy through modular learning.
4	3.51–4.50	Agree (A)	The respondents agree with the statements, showing a strong positive perception of the benefits and impact of peer tutoring on students' academic performance.
3	2.51–3.50	Neutral (N)	The respondents neutral with the statements, reflecting a fair level of approval but with some uncertainties or areas of improvement in implementing the peer tutoring strategy.
2	1.51–2.50	Disagree (D)	The respondents disagree with the statements, but their responses indicate minor reservations or the need for certain improvements in the peer tutoring process.
1	1.00–1.50	Strongly Disagree (SD)	The respondents strongly disagree with the statements, suggesting that the peer tutoring strategy was perceived as ineffective or not beneficial under modular learning.

This scale provided a structured framework for interpreting the respondents' level of agreement regarding the use of peer tutoring in modular learning. By categorizing responses into measurable levels of agreement, the study was able to identify the degree of student support, recognize effective aspects of the strategy, and highlight areas that require further enhancement. This systematic approach ensured that the analysis accurately reflected students' experiences and perceptions, providing a solid basis for improving the implementation of peer tutoring in Junior High School settings.

DEFINITION OF TERMS

For clarity and better understanding of the study, the following terms are defined textually and/or operationally.

Abreast – This refers to staying current and informed about recent developments or changes. A teacher who keeps abreast of new strategies ensures that teaching remains relevant. It involves continuous learning and awareness of educational trends.

Academic Performance – This refers to the measurement of student achievement across various academic subjects. Teachers and education officials typically measure achievement using classroom performance, graduation rates, and results from standardized tests. Good academic performance reflects a student's understanding, effort, and consistency.

Access – Access refers to the opportunity or right to use or benefit from something, such as educational programs or other resources. It ensures that every learner can receive quality instruction regardless of their background. Equal access promotes fairness and inclusion in learning

Activities – These are specific tasks or exercises given to help students learn and apply what they have studied. Activities can include reading, answering modules, group work, or discussions. They are designed to make learning more interactive and engaging.

Adapted – To be adapted means to be changed or adjusted to fit a new situation or purpose. In education, lessons are often adapted to suit different learning styles and abilities. This ensures that all students can understand and participate in learning.

Adept – This describes someone who is highly skilled or proficient at doing something. An adept teacher can manage lessons effectively and respond to student needs. It shows mastery and competence in a specific area.

Aspiration – Aspiration refers to a strong desire or ambition to achieve something meaningful. Students often aspire related to education, career, or personal growth. It motivates individuals to work hard and reach their goals.

Assessment – Assessment is the process of measuring how much a student has learned or achieved. It may include quizzes, projects, or performance tasks. Teachers use assessments to guide instruction and improve student outcomes.

Asymmetrical Relationship – This term refers to a learning relationship where one person has more knowledge than the other. In peer tutoring, the tutor teaches while the tutee learns, creating an unequal but productive relationship. It helps both learners grow through interaction and feedback.

Competencies – Competencies are the knowledge, skills, and attitudes students need to perform effectively in learning tasks. They are the foundation of the curriculum set by DepEd. Developing competencies ensures that students can apply learning in real-life situations.

Cooperative Learning – This is a teaching approach where students work together in groups to achieve shared goals. It encourages teamwork, responsibility, and communication among learners. Through cooperation, students learn both academic and social skills.

Crisis – A crisis is a difficult or dangerous situation that requires immediate attention. The COVID-19 pandemic is an example of a global crisis that affected education systems. Teachers and students had to find new ways to continue learning despite the challenges.

Curiosity – Curiosity means having a strong desire to learn, explore, or understand something new. It drives students to ask questions and seek answers beyond the lesson. Encouraging curiosity helps develop critical thinking and creativity.

Delivery of Instruction – This refers to the method or process by which teachers present lessons to students. It can be done through face-to-face, modular, or online learning. Effective delivery ensures that students clearly understand and apply what they learn.

Dismal – Dismal describes something very poor, disappointing, or lacking success. In education, dismal results may indicate that students need better learning support. It often motivates teachers to improve teaching strategies.

Distance Learning – Distance learning is a mode of education where teachers and students are not physically together in a classroom. It uses printed modules or digital platforms to deliver lessons. This approach became widely used during the COVID-19 pandemic.

Educational Modality – An educational modality refers to the method or approach used to deliver instruction. Examples include modular, online, blended, and face- to-face learning. Choosing the right modality helps ensure effective and accessible education.

Emergence – Emergence means the process of becoming visible, known, or important. The emergence of new learning strategies, such as modular teaching, helped schools continue instruction during the pandemic. It highlights adaptation to change in education.

Enhance – To enhance means to improve or make something better. Teachers enhance learning by using creative strategies that increase student participation. It focuses on upgrading both teaching quality and learning outcomes.

Equitable – Equitable means fair and just, ensuring that everyone receives the same opportunities. In education, equity allows all students to learn regardless of their social or economic status. It is a foundation of inclusive and quality learning. **Evaluation** – Evaluation is the process of reviewing and judging the value or effectiveness of something. Teachers evaluate student progress to determine strengths and weaknesses. It helps guide further improvement in teaching and learning.

Goal – A goal is a desired result or target that one aims to achieve. In education, goals guide both teachers and students in planning and achieving success. Setting clear goals gives direction and motivation to the learning process.

