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Efficacy of Gamified Learning Materials for Araling Panlipunan 7

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Abstract

This study evaluated the efficacy of gamified learning materials in improving the learning performance of Grade 7 students in Araling Panlipunan. The study employed a descriptive evaluative research design involving 30 Grade 7 students who were selected through purposive sampling. Data were gathered through expert evaluation of the gamified learning materials and pretest-posttest assessments measuring knowledge, comprehension, and application. Expert evaluations rated the gamified learning materials as Very Satisfactory in terms of content quality, instructional quality, technical quality, and accuracy, indicating that the materials met the expected standards for instructional use. The pretest results showed varying levels of student performance across the three assessed areas, while the posttest results revealed improvements in knowledge, comprehension, and application after exposure to the gamified learning materials. The paired-samples t-test revealed statistically significant differences between the pretest and posttest performances in knowledge ($t = 6.071$, $p < .001$), comprehension ($t = 9.041$, $p < .001$), and application ($t = 9.072$, $p < .001$). These results indicated that students demonstrated significantly better learning outcomes following the use of the gamified learning materials. The significant gains across knowledge, comprehension, and application suggested that the gamified learning materials supported not only the acquisition of information but also the understanding and practical application of concepts. The favorable expert evaluation and significant improvement in students' posttest performance provided evidence of the instructional value, acceptability, and potential effectiveness of the developed materials. The study highlighted the potential of gamification to promote active participation, enhance learning experiences, and support improved academic performance. It was recommended that well designed gamified learning materials be integrated as innovative instructional resources to support meaningful, engaging, and learner-centered instruction in Araling Panlipunan 7.

Keywords: Application, Efficacy, Gamified Learning Materials, Students' Performance

Introduction

Gamification has emerged as an instructional strategy for enhancing student engagement and academic performance. It integrates game elements such as points, levels, badges, and challenges into learning environments to encourage participation and motivation. Studies have shown that gamification can improve

behavioral, emotional, and cognitive engagement and contribute to better learning outcomes among learners (Ruiz et al., 2024).

Despite these positive findings, gaps remain in the global literature. Dichev and Dicheva (2023) reported limited evidence on the sustained effects of gamification and noted the need for further research across different subjects, learner groups, and resource-constrained settings. Similarly, Zeng et al. (2024) found a positive effect of gamification on academic performance but emphasized the importance of instructional context and design. These findings indicate the need for context-specific studies that examine the effectiveness of gamified learning materials in actual classroom settings.

In the Philippine context, the Department of Education (DepEd) promotes learner-centered, meaningful, and engaging instruction through the K–12 Basic Education Program. DepEd Order No. 42, s. 2016 emphasizes active participation and meaningful learning. However, the use of learner-centered approaches does not always ensure sustained learner engagement. Recent studies have reported that gamified and interactive approaches can improve students' engagement, motivation, and academic performance compared with conventional approaches (Jaramillo-Mediavilla et al., 2024; Li et al., 2024).

This concern is relevant to Araling Panlipunan, which requires learners to understand historical events, social issues, civic concepts, and relationships among people and institutions. These competencies require active participation, comprehension, and application of knowledge. Philippine studies have identified concerns regarding learner participation and motivation when instructional activities provide limited interactivity (Baldado & Daniel, 2023; Ruiz et al., 2024). Thus, gamified learning materials may provide an alternative approach to making Araling Panlipunan learning more interactive and engaging.

At the local level, instructional materials must be responsive to learners' needs, available resources, and classroom conditions. DepEd (2024) recognized that differences in school location, resources, learner conditions, and learning delivery may affect educational outcomes. In Caraga, the Regional Education Development Plan 2023–2028 identified challenges involving internet connectivity, educational resources, and access to basic education services in geographically isolated and disadvantaged areas (DepEd Caraga, 2023). These conditions highlight the need for instructional materials that are appropriate to the actual local learning environment.

In response to these global, national, and local needs, this study focused on the use of gamified learning materials in Araling Panlipunan 7. It evaluated their efficacy through expert assessment and students' pretest and posttest performance in knowledge, comprehension, and application. The study aimed to provide context-specific evidence on the potential of gamified learning materials to support meaningful, engaging, and effective learning in the Philippine classroom setting.

Review of Related Studies

This section presents relevant literature and previous studies that provided support for the investigation. It focused on gamified learning materials, their effectiveness in improving students' academic performance, and their influence on learners' motivation and engagement, particularly in Araling Panlipunan 7. It also discussed the importance of developing curriculum-aligned instructional materials in the Philippine educational setting.

Gamification has become an innovative instructional approach that incorporates game elements into the teaching and learning process to promote learners' motivation, engagement, participation, and academic performance. It involves the integration of elements such as points, badges, levels, challenges, rewards, leaderboards, and interactive activities into educational tasks. These elements transform conventional classroom instruction into a more engaging learning experience by encouraging learners to actively participate, accomplish learning objectives, and take responsibility for their own progress.

According to Guisadio et al. (2025), gamified elements in Philippine education have demonstrated positive contributions to students' motivation, engagement, and learning gains. Their systematic review of Philippine educational studies revealed that the integration of game mechanics into classroom instruction could enhance learners' participation and improve learning experiences, particularly when the activities were aligned with curriculum objectives and appropriate instructional strategies. However, the review also identified challenges involving unequal access to technology, limited teacher training, and inconsistencies in implementation. These findings emphasize the importance of developing instructional materials that are engaging, accessible, and appropriate to the learning environment.

Similarly, Yap and Gonzaga (2024), in their study entitled Integration of Gamified Instruction on Students' Academic Performance, examined the effects of gamified instruction on Grade 7 students' academic performance in Araling Panlipunan. Their findings revealed significant improvements in students' competency levels following the integration of gamified instruction through the ClassPoint application. The researchers also found that gamification contributed to a more enjoyable learning experience, increased motivation, and greater classroom engagement. This study demonstrates the potential of gamified instructional strategies in improving the academic performance of junior high school learners, particularly in Araling Panlipunan.

These findings establish that gamification is not merely an entertaining classroom activity but an instructional strategy that can support meaningful learning. By integrating game-based challenges and activities into lessons, teachers can provide opportunities for learners to understand concepts, practice acquired knowledge, and demonstrate their learning through interactive experiences.

Araling Panlipunan is an important learning area that develops learners' understanding of history, geography, economics, culture, governance, and society. However, some learners may perceive the subject as challenging because of its extensive content, historical information, unfamiliar concepts, and the need to understand relationships among different events and social conditions. Consequently, teachers need to employ instructional approaches that encourage active participation, critical thinking, and meaningful understanding.

In a Philippine-based study, Partido et al. (2025), in their research entitled Enhancing Learners' Engagement in Araling Panlipunan through Gamification: A Philippine Case Study, investigated the use of gamification in improving the engagement of Grade 10 learners at San Rafael National High School in Camarines Sur. The researchers highlighted the potential of gamified classroom activities to address learner disengagement in Araling Panlipunan. Their research provides local evidence that game-based instructional approaches can make Social Studies lessons more interactive and encourage learners to participate actively in classroom activities.

Furthermore, Florese (2025), in the study Digital Game-Based Learning: A Tool for Enhancing Engagement, Motivation, and Autonomy in Araling Panlipunan of Grade Eight Junior High School Students, examined the use of digital game-based learning among Grade 8 learners at Parañaque National High School–Baclaran. The study focused on improving learning outcomes, engagement, motivation, and learner autonomy. It provides relevant evidence of how digital game-based activities can be incorporated into Araling Panlipunan instruction to address academic challenges and create more meaningful learning experiences.

Likewise, Castro (2020), in the study Simulation Games Techniques and Lecture Method in Teaching Araling Panlipunan, examined the effects of simulation game techniques and lecture-based instruction on the academic performance of Grade 8 students at Eduardo Cojuangco National Vocational High School. The findings indicated that learners exposed to simulation game techniques demonstrated improved posttest performance compared with those taught through the lecture method. This suggests that providing learners with opportunities to participate in simulated situations and interactive activities can contribute to better understanding and retention of lesson content.

The aforementioned studies support the use of gamification as an instructional approach in Araling Panlipunan. They demonstrate that integrating games, simulations, and interactive learning activities can address challenges associated with traditional classroom instruction. These studies are particularly relevant to the present research because they provide Philippine-based evidence supporting the development and implementation of gamified learning materials for Grade 7 learners.

Academic performance is an important indicator of the extent to which learners acquire the knowledge, skills, and competencies expected in a particular learning area. In Araling Panlipunan, students are expected not only to remember historical facts and concepts but also to understand information, explain relationships, interpret events, and apply their knowledge to real-life situations. Therefore, instructional materials should provide meaningful learning experiences that address different levels of cognitive development.

Yap and Gonzaga (2024) established that gamified instruction could significantly improve the competency levels of Grade 7 students in Araling Panlipunan. Their findings suggest that incorporating interactive game elements into classroom instruction provides learners with opportunities to practice concepts while receiving an engaging learning experience. This is particularly important in developing instructional materials that encourage learners to participate and demonstrate their understanding of the subject matter.

In addition, the findings of Castro (2020) demonstrated the effectiveness of simulation games in improving students' academic performance in Araling Panlipunan. The improvement in posttest performance suggests that game-based activities can provide learners with opportunities to connect theoretical concepts with practical learning experiences. Through participation in simulations and educational games, learners can become more actively involved in processing and understanding lesson content.

More recently, Daquiado (2026), in the study Interactive Game-Based Learning Environment (IGLE) and Students' Achievement in Araling Panlipunan, investigated the effectiveness of a gamified learning environment using Wordwall among Grade 7 learners in Koronadal City Division. The research focused on students' academic performance, active learning, and engagement. Its emphasis on Grade 7 Araling Panlipunan makes it particularly relevant to the present study, as both examine the application of game-based instructional strategies in the same subject and grade level.