Independent Learning – Independent learning happens when students study and manage their learning on their own. It promotes responsibility, time management, and self-discipline. Through modular learning, students practice independence and self-guided study.

Individualized Instruction – This refers to teaching methods designed to meet each student's unique needs. It allows teachers to adjust lessons based on ability, pace, and interests. This approach supports diverse learners in achieving success.

Innovate – To innovate means to create new ideas, methods, or tools to improve something. Teachers innovate by developing creative strategies to enhance classroom learning. Innovation is essential for adapting to modern educational challenges.

Instructional Program – An instructional program is a structured plan of lessons and activities for teaching a subject. It ensures that learning follows a logical and effective process. A well-designed program supports both teaching goals and student development.

Intervention Strategy – This is a specific action or method used to address a problem in learning. For example, peer tutoring is an intervention to help struggling students. It aims to improve performance and close learning gaps.

Learners – Learners are individuals who are gaining knowledge, skills, and values through study or experience. In schools, they refer to students under the guidance of teachers. Every learner has unique learning styles and needs.

Learning Competencies. These refer to the desired knowledge, skills, and behaviors that the students expect to master from the lesson.

Learning Continuity Plan (BE-LCP) – This plan ensures that education continues during emergencies like the pandemic. It guides schools in adopting flexible learning modalities. The goal is to protect every learner's right to continuous education.

Lifelong Learning – Lifelong learning means continuously gaining knowledge and skills throughout one's life. It goes beyond formal education and includes personal and professional growth. This mindset helps individuals adapt to changes in society.

Most Essential Learning Competencies (MELC's). These can be defined as the students' need, considered indispensable, in the teaching-learning process to building skills to equip learners for subsequent grade levels and subsequently, for lifelong learning.

Modular Approach – The modular approach divides lessons into self-contained learning units called modules. Students can study each module at their own pace and time. It promotes independent learning and self-assessment.

Motivation – Motivation is the internal drive that encourages students to learn and succeed. It can come from interest, rewards, or personal goals. A motivated learner actively participates and performs better in class.

Paradigm Shift – A paradigm shift refers to a major change in the way people think or approach something. In education, it involves adapting new teaching methods to fit new conditions like online or modular learning. It challenges traditional practices and promotes innovation.

Peer Tutoring – Peer tutoring is a learning method where students help each other by taking turns as tutor and tutee. It builds teamwork, confidence, and understanding of lessons. Both students benefit as they teach and learn from one another.

Personalized Learning – Personalized learning tailors lessons to fit each student's strengths, weaknesses, and interests. It allows learners to progress at their own pace. This approach increases engagement and ensures meaningful learning.

Quality Education – Quality education provides students with useful knowledge, skills, and values for life. It ensures that learning is effective, inclusive, and relevant to modern needs. The goal is to prepare learners for personal and professional success.

Remedial Instruction – Remedial instruction is extra teaching given to students who are struggling in a subject. It helps them catch up and strengthen weak areas. This approach ensures that no learner is left behind.

Self-Learning Modules (SLM) – These are printed or digital learning materials that students use for independent study. Each module includes lessons, exercises, and assessments. It helps ensure continuous learning even without face-to-face classes.

Sustainable Development – Sustainable development means progress that meets present needs without harming future generations. In education, it focuses on building lifelong learning and responsible citizenship. It ensures that growth benefits both people and the environment.

2. PRESENTATION OF DATA, ANALYSIS AND INTEPRETATION

This chapter presents the analyses and interpretations of the data collected from the study, which aimed to assess peer tutoring as a strategy in teaching Araling Panlipunan 10 among Grade 10 students. The analyses focus on students' demographic profile, academic performance, challenges and difficulties encountered in the modular learning setup, and the relationship between these challenges and their performance.

At the outset, the chapter examines the demographic characteristics of the respondents, including age and gender, to provide a clear understanding of the population involved in the study. It further evaluates the students' academic performance across specific topics using peer tutoring and a modular approach, providing insights into the strategy's effectiveness in facilitating learning outcomes. Additionally, the chapter analyzes the challenges and difficulties faced by students in engaging with peer tutoring activities within the modular learning environment. The correlation between these challenges and students' academic performance is also examined to assess the extent to which these difficulties affect learning outcomes. The findings and interpretations presented in this chapter serve as the foundation for recommending strategies to enhance peer tutoring implementation and improve students' learning experiences in Araling Panlipunan 10.

PROFILE OF THE RESPONDENTS

Understanding the respondents' demographic profile is essential for interpreting their experiences and academic performance in peer tutoring for Araling Panlipunan 10. Age and gender provide context for how students engage with the modular learning approach, with the majority being 14 to 15 years old and female, which may influence focus, participation, and learning behaviors. This information also helps identify trends, ensure the sample represents the student population, and guide strategies to address challenges such as limited learning resources or distractions at home, thereby supporting effective implementation of peer tutoring.

Table 2 Demographic Profile of Respondents by Age (n=42)

Variable	Frequency (n=42)	Percentage (100%)
Demographic Profile of Respondents by Age		
20 years Old and Above	0	0.00%
18 to 19 years Old	4	9.52%
16 to 17 years Old	12	28.57%
14 to 15 years Old	26	61.90%
Below 14 years Old	0	0.00%
Total	**42**	**100.00%**

Table 2 shows that most respondents, 61.90% (26 students), belong to the 14 to 15 years old age group, indicating a strong concentration of early high school learners. Students aged 16 to 17 comprise 28.57% (12 students), while those aged 18 to 19 account for only 9.52% (4 students). No respondents were below 14 years old or above 20, indicating that students outside this age range were not represented in the study.

This distribution suggests that the study's findings largely reflect the experiences, challenges, and learning behaviors of younger adolescents. Early high school students are typically at a developmental stage where peer influence, collaborative learning, and structured guidance are highly effective. Their cognitive and social maturity may affect how they interact in peer tutoring activities, follow modular instructions, and manage independent learning tasks. The lower representation of older students implies that conclusions regarding older age groups cannot be generalized from this study.

The implications of this demographic pattern are significant for instructional planning. Peer tutoring strategies and modular learning activities should be designed to match the cognitive and emotional readiness of the majority age group, ensuring that tasks are engaging, comprehensible, and developmentally appropriate. These findings are supported by Zha et al. (2025), who emphasized that teachers and curriculum planners should provide additional support mechanisms, such as scaffolding and guided practice, to help younger students fully benefit from peer learning. Furthermore, understanding that the sample is skewed toward younger learners can guide future studies to either focus on this group or include a broader age range for comparative analysis.

Simply put, the age profile emphasizes the need for age-sensitive teaching strategies that optimize learning outcomes, enhance participation, and address the unique challenges faced by early high school students in modular and peer- assisted learning environments.

Gender Distribution of Respondents

The distribution of respondents in terms gender is essential in analyzing how male and female students may experience, participate in, and respond to peer tutoring as a strategy in teaching Araling Panlipunan 10. Gender can influence learning behaviors, engagement levels, communication styles, and collaboration patterns within peer-assisted learning activities. For example, female students may demonstrate higher participation or preference for collaborative work, while male students may exhibit different interaction dynamics that can affect group performance.

Examining gender distribution also helps ensure that the sample is representative of the population, allowing researchers to identify potential differences in challenges, academic performance, and responses to the modular learning approach. In this study, females constitute the majority of respondents, which highlights the need to consider gender-sensitive strategies that encourage balanced participation, promote inclusivity, and address any disparities in learning experiences.

Moreover, understanding the gender composition can guide teachers in designing interventions, groupings, and peer tutoring activities that optimize collaboration and learning outcomes for all students. It also allows the study to provide insights into whether certain challenges or successes in peer tutoring are more prevalent in one gender group, helping to inform future instructional planning and policy decisions.

Table 3 Gender Distribution of Respondents (n=42)

Variable	Frequency (n=42)	Percentage (100%)
Demographic Profile of Respondents by Gender		
Male	17	40.48%
Female	25	59.52%
Total	**42**	**100.00%**

Table 3 illustrates the gender distribution of respondents. Of the 42 participants, 25 (59.52%) are female and 17 (40.48%) are male, indicating that females form most of the study population, while males represent a smaller proportion. Gender composition is important as it may influence how students engage with peer tutoring and modular learning strategies in Araling Panlipunan 10. Gender differences can affect participation styles, communication, collaboration, and responses to challenges in learning activities. For example, female students may demonstrate higher levels of engagement or consistency in completing modular tasks, whereas male students may approach peer-assisted learning differently, affecting group dynamics and overall outcomes.

The analysis indicates that gender may influence learning experiences, especially in collaborative and peer-supported learning environments. The predominance of female students implies that findings of the study, such as challenges encountered or performance outcomes, may largely reflect the experiences of female learners. This has implications for designing instructional strategies, where teachers need to ensure that learning activities are inclusive, promote balanced participation, and address any disparities that may arise between male and female students.

Moreover, understanding gender distribution can inform interventions aimed at enhancing peer tutoring effectiveness. This result had been supported with the study conducted by Goodfellow (2024), who opined that educators could consider gender-responsive approaches, such as mixed-gender groupings, differentiated support, and monitoring participation to ensure equitable learning opportunities. It also highlights the importance of creating learning environments that cater to diverse student needs, helping maximize engagement and academic success for both male and female learners.

Grade 10 Students' 1st Quarter Performance Using Peer Tutoring and Modular Learning

Assessing the first-quarter academic performance of Grade 10 students in peer tutoring in modular learning is essential for determining the effectiveness of these instructional strategies. This performance data provides insight into how well students grasp the lessons in Araling Panlipunan 10 reflecting their comprehension, application of knowledge, and mastery of key topics.

Evaluating academic performance helps identify the strengths and weaknesses of the peer tutoring approach in Araling Panlipunan 10 within the modular learning framework, highlighting areas where students excel and

those that require additional support or intervention. It also allows teachers to determine whether peer-assisted learning enhances collaboration, engagement, and retention of content, and whether the modular approach supports self-directed learning.

Furthermore, analyzing student performance has implications for instructional planning, as it guides teachers in improving lesson design, peer interaction, and the alignment of activities with learning objectives. By understanding how students perform under these strategies, educators can implement targeted interventions, refine teaching methods, and ensure that academic outcomes meet curriculum standards, ultimately promoting better learning experiences and higher achievement for all students.