Collectively, these studies provide support for examining the effectiveness of gamified learning materials in improving academic performance. They also establish the importance of assessing learning outcomes rather than relying solely on learners' enjoyment or participation. Accordingly, the present study considers students' performance in terms of knowledge, comprehension, and application to determine the effectiveness of the developed gamified learning materials.

The development of effective instructional materials requires alignment with the prescribed curriculum, learning competencies, and educational standards. In the Philippine educational system, the Department of Education provides curriculum guides and learning resources to assist teachers in delivering quality instruction and addressing the diverse learning needs of students.

The Department of Education (2017), through its K to 12 Curriculum Guide: Araling Panlipunan, provides the content standards, performance standards, and learning competencies that serve as guides in developing teaching and learning materials. The curriculum guide also provides a basis for assessing students' progress and designing appropriate instructional strategies. This emphasizes the responsibility of teachers to develop learning resources that are aligned with the intended competencies and educational objectives of the subject.

Furthermore, the Learning Resources Management and Development System (LRMDS) of the Department of Education serves as a platform for accessing and managing educational resources that support curriculum implementation. The DepEd Learning Portal provides Araling Panlipunan Grade 7 curriculum

guides and instructional resources intended to assist educators in preparing and implementing classroom instruction (Department of Education, 2012, 2020).

The availability of these resources highlights the importance of using curriculum-aligned materials in teaching Araling Panlipunan. However, teachers may also develop supplementary instructional materials to address specific learning difficulties, improve student participation, and provide alternative approaches to teaching challenging concepts. In this regard, gamified learning materials can serve as supplementary resources that complement existing DepEd learning materials while incorporating interactive activities, challenges, and assessment opportunities.

For the present study, the LRMDS and DepEd curriculum resources provide an important foundation for ensuring that the developed gamified learning materials are appropriate for Grade 7 Araling Panlipunan. The materials are intended to supplement existing instructional resources by transforming selected learning competencies into structured, interactive, and engaging learning activities. Thus, the study supports the continuous development of localized, relevant, and learner-centered instructional materials in the Philippine educational setting.

Learners' motivation and engagement are essential factors that influence the effectiveness of classroom instruction. Students who are motivated to participate in learning activities are more likely to demonstrate interest, sustain their attention, complete assigned tasks, and actively engage with lesson content. In this context, gamification offers an instructional approach that encourages participation through challenges, rewards, progress indicators, and opportunities for achievement.

Guisadio et al. (2025) emphasized that gamified elements in Philippine education contribute to improved learner motivation and classroom engagement. Their systematic review identified points, badges, leaderboards, levels, and quests as common game mechanics used to make learning activities more interactive. The review also highlighted the importance of aligning these elements with instructional objectives to ensure that gamification supports actual learning rather than simply providing entertainment.

Similarly, Partido et al. (2025) explored gamification as an approach to addressing learner disengagement in Araling Panlipunan. Their research highlights the relevance of incorporating interactive activities into Social Studies instruction to encourage learners' involvement in classroom discussions and learning tasks.

Florese (2025) also examined the role of digital game-based learning in promoting engagement, motivation, and autonomy among Grade 8 Araling Panlipunan learners. This research provides further support for using game-based activities to encourage learners to become more actively involved in their learning experiences.

These findings suggest that motivation and engagement should be considered important indicators when evaluating the effectiveness of gamified learning materials. For the present study, learners' perceptions of the developed materials are relevant in determining whether the instructional intervention provides an enjoyable, motivating, and engaging learning experience. In addition, examining these perceptions alongside academic performance provides a more comprehensive understanding of the potential benefits of gamified instruction.

The reviewed literature and studies provide substantial support for the development and implementation of gamified learning materials in Araling Panlipunan 7. The studies of Yap and Gonzaga (2024), Partido et al. (2025), Florese (2025), and Castro (2020) demonstrate the potential of game-based instructional approaches to improve students' academic performance, motivation, and classroom engagement in the Philippine educational setting. These findings establish that integrating interactive games, simulations, challenges, and digital activities into classroom instruction can provide meaningful learning experiences, particularly in subjects that require learners to understand historical events, social concepts, and interconnected information.

Moreover, the literature reviewed from the Department of Education and its Learning Resources Management and Development System emphasizes the importance of developing instructional materials that are aligned with the prescribed curriculum and intended learning competencies. These resources provide a foundation for ensuring that supplementary instructional materials are educationally appropriate, relevant, and responsive to the learning needs of Filipino students. The reviewed studies also highlight the importance of considering learners' motivation, engagement, and academic achievement when evaluating innovative teaching strategies.