Table 4 Grade 10 Students' 1st Quarter Performance Using Peer Tutoring and Modular Learning

(n=42)

Variable	n	O	VS	S	FS	DN	M	SD	Qualitative Description
Climate Change	42	16	15	11	-	-	**88.44**	**4.36**	**Very Satisfactory**
Solid Waste	42	12	16	10	4	-	**87.02**	**4.52**	**Very Satisfactory**
Illegal Logging	42	8	10	18	6	-	**85.33**	**4.68**	**Very Satisfactory**
1st Quarter Final Grade	**42**	**16**	**15**	**11**	**-**	**-**	**87.57**	**4.39**	**Very Satisfactory**

Note. The rating scale and qualitative description is based on DepEd Memo #8, s. 2015:

90.00 to 100.00 – Outstanding (O); 85.00 to 89.99 – Very Satisfactory (VS); 80 to 84.99 – Satisfactory (S); 75.00 to 79.99 – Fairly Satisfactory (FS); 74.99 and below – Did not meet expectation (DN).

CLIMATE CHANGE

Competency 1: Explain the causes and effects of climate change on people, the economy, and the environment.

Competency 2: Analyze how human activities make climate change worse.

Competency 3: Propose ways that individuals and communities can help reduce its effects.

Table 4 presents the 1st Quarter academic performance of Grade 10 students using a peer tutoring strategy through a modular approach. In Climate Change, 16 students received an Outstanding (O) rating, 15 students received a Very Satisfactory (VS) rating, 11 students were rated Satisfactory (S), and no students received a Fairly Satisfactory (FS) or Did Not Meet Expectation (DN) rating. The mean score was 88.44, categorized as *Very Satisfactory*, with a standard deviation of 4.36. This relatively low standard deviation suggests that students' grades were relatively consistent and clustered closely around the mean, reflecting stable performance across the cohort (Franklin, 2019; Pagano & Gauvreau, 2018).

SOLID WASTE

Competency 1: Identify the sources and types of solid waste found in the community.

Competency 2: Explain how improper waste disposal affects people's health, the environment, and the economy.

Competency 3: Demonstrate proper solid waste management practices such as reducing, reusing, recycling, and recovering in school and community settings.

A total of 12 students received an Outstanding (O) rating, 16 students received a Very Satisfactory (VS) rating, 10 students were rated Satisfactory (S), 4 students received a Fairly Satisfactory (FS) rating, and no students received a Did Not Meet Expectation (DN) rating. The mean score was 87.02, falling under *Very Satisfactory*, with a standard deviation of 4.52. This slightly higher SD compared to Climate Change indicates more variation in student performance, which aligns with previous research suggesting that new or more complex content areas may produce broader performance spreads when using self-paced modular approaches (Bloom, 1984; Slavin, 2011).

ILLEGAL LOGGING

Competency 1: Explain the causes and effects of illegal logging on the environment and society.

Competency 2: Analyze how human greed and poverty contribute to the continuation of illegal logging.

Competency 3: Suggest community programs and government actions to stop illegal logging and protect forests.

With 8 students receiving an Outstanding (O) rating, 10 students receiving a Very Satisfactory (VS) rating, 18 students rated Satisfactory (S), 6 students received a Fairly Satisfactory (FS) rating, and no students received a Did Not Meet Expectation (DN) rating, the mean score was 85.33, categorized as *Very Satisfactory*, with a standard deviation of 4.68. This was the highest SD among the three topics, indicating that grades for Illegal

Logging were more widely dispersed. A greater spread in scores can reflect variability in student understanding of the material or differential engagement with the topic (Field, 2018).

For the 1st Quarter Final Grade, 16 students received an Outstanding (O) rating, 15 students received a Very Satisfactory (VS) rating, 11 students were rated Satisfactory (S), and no students received a Fairly Satisfactory (FS) or Did Not Meet Expectation (DN) rating.

The overall mean final grade for the students was 87.57, again classified as *Very Satisfactory*, with an overall standard deviation of 4.39. The similarity of this SD to that of the Climate Change topic indicates overall consistency in students' performance across subjects. This suggests that the peer tutoring strategy through the modular approach provided a robust framework that supported stable academic achievement among students (Johnson & Johnson, 1989; Roscoe & Chi, 2007). Peer tutoring has been shown to improve not only individual content understanding but also learning consistency across diverse learners (Kulik & Kulik, 1992).

Overall, the findings imply that students performed consistently well in environmental topics, with the majority achieving Very Satisfactory or Outstanding ratings. The relatively low standard deviations across most subjects suggest that the modular peer tutoring approach helped maintain solid academic performance among the students.

Challenges and Difficulties Encountered in Peer Tutoring as Strategy in Modular Approach

Understanding the challenges and difficulties students encounter in peer tutoring within a modular learning approach is essential for evaluating the effectiveness of this instructional strategy. Identifying these obstacles helps educators recognize factors that hinder learning, such as limited access to learning materials, distractions at home, time management issues, or difficulty understanding module content.

Examining these challenges provides insights into how students engage with peer-assisted learning and the modular approach, revealing potential gaps in instructional design, support systems, and resources. It also allows teachers to develop targeted interventions that address specific learning barriers, ensuring that students can fully benefit from peer tutoring activities.

Moreover, understanding these difficulties has implications for improving academic performance, engagement, and motivation. By addressing the most pressing challenges, educators can enhance the learning experience, create a more supportive environment, and ensure that peer tutoring and modular learning strategies are both practical and effective for all students.

Table 5 ***Challenges and Difficulties Encountered in Peer Tutoring as Strategy in Modular Approach***

(n=42)

No.	Statements	Mean	Standard Deviation	Qualitative Description
1	I easily get distracted and disturbed at home due to my learning environment.	3.57	1.09	Agree
2	I have limited or sometimes no access to printed learning materials at home such as books, journals and others.	3.52	1.03	Agree
3	I have difficulty concentrating and am sometimes anxious in answering modular activities.	3.38	0.97	Neutral
4	I have difficulty searching for related online resources using the internet.	3.29	1.03	Neutral
5	The learning activities are less engaging and interactive.	3.17	1.17	Neutral
6	I feel the pressure from my peers and family to religiously comply with the requirements for my module.	3.10	1.04	Neutral
7	I am not satisfied of the modular instruction as delivery mode of learning	3.05	1.02	Neutral
8	I lack moral and emotional support and guidance from my parents and other family members.	2.98	1.08	Neutral
9	The instructions in the modules are difficult to understand and follow.	2.83	1.13	Neutral
10	I have no available gadgets such as laptops, cellular phones, computers and the like.	2.48	1.24	Disagree
Overall Mean and Standard Deviation		3.09	1.08	Neutral

Note: The challenges and difficulties were measured and interpreted using the following scales and verbal interpretations: Strongly Agree (4.51 – 5.00); Agree (3.51 – 4.50); Neutral (2.51 – 3.50); Disagree (1.51 – 2.50); and Strongly Disagree (1.00 – 1.50).

Table 5 shows a detailed analysis of the challenges and difficulties encountered by Grade 10 students in peer tutoring as a strategy in modular learning. The highest mean scores indicate that students agree they are easily distracted at home (M = 3.57, SD = 1.09) and have limited or no access to printed learning materials such as books and journals (M = 3.52, SD = 1.03), highlighting these as the most pressing challenges. Responses to other items-including difficulty concentrating and anxiety in answering modular activities (M = 3.38, SD = 0.97), challenges in searching for online resources (M = 3.29, SD = 1.03), perceptions of less engaging activities (M = 3.17, SD = 1.17), pressure from peers and family (M = 3.10, SD = 1.04), satisfaction with modular instruction (M = 3.05, SD = 1.02), lack of moral and emotional support (M = 2.98, SD = 1.08), and difficulty understanding module instructions (M = 2.83, SD = 1.13)-fell within the neutral range, suggesting that these challenges are present but less pronounced. In contrast, students disagreed that lack of available gadgets such as laptops or phones was a problem (M = 2.48, SD = 1.24).

The overall mean score of 3.09 (SD = 1.08) reflects a generally neutral attitude toward the set of challenges, indicating that while specific issues like environmental distractions and limited resources are significant, students' overall perceptions of modular learning challenges are moderate. Descriptive statistics such as mean and standard deviation provide insight into central tendency and the degree of variability in responses, which is common practice in Likert-type surveys (Sullivan & Artino, 2013; Scribbr, n.d.).

Table 6 ***Pearson Product Moment of Correlation Coefficient (r) between the students' Academic Performance and their Challenges and Difficulties Encountered in Peer Tutoring as Strategy in Modular Approach (n=42)***

Variables		1st Quarter Final Grade		
		Climate Change	Solid Waste Managemen t	Illegal Logging
Challenges and Difficulties Encountered in Peer Tutoring as Strategy in Modular Approach	Pearson Correlation	.207	.199	.224
	Sig. (2- tailed)	.189	.208	.154
	N	42	42	42

**. Correlation is significant at the 0.05 level (2-tailed).

Table 6 presents the Pearson Product-Moment Correlation Coefficient (r) between students' academic performance and the challenges and difficulties they encountered in peer tutoring using the modular approach. The analysis revealed very low positive correlations across all three competencies, which were not statistically significant: Climate Change ($r = 0.207$, $p > 0.05$), Solid Waste Management ($r = 0.199$, $p > 0.05$), and Illegal Logging ($r = 0.224$, $p > 0.05$). These results indicate that the challenges encountered by students, such as distractions at home, limited access to learning materials, and difficulty understanding modules, did not directly affect their academic performance. In other words, regardless of the level of performance, students' experiences of challenges in modular peer tutoring did not substantially influence their scores across the three competencies. This may be attributed to factors such as students' individual resilience, self-regulated learning strategies, and prior knowledge, which may mitigate the impact of challenges on academic outcomes (Sullivan & Artino, 2013). Alternatively, it suggests that while peer tutoring offers some benefits, its effectiveness in modular learning environments may be limited without additional structured support, such as clear role definitions, guided prompts, and teacher- facilitated reflections, which can help ensure that peer interactions meaningfully contribute to learning outcomes.

3. SUMMARY, FINDINGS, CONCLUSION, AND RECOMMENDATION

Summary

The study assessed the effectiveness of peer tutoring as an enhancement strategy in teaching Araling Panlipunan 10 to Grade 10 students. It examined the students' demographic profile, including age and gender, to provide context for their learning experiences and engagement in the modular learning approach. The research further evaluated students' academic performance across specific topics-Climate Change, Solid Waste, and Illegal Logging-using peer tutoring combined with modular activities to determine its learning outcomes.

In addition, the study aimed to analyze the challenges and difficulties encountered by students in implementing peer tutoring within the modular setup,

identifying key obstacles such as limited access to printed materials, distractions at home, and time management issues. The correlation between these challenges and academic performance was also examined, revealing a low positive relationship that was statistically not significant. This indicates that, while challenges exist, they do not substantially affect students' overall performance in the modular peer tutoring strategy.