Despite the positive findings of previous studies, there remains a need for further research focusing specifically on the development, expert evaluation, and effectiveness of localized gamified learning materials for Grade 7 Araling Panlipunan. Some previous studies focused on digital applications, simulation techniques, or learner engagement, while others examined gamified instruction in different grade levels. The present study addresses this need by developing and evaluating gamified learning materials specifically designed for Grade 7 Araling Panlipunan learners.

The contribution of the present study lies in providing a curriculum-aligned and localized instructional innovation that integrates gamification into the teaching of Araling Panlipunan 7. Unlike studies that primarily examine the use of existing digital applications or individual game-based strategies, the present research develops a structured set of gamified learning materials that undergoes expert evaluation in terms of content quality, instructional quality, technical quality, and accuracy. Furthermore, it examines the effectiveness of these materials through pretest and posttest assessments in knowledge, comprehension, and application, together with learners' perceptions of motivation and engagement. Through these components, the study contributes empirical evidence and a practical instructional resource that may assist teachers in addressing learning difficulties, strengthening student participation, and improving the delivery of Araling Panlipunan instruction.

Theoretical/Conceptual Framework

This study was anchored on Piaget's Cognitive Development Theory (1952) and Mayer's Cognitive Theory of Multimedia Learning (2009), which provided the theoretical foundation for the design, implementation, and evaluation of the gamified learning materials in Araling Panlipunan 7. These theories provided a basis for understanding how learners constructed knowledge and processed information when interacting with instructional materials that incorporated visual, verbal, and interactive elements.

These theories explained how learners constructed knowledge and how instructional materials could be designed to facilitate effective information processing, meaningful engagement, and improved learning outcomes. The integration of these theories provided a framework for developing gamified learning materials that were both cognitively appropriate and instructionally effective. Piaget's Cognitive Development Theory served as a foundation for understanding how learners actively constructed knowledge through interaction with their environment and through the integration of new experiences with existing knowledge.

According to the theory, learning involved processes such as assimilation and accommodation, through which learners modified or reorganized their existing cognitive structures to make sense of new information. In this study, the gamified learning materials provided learners with opportunities to actively engage with the subject matter through problem-solving activities, simulations, challenges, and interactive tasks. These activities were intended to encourage students to connect new concepts with their prior knowledge while developing their ability to think critically and construct meaningful understanding of the lessons in Araling Panlipunan 7.

Piaget's theory also guided the sequencing and complexity of the learning activities. The gamified materials were organized from relatively simple tasks toward more complex activities, allowing learners to

gradually develop and apply their understanding. This progression was intended to provide appropriate cognitive challenges without unnecessarily overwhelming the learners. Through active participation and interaction with the learning environment, students were given opportunities to explore concepts, solve problems, make connections, and apply their knowledge. The theory therefore served as a basis for examining whether the gamified learning experience supported students' development of understanding, application, and analysis of the concepts presented in Araling Panlipunan 7.

On the other hand, Mayer's Cognitive Theory of Multimedia Learning provided the basis for the design and presentation of information within the gamified learning materials. The theory explained that learners processed information through separate but interacting channels for verbal and visual information and that learning was facilitated when instructional materials were designed in ways that supported meaningful cognitive processing. In this study, the gamified materials incorporated appropriate combinations of text, images, graphics, audio, animations, and interactive elements to present the lessons in an engaging and understandable manner. These multimedia components were intended to help students select relevant information, organize it meaningfully, and integrate it with their existing knowledge.

The design of the gamified learning materials was also guided by multimedia principles such as coherence, signaling, and contiguity. The coherence principle was applied by minimizing unnecessary words, graphics, sounds, and other elements that could distract learners from the essential content. The signaling principle was used to emphasize important information and direct learners' attention to key concepts. Meanwhile, the contiguity principle guided the placement of corresponding words and visuals so that related information could be processed more efficiently. Applying these principles was intended to minimize unnecessary cognitive load and promote learners' focus on the essential concepts of the lessons.

The integration of Cognitive Development Theory and the Cognitive Theory of Multimedia Learning established a connection between the way learners constructed knowledge and the way instructional information was presented to them. Piaget's theory emphasized the learner's active role in constructing knowledge through interaction, exploration, and meaningful experiences, while Mayer's theory emphasized the importance of carefully designed multimedia presentations that supported effective cognitive processing. Together, these theories provided complementary foundations for the development of gamified learning materials that encouraged active participation while presenting information in a cognitively supportive manner.

Thus, the theoretical framework assumed that appropriately designed gamified learning materials could provide learners with active, interactive, and multimedia-supported learning experiences. These experiences could facilitate meaningful engagement with the lessons and support students' understanding and retention of the content in Araling Panlipunan 7. The framework consequently provided a research-based foundation for examining the effectiveness of the developed gamified learning materials in relation to the intended learning outcomes of the study.

This study examined how gamified learning materials influenced the performance of students in Araling Panlipunan 7. The conceptual framework was based on the premise that effective learning depended not only on content delivery but also on the quality of instructional materials and learners' active participation. The gamified learning materials served as the independent variable and incorporated game elements such as challenges, points, levels, rewards, feedback, choices, and interactive tasks. These elements were intended to encourage learners to participate actively, respond to questions, solve problems, and demonstrate their understanding. Recent studies indicated that gamification could support academic performance when game elements were aligned with learning objectives and appropriate instructional design (Li et al., 2023; Zeng et al., 2024). In K–12 education, the effectiveness of gamification likewise depended on the design of the learning environment, learner characteristics, and alignment with intended learning outcomes (Dehghanzadeh et al., 2024).

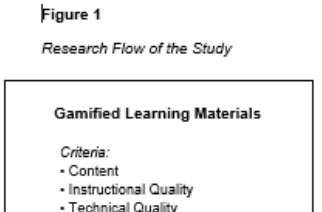
The quality of the gamified learning materials was evaluated in terms of content, language, and accuracy. Content referred to the relevance and appropriateness of the information and activities to the intended competencies of Araling Panlipunan 7. Language concerned the clarity and accessibility of instructions, questions, explanations, and feedback, while accuracy referred to the correctness and reliability of the information presented. These indicators were considered important because gamification alone did not ensure effective learning. Recent literature emphasized that game elements should be integrated with meaningful instructional activities and appropriate learning objectives (Triantafyllou et al., 2025). In the Philippine context, the effectiveness of gamified approaches could also be influenced by implementation conditions, teacher preparation, and available resources (Guisadio et al., 2025). Thus, expert evaluation was included to establish the instructional quality and suitability of the developed materials before their classroom use.

Students' performance served as the dependent variable and was measured in terms of knowledge, comprehension, and application through pretest and posttest assessments. Knowledge referred to the ability to recall or recognize information and concepts; comprehension involved explaining, interpreting, comparing, and demonstrating understanding; and application involved using knowledge to solve problems, analyze situations, and apply concepts in appropriate contexts. The pretest determined learners' initial performance, while the posttest measured their performance after exposure to the gamified learning materials. Comparing the results provided evidence of changes in learning performance. This approach was supported by research emphasizing that the effectiveness of gamification should be examined through measurable learning outcomes rather than engagement or enjoyment alone (Li et al., 2023; Li et al., 2024; Zeng et al., 2024).

The framework was anchored on Cognitive Theory and Multimedia Learning Theory, which provided a basis for understanding how learners actively processed and organized information. Gamified activities encouraged learners to retrieve prior knowledge, respond to challenges, solve problems, and receive feedback, while multimedia elements such as text, images, and interactive representations supported the processing of information when appropriately designed (Mayer, 2024). The learning process and student interaction therefore represented the way learners engaged with the materials, teacher, peers, and activities. Through active participation, learners were provided with opportunities to process, practice, and apply the concepts presented.

Figure 1 illustrated the relationship among the gamified learning materials, their quality indicators, learning process and student interaction, and students' performance in knowledge, comprehension, and application.

Figure 1. *The Research Paradigm Showing the Flow of the Study*



Objectives of the Study

This study evaluated the efficacy of gamified learning materials in Araling Panlipunan 7 as a basis for developing a teaching innovation. Specifically, it sought to: (1) determine the validity of the gamified learning materials in terms of content, instructional quality, technical quality, and other findings; (2) assess the level of students' performance before and after the utilization of gamified learning materials in terms of knowledge, comprehension, and application; (3) determine whether there is a significant difference in students' performance before and after the implementation of the gamified learning materials; and (4) evaluate the extent of effectiveness of the gamified learning materials as perceived by the students in terms of motivation and engagement, learning experience and enjoyment, challenge and competitiveness, and knowledge retention and value.

Methodology

This study employed a descriptive-evaluative research design to examine the efficacy of gamified learning materials in Araling Panlipunan 7. It was conducted at Marcelina National High School, Bayugan City, Agusan del Sur, during School Year 2025–2026, involving 30 Grade 7 Mendeleev learners selected through intact group sampling. Data were gathered using an expert evaluation form adapted from the Department of Education's Learning Resources Management and Development System (LRMDS) standards, a researcher-made achievement test, and a learner perception questionnaire. The achievement test underwent expert validation and pilot testing to establish its validity and reliability. Following the necessary administrative approval, a pretest was administered, followed by the implementation of the gamified learning materials and subsequent posttest and learner perception assessment. The collected data were analyzed using frequency counts, percentages, mean, Mean Percentage Score (MPS), and weighted mean, while a paired-samples t-test at the 0.05 level of significance was employed to determine differences in students' performance before and after the intervention. The findings served as the basis for the development of a teaching innovation aimed at enhancing learning outcomes in Araling Panlipunan 7.

Results and Discussion

Problem 1. How valid are the developed gamified learning materials in Araling Panlipunan 7 in terms of content, instructional quality, technical quality, and other findings?