The findings highlight that peer tutoring is an effective strategy when integrated with modular learning, can support consistent academic performance and facilitate collaborative learning among early high school students. Moreover, understanding the demographic characteristics and the difficulties encountered provides valuable insights for educators to design age-appropriate, engaging, and supportive peer tutoring activities. Targeted interventions-such as providing printed learning materials, improving the home learning environment, and implementing structured guidance-can further enhance the effectiveness of peer- assisted learning strategies and optimize student outcomes in Araling Panlipunan 10.

Findings

The academic performance of students using peer tutoring through a modular approach shows that Grade 10 learners performed well in the second quarter, particularly in the topics of Climate Change, Solid Waste Management, and Illegal Logging. In Climate Change, most students 16 achieved Outstanding, 15 were Very Satisfactory, and 11 were Satisfactory, with mean score of 88.44 classified as "Very Satisfactory," indicating a high level of comprehension of the causes and effects of climate change, human contributions to its worsening, and proposed mitigation strategies. The low standard deviation (4.36) reflects consistent performance among students. In Solid Waste Management, performance remained strong, with 12 students rated Outstanding, 16 Very Satisfactory, 10 Satisfactory, and 4 Fairly Satisfactory. The mean of 87.02 shows that students were able to identify waste types, explain the effects of improper disposal, and demonstrate proper waste management practices. In Illegal Logging, although slightly lower in consistency, students still performed very satisfactorily with a mean of 85.33, demonstrating understanding of the causes and effects of illegal logging, analyzing contributing factors such as poverty and greed, and suggesting actionable solutions for forest protection. The overall first quarter grade, with a combined mean of 87.57 ("Very Satisfactory"), confirms that the peer tutoring strategy through the modular approach helped students achieve substantial mastery across topics, highlighting its effectiveness in enhancing engagement, comprehension, and collaboration. These findings suggest that peer tutoring in a modular setup facilitates knowledge construction, as students actively explain, guide, and learn from one another.

The structured modular tasks complement peer discussions, ensuring coverage of learning outcomes and reinforcing self-directed learning, and the consistency across topics indicates that the strategy helps maintain equitable understanding among students. Students also encountered various challenges while engaging with peer tutoring and modular learning. The analysis revealed that the most pressing challenges were limited or no access to printed learning materials (mean = 3.52) and distractions at home (mean = 3.57), which were identified as the most significant difficulties. Moderate challenges reported by students included time management, maintaining focus, internet connectivity, difficulty in searching for resources, and issues related to module design and engagement, with mean scores ranging from 3.17 to 3.38.

The least significant challenges were access to digital devices (mean = 2.48) and lack of financial support (mean = 2.71). The overall mean of 3.09 (Neutral) indicates that, while students face several difficulties, these challenges are generally manageable. The findings highlight that peer tutoring is effective but influenced by environmental and resource-related factors. Students' learning experiences were primarily affected by external factors, such as the home environment and limited access to learning materials, rather than by the peer tutoring strategy itself. To optimize outcomes, interventions such as providing printed modules, offering structured time management guidance, and promoting engaging and interactive modules are recommended.

The relationship between students' academic performance and the challenges they encountered was analyzed using the Pearson correlation coefficient, revealing a low positive correlation ($r = 0.206$, $p > 0.05$). This relationship is not statistically significant, indicating that students' academic performance was not substantially affected by the difficulties they experienced during peer tutoring. This suggests that peer tutoring can mitigate some learning barriers, allowing students to perform satisfactorily despite challenges. However, for maximum effectiveness, peer tutoring should be reinforced with teacher guidance, structured prompts, and support mechanisms to address environmental and resource

constraints. This would ensure that challenges do not impede the benefits of collaborative learning.

Based on the findings, several enhancements are recommended to improve the peer tutoring experience. First, providing students with adequate learning materials is essential to ensure access to printed modules or supplementary resources, thereby reducing reliance on materials available at home. Second, structured time management should be incorporated by offering guidance on pacing and scheduling tasks to minimize distractions and avoid overload. Third, interactive and engaging modules need to be developed by improving the design and variety of activities to sustain student interest and active participation. Fourth, teacher-facilitated scaffolding is essential, which involves integrating periodic teacher check-ins, clarifications, and feedback sessions to support peer discussions and reinforce learning. Lastly, home learning environmental support must be encouraged by involving family members or establishing quiet learning spaces to reduce environmental distractions.

Implementing these enhancements can address the most pressing difficulties and maximize the positive impact of peer tutoring, further strengthening students' comprehension, engagement, and academic performance in Araling Panlipunan 10. The study confirms that peer tutoring through a modular approach significantly improves student learning outcomes, with students achieving Very Satisfactory grades in key topics. While challenges such as limited materials and home distractions exist, these do not critically affect academic performance. Targeted enhancements can further optimize the strategy, making peer-assisted modular learning a highly effective instructional approach for Grade 10 students.

Conclusion

Based on the analysis and interpretation of the data, the study concludes that peer tutoring through the modular approach is an effective strategy for teaching Araling Panlipunan 10 to Grade 10 students. The students demonstrated very satisfactory academic performance across the topics of Climate Change, Solid Waste Management, and Illegal Logging, indicating that the combination of peer-assisted learning and structured modular activities promotes comprehension, collaboration, and mastery of content. Although students encountered challenges such as limited access to printed learning materials and distractions in the home environment, these difficulties did not significantly affect their overall academic performance. The study further concludes that peer tutoring, when supported by well-designed modules and guided facilitation, fosters active engagement and self- directed learning.

Finally, the study emphasizes that enhancements such as providing additional learning resources, promoting interactive and engaging modules, implementing structured time management strategies, and incorporating teacher guidance can further strengthen the effectiveness of peer tutoring in modular learning setups. These improvements will help ensure that all students benefit maximally from this instructional approach, achieving both academic success and improved learning experience.

Recommendation

Based on the findings and conclusions of this study, the following recommendations are proposed to enhance the effectiveness of peer tutoring as a strategy using the modular approach in teaching Araling Panlipunan 10. Teachers are encouraged to design age-appropriate and engaging modules that are clear, concise, and aligned with learning outcomes. They should provide structured guidance and regular feedback during peer tutoring activities to ensure student understanding and accountability. Incorporating interactive and collaborative activities can further maintain student engagement and promote active participation. Students, on the other hand, are advised to practice effective time management and self-discipline when completing modular activities to maximize learning outcomes. They should actively participate in peer tutoring sessions by preparing in advance and supporting their classmates in understanding the module content. Utilizing available online and offline resources to supplement learning, especially when printed materials are limited, is also recommended.

School administrators play a crucial role in supporting peer tutoring strategies by ensuring the availability of adequate learning materials, including printed modules and digital resources, for all students. Providing a conducive learning environment for modular activities, minimizing distractions, and enhancing focus are essential to help students perform better. Additionally, organizing teacher training or workshops on implementing peer tutoring strategies effectively within modular learning setups can improve overall instructional quality. Finally, for future researchers, it is recommended to conduct further studies exploring the effectiveness of peer tutoring across different subjects, grade levels, or learning modalities. Investigating additional factors that may influence students' performance and engagement, such as parental support, internet access, or socio- emotional factors, can also provide valuable insights. Implementing these recommendations can

strengthen peer tutoring practices, enhance student learning experiences, and ultimately improve academic performance in Araling Panlipunan 10.

4. OUTPUT OF THE STUDY

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Rationale

A well-structured and clearly implemented Peer Tutoring Enhancement Plan in Araling Panlipunan 10 is essential to improving students' academic performance, motivation, and engagement in the subject. Social Studies, being a conceptually rich and critical discipline, often challenges learners' comprehension and interest, particularly under the modular learning setup where teacher supervision is limited. Peer tutoring provides a meaningful way to address these learning gaps by allowing students to help one another through guided interaction, collaboration, and shared responsibility in achieving learning goals.

This study was conducted to enhance the learning process in Araling Panlipunan 10 by developing and implementing a Peer Tutoring Enhancement Plan that promotes cooperation, communication, and critical thinking among Junior High School students. The plan emphasizes key strategies such as pairing students, assigning tasks, providing contact and resources, encouraging interaction, and setting clear guidelines. These structured approaches are designed to create a supportive learning environment where both tutors and tutees can benefit academically and socially.

Furthermore, the enhancement plan seeks to foster independent learning and deepen students' understanding of historical, political, and social concepts. By incorporating peer tutoring into modular instruction, the study aligns with the Department of Education's goal of providing inclusive and equitable quality education, even in challenging learning environments such as distance or blended learning.

Overall, this study contributes to the enhancement of teaching practices in Araling Panlipunan 10 by offering a practical and sustainable framework that empowers students to take active roles in their learning. Additionally, it enables teachers to maximize learner participation, strengthen collaboration, and promote academic excellence through the effective application of peer-assisted learning strategies.

BIBLIOGRAPHY

[1] Alizadeh,A., Mahmoodi, F., & Adib, Y. (2024). Representation of cultural patterns of individualism and collectivism in primary school textbooks. Intercultural Education,35(3),257-282. https://doi.org/10.1080/14675986.2024.2318144.

[2] An, F., & Guo, J. (2024). Does students' perceived peer support facilitate their deeper learning? The chain mediating role of computer self-efficacy and perceived classroom mastery goal structure. Education and Information Technologies, 29(7), 9013-9036. https://doi.org/10.1007/s10639-023-12193-7.

[3] Baena-Morales, S., Prieto-Ayuso, A., Merma-Molina, G., & González-Víllora, S. (2024). Exploring physical education teachers' perceptions of sustainable development goals and education for sustainable development. Sport, EducationandSociety,29(2),162-179. https://doi.org/10.1080/13573322.2022.2121275.

[4] Bandura, A. (1986). Social foundations of thought and action. Prentice-Hall.

[5] Bell, I., Laurie, N., Calle, O., Carmen, M., & Valdez, A. (2024). Education for disaster resilience: Lessons from El Niño. Geoforum, 148, 103919. https://doi.org/10.1016/j.geoforum.2023.103919

[6] Botelho, M. G., & Boubaker, B. (2024). Near-peer teaching in a psychomotor skills course: Benefits, challenges and solutions. European Journal of Dental Education, 28(1), 313-319. https://doi.org/10.1111/eje.12951.

[7] Chen, S., Hou, Y., Zhang, Y., Yao, Z., Shen, X., Cao, L., ... & Huang, Q. (2024). The multilevel chain mediating mechanism of

college faculty's felt responsibility on students' engagement in green building learning. Buildings, 14(3), 659. https://doi.org/10.3390/buildings14030659.