Table 1. Validity of the Gamified Learning Material in Terms of Content Quality, Instructional Quality, Technical Quality, and Other Findings

Particulars	***Wtd Mean***	***Verbal Description***
Content		
1. Content is consistent with topics/skills found in the DepED Learning Competencies for the subject and grade/year level it was intended.	*4*	*Very Satisfactory*
2. Concepts developed contribute to enrichment, reinforcement, or mastery of the identified learning objectives.	*4*	*Very Satisfactory*
3. Content is accurate.	*4*	*Very Satisfactory*
4. Content is up-to-date.	*4*	*Very Satisfactory*
5. Content is logically developed and organized.	*4*	*Very Satisfactory*
6. Content is free from cultural, gender, racial, or ethnic bias.	*3.8*	*Very Satisfactory*
7. Content stimulates and promotes critical thinking.	*4*	*Very Satisfactory*
8. Content is relevant to real-life situations.	*4*	*Very Satisfactory*
9. Language (including vocabulary) is appropriate to the target user level.	*4*	
10. Content promotes positive values that support formative growth.	*4*	*Very Satisfactory*
Content Weighted Mean	***3.98***	***Very Satisfactory***
Instructional Quality		
1. Purpose of the material is well defined.	*4*	*Very Satisfactory*
2. Material achieves its defined purpose.	*4*	*Very Satisfactory*
3. Learning objectives are clearly stated and measurable.	*4*	*Very Satisfactory*
4. Level of difficulty is appropriate for the intended target user.	*3.6*	*Very Satisfactory*
5. Graphics / colors / sounds are used for appropriate instructional reasons.	*3.8*	*Very Satisfactory*
6. Material is enjoyable, stimulating, challenging, and engaging.	*4*	*Very Satisfactory*
7. Material effectively stimulates creativity of target user.	*4*	*Very Satisfactory*
8. Feedback on target user's responses is effectively employed.	*4*	*Very Satisfactory*
9. Target user can control the rate and sequence of presentation and review.	*4*	*Very Satisfactory*
10. Instruction is integrated with target user's previous experience.	*4*	*Very Satisfactory*
Instructional Quality Weighted Mean	***3.94***	***Very Satisfactory***
Technical Quality		
1. Audio enhances understanding of the concept.	*4*	*Very Satisfactory*
2. Speech and narration (correct pacing, intonation, and pronunciation) is clear and can be easily understood.	*3*	*Very Satisfactory*
3. There is complete synchronization of audio with the visuals, if any.	*4*	*Very Satisfactory*
4. Music and sound effects are appropriate and effective for instructional purposes.	*3.8*	*Very Satisfactory*
5. Screen displays (text) are uncluttered, easy to read, and aesthetically pleasing.	*4*	*Very Satisfactory*
6. Visual presentations (non-text) are clear and easy to interpret.	*4*	*Very Satisfactory*
7. Visuals sustain interest and do not distract user's attention.	*4*	*Very Satisfactory*
8. Visuals provide accurate representation of the concept discussed.	*4*	*Very Satisfactory*

9. The user support materials (if any) are effective.	*4*	*Very Satisfactory*
10. The design allows the target user to navigate freely through the material.	*4*	*Very Satisfactory*
11. The material can easily and independently be used.	*4*	*Very Satisfactory*
Technical Quality Weighted Mean	***3.89***	***Very Satisfactory***
Other Findings		
1. Conceptual errors.	*4*	*Very Satisfactory*
2. Factual errors.	*4*	*Very Satisfactory*
3. Grammatical and / or typographical errors.	*4*	*Very Satisfactory*
4. Other errors (i.e., computational errors, obsolete information, errors in the visuals, etc.).	*4*	*Very Satisfactory*
Other findings Weighted Mean	***4***	***Very Satisfactory***
Overall Weighted Mean	***3.9525***	***Very Satisfactory***

Legend: 1.00-1.49-Not Satisfactory; 1.50-2.49-Poor; 2.50-3.49-Satisfactory; 3.50-4.00-Very Satisfactory

The results of the expert evaluation revealed that the developed gamified learning materials for Araling Panlipunan 7 obtained a Very Satisfactory rating across the evaluated criteria, namely content quality, instructional quality, technical quality, and accuracy. These findings indicate that the developed materials demonstrated desirable characteristics of quality instructional resources and were considered appropriate for their intended educational purpose. This result is consistent with the Learning Resources Management and Development System (LRMDS) of the Department of Education, which provides standards and procedures for assessing and evaluating teacher-developed learning resources to ensure their educational soundness and suitability for classroom use (Department of Education,2009). The favorable evaluation therefore suggests that the developed materials met important quality considerations for instructional resource development in the Philippine educational setting.

In terms of content quality, the developed materials obtained an overall weighted mean of 3.98, verbally interpreted as Very Satisfactory. This result indicates that the learning materials contained relevant, appropriate, and well-organized information aligned with the intended learning competencies in Araling Panlipunan 7. The findings further suggest that the topics and activities were suitable for the target learners and provided meaningful opportunities to understand the subject matter. Although the indicator on freedom from cultural bias received a slightly lower weighted mean of 3.80, it remained within the Very Satisfactory category. This finding highlights the importance of ensuring that instructional materials present information that is not only accurate and relevant but also inclusive and respectful of cultural diversity. UNESCO (2017) emphasized the importance of culturally responsive education in promoting inclusive and equitable learning opportunities. In this regard, the expert evaluation suggests that the developed materials demonstrated satisfactory content standards while recognizing the importance of cultural sensitivity in presenting historical and social concepts.

For instructional quality, the developed gamified learning materials obtained an overall weighted mean of 3.94, interpreted as Very Satisfactory. This indicates that the learning objectives, instructional activities, directions, and assessment tasks were appropriately designed to facilitate the teaching and learning process. The activities incorporated game elements that encouraged learner participation, interaction, and engagement while providing opportunities to develop knowledge and understanding of historical concepts. This finding is supported by Dehghanzadeh et al. (2024), whose systematic review examined 54 empirical studies on gamification in K–12 education and highlighted its potential to support students' learning

experiences when game elements are purposefully integrated into instructional design. Similarly, Ratinho and Martins (2023) identified the role of gamified learning strategies in supporting student motivation. These studies reinforce the importance of designing instructional activities that make learning more engaging while maintaining alignment with the intended educational objectives.

Regarding technical quality, the evaluation results indicated a Very Satisfactory level, reflecting the favorable assessment of the materials' technical presentation, organization, and functionality. This suggests that the developed learning materials were presented in a manner that supported their intended classroom utilization and provided an organized learning experience for Grade 7 students. The result emphasizes that instructional resources should not only contain appropriate educational content but should also possess suitable presentation and technical features that make them accessible and understandable to learners. Mayer (2024), through the Cognitive Theory of Multimedia Learning, explained that meaningful learning can be supported when verbal and visual information are appropriately organized and presented, considering learners' limited cognitive processing capacity. Thus, the favorable technical evaluation suggests that the developed materials demonstrated appropriate presentation characteristics that could support learners in engaging with the instructional content.

In terms of accuracy, the expert evaluation likewise reflected a Very Satisfactory assessment. This indicates that the concepts, information, and learning activities presented in the developed materials were considered appropriate and consistent with the subject matter and intended learning competencies. Accuracy is particularly important in Araling Panlipunan because historical information, significant events, concepts, and interpretations must be presented correctly to prevent misconceptions among learners. The DepEd National Educators Academy of the Philippines (2023), through its Professional Development Learning Resources Materials Quality Standards Checklist, emphasizes that instructional content should be accurate, supported by credible sources, aligned with learning objectives, and updated when necessary. Therefore, the favorable evaluation suggests that the developed gamified learning materials demonstrated an acceptable level of informational reliability and subject-matter appropriateness.

Overall, the findings demonstrate that the developed gamified learning materials were favorably evaluated by the experts in terms of content quality, instructional quality, technical quality, and accuracy. The Very Satisfactory ratings indicate that the materials possessed the essential characteristics of quality instructional resources and were considered suitable for their intended classroom application. These findings are further supported by Zeng et al. (2024), whose meta-analysis of 22 experimental studies found a moderately positive effect of gamification on students' academic performance. However, the effectiveness of gamified materials depends not only on the presence of game elements but also on the quality of their instructional design and implementation. Consequently, the positive expert evaluation provides a sound basis for utilizing the developed materials as a supplementary instructional innovation in teaching Araling Panlipunan 7.

Problem 2. What is the level of students' performance before and after the utilization of gamified learning materials in Araling Panlipunan 7 in terms of knowledge, comprehension, and application?

Table 2. Level of Students' Performances before and after the use of the Gamified Learning in Terms of Knowledge, Comprehension and Applications

Score Ranges	Pretest		Posttest		
	f	%	f	%	Descriptive Rating
Knowledge					
26-30	0	0	5	16.1	Outstanding
22-25	0	0	6	19.4	Very Satisfactory
18-21	7	23.3	8	25.8	Satisfactory
14-17	6	20	6	19.4	Fairly Satisfactory
10-13	7	23.3	1	3.2	Needs Improvement
0-9	10	33.3	4	12.9	Poor
Total	**30**	**100**	**30**	**100**	
Comprehension					
26-30	2	6.7	17	56.7	Outstanding
22-25	3	10	10	33.3	Very Satisfactory
18-21	4	13.3	3	10	Satisfactory
14-17	9	30	0	0	Fairly Satisfactory
10-13	5	16.7	0	0	Needs Improvement
0-9	7	23.3	0	0	Poor
Total	**30**	**100**	**30**	**100**	
Application					
26-30	1	3.3	14	46.7	Outstanding
22-25	2	6.7	5	16.7	Very Satisfactory
18-21	1	3.3	7	23.3	Satisfactory
14-17	2	6.7	4	13.3	Fairly Satisfactory
10-13	11	36.7	0	0	Needs Improvement
0-9	13	43.3	0	0	Poor
Total	**30**	**100**	**30**	**100**	

The results revealed an improvement in students' performance in all three cognitive domains after the implementation of the developed gamified learning materials. In terms of knowledge, students who achieved Satisfactory to Outstanding increased from 23.3% in the pretest to 63.3% in the posttest. This indicates improved acquisition and retention of essential concepts and factual information. This finding is supported by Dehghanzadeh et al. (2024), who highlighted the potential of gamification to support learning experiences in K–12 education.

In terms of comprehension, the percentage of students who achieved Very Satisfactory to Outstanding increased from 16.7% in the pretest to 90.0% in the posttest. This demonstrates considerable improvement in students' ability to interpret, explain, and understand the concepts presented in the lessons. Similarly, Zeng et al. (2024) found that gamification had a moderately positive overall effect on students' academic performance.

Regarding application, students who attained Satisfactory to Outstanding increased from 13.3% in the pretest to 86.7% in the posttest. Furthermore, no students remained in the Needs Improvement or Poor

categories during the posttest. This suggests that students became more capable of applying their acquired knowledge to answer questions and solve learning tasks. This finding is consistent with Anderson and Krathwohl (2001), who emphasized the importance of applying learned knowledge and skills in different situations.

The findings demonstrate a favorable improvement in students' performance across knowledge, comprehension, and application. The results suggest that the developed gamified learning materials provided meaningful learning experiences and supported the improvement of students' academic performance in Araling Panlipunan 7. However, further statistical analysis is necessary to establish whether the observed differences between pretest and posttest scores are statistically significant.

Problem 3. Is there a significant difference in students' performance before and after the implementation of the gamified learning materials in Araling Panlipunan 7?

The table reveals the results of the paired samples t-test between the pretest and posttest performances of the students. It determined whether there was a significant difference in the learners' performance before and after the implementation of the gamified learning materials in terms of knowledge, comprehension, and application.

Table 3. Paired Samples T-test between Pretest and Posttest Performances of the Students

Test	Mean	SD	Mean difference	t-value	p-value	Decision on H_o	Interpretation/Remarks
PRETEST Knowledge	5.27	1.28	1.63	6.071	<.001	Reject H_o	Significant
POSTTEST Knowledge	6.90	1.79					
PRETEST Comprehension	5.80	1.81	2.87	9.041	<.001	Reject H_o	Significant
POSTTEST Comprehension	8.67	0.92					
PRETEST Application	4.60	1.81	3.50	9.072	<.001	Reject H_o	Significant
POSTTEST Application	8.10	1.30					

significant @ p<.001

Table 3 presents the results of the paired-samples t-test conducted to determine whether there was a significant difference between the students' pretest and posttest performance.

The results for Knowledge showed that the students' mean score increased from 5.27 (SD = 1.28) in the pretest to 6.90 (SD = 1.79) in the posttest, resulting in a mean difference of 1.63 points. The computed t-value of 6.071 and p-value of less than .001 indicate a statistically significant difference between the students' pretest and posttest scores. Since the p-value is lower than the 0.05 level of significance, the null hypothesis is rejected. This finding suggests that students demonstrated improved knowledge acquisition after the implementation of the gamified learning materials. The paired-samples t-test is appropriate for examining differences between two measurements obtained from the same participants (OpenStax, 2020).

In terms of Comprehension, the mean score increased from 5.80 (SD = 1.81) in the pretest to 8.67 (SD = 0.92) in the posttest, with a mean difference of 2.87 points. The computed t-value of 9.041 and p-value of less than .001 demonstrate a statistically significant improvement in students' comprehension performance. Consequently, the null hypothesis is rejected. This result indicates that students became more capable of understanding and interpreting the concepts presented in the learning materials. The substantial difference between the pretest and posttest means provides evidence of improved performance following the instructional intervention.

Regarding Application, the students' mean score increased from 4.60 (SD = 1.81) in the pretest to 8.10 (SD = 1.30) in the posttest, resulting in the highest mean difference of 3.50 points among the three cognitive domains. The computed t-value of 9.072 and p-value of less than .001 indicate a statistically significant difference in students' application performance. Thus, the null hypothesis is rejected. This suggests that students improved their ability to apply the concepts and knowledge acquired during the implementation of the gamified learning materials. Lakens (2013) emphasized the importance of reporting effect sizes alongside statistical significance to provide a more complete understanding of the magnitude and practical importance of research findings.

The results revealed statistically significant improvements in students' performance across knowledge, comprehension, and application, as indicated by the p-values of less than .001 in all three domains. The findings provide strong statistical evidence of differences between the pretest and posttest results at the 0.05 level of significance. Therefore, the null hypothesis stating that there is no significant difference in students' performance before and after the implementation of the gamified learning materials is rejected. These findings suggest that the developed gamified learning materials contributed positively to students' learning performance in Araling Panlipunan 7. However, statistical significance