[8] Clarke, A. E. (2024). Social worlds/arenas theory as organizational theory. In Social organization and social process (pp. 119-158). Routledge.

[9] Figueiredo, J., & García-Peñalvo, F. J. (2024). Design science research applied to difficulties of teaching and learning initial programming. Universal access in the information society, 23(3), 1151-1161. https://doi.org/10.1007/s10209-022-00941-4

[10] Gehreke, L., Schilling, H., & Kauffeld, S. (2024). Effectiveness of peer mentoring in the study entry phase: A systematic review. Review of Education, 12(1), e3462. https://doi.org/10.1002/rev3.3462.

[11] Goodfellow, P. (2024). An exploration of factors influencing the recent levels of incarceration of girls in England and Wales. http://hdl.handle.net/10547/626201.

[12] Jafarian, N. R., & Kramer, A. W. (2025). AI-assisted audio-learning improves academic achievement through motivation and reading engagement. Computers and Education: Artificial Intelligence, 8, 100357. https://doi.org/10.1016/j.caeai.2024.100357.

[13] Kos, T. (2025). Enhancing young learners' peer collaboration: Pedagogical ideas for language teachers. Tesol Quarterly, 59(1), 541-551. https://doi.org/10.1002/tesq.3344.

[14] Kromminga, K. R., & Codding, R. S. (2024). The impact of intervention modality on students' multiplication fact fluency. Psychology in the Schools, 61(1), 329-351. https://doi.org/10.1002/pits.23054.

[15] Lin, X. (2024). Exploring the role of ChatGPT as a facilitator for motivating self- directed learning among adult learners. Adult Learning, 35(3), 156-166. https://doi.org/10.1177/10451595231184928.

[16] Liu, C. C., Wang, H. J., & Gu, X. Q. (2025). From access to mastery: Integrating AI in blended learning for equitable, inclusive, and accessible music theory educations. The Internet and Higher Education, 101018. https://doi.org/10.1016/j.iheduc.2025.101018.

[17] Mägi, L., Uibu, E., Moi, A. L., Mortensen, M., Naustdal, K., Põlluste, K., ... & Kangasniemi, M. (2024). Collaborative learning linking nursing practice and education–Interview study with master's students and teachers. Nurse Education Today, 139, 106261. https://doi.org/10.1016/j.nedt.2024.106261.

[18] Marie Candy L. Celeste, Ronel B. Amorin, Joahna F. Tibus, Magdalena Cataluna (2024).

[19] *Modular Instruction: Challenges, Difficulties and Coping Mechanisms of Filipino University Students.* Journal for Educators, Teachers and Trainers, Vol. 15(1).40-50

[20] Maringanti, H. B., & Sahu, M. (2024). Cognitive Learning. In Digital Skill Development for Industry 4.0 (pp. 15-32). Auerbach Publications. https://doi.org/10.1201/9781003504894.

[21] Mesutoglu, C., Stollman, S., & Lopez Arteaga, I. (2024). Principles and practices of modular course design in higher engineering education. The International Journal of Information and Learning Technology, 41(2), 153-165. https://doi.org/10.1108/IJILT-05-2023-0061

[22] Mir, S., Shah, S. A., & Shafi Bhat, M. (2025). Disasters affecting education across time and space-a perspective from Kashmir. Environment, Development and Sustainability, 27(2), 3125-3143. https://doi.org/10.1007/s10668-023-04006-1.

[23] Navrátilová, J., & Jurčík, M. (2025). Analysing the intersection between teachers 'peer learning strategies and students' perspectives in inclusive classrooms. Education Inquiry, 1-21. https://doi.org/10.1080/20004508.2025.2522521.

[24] Piaget, J. (1972b) LoÂ gica y psicologõÂ a (Argentina: Solpin). (Translated from Logic and psychology. (New York: Manchester University Press 1953).

[25] Sert, O., Gynne, A., & Larsson, M. (2025). Developing student-teachers' interactional competence through video-enhanced reflection: A discursive timeline analysis of negative evaluation in classroom interaction. Classroom Discourse, 16(2), 142-171. https://doi.org/10.1080/19463014.2024.2337184.

[26] Tolentino, Q. J. T. (2024). The Implementation of Basic Education Learning Continuity Plan (BE-LCP) of Gamu District: Its Opportunities, Challenges, and Effect on School Performance. Ignatian International Journal for

Multidisciplinary Research, 2(10), 568-626. https://doi.org/10.5281/zenodo.13952983.

[27] Umstead, L. K., & Delgado, H. (2024). Using correlational and causal-comparative research designs in Practice: Exploring relations among client variables. In Making research relevant (pp. 98-109). Routledge. https://doi.org/10.4324/9781032706139.

[28] Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes (Vol. 86). Harvard university press.

[29] Vygotsky LS. 1978. Mind in society. Cambridge: Harvard University Press.

[30] Wang, T. (2024). Online peer tutoring programs fostering community and learning skills among college students. Education and Information Technologies, 29(16), 21751-21788. https://doi.org/10.1007/s10639-024-12656-5.

[31] Zha, S., Tang, Y., Gong, J., & Xu, Y. (2025). COLP: Scaffolding Children's Online Long-term Collaborative Learning. International Journal of Human– ComputerInteraction,1-23. https://doi.org/10.1080/10447318.2025.2498492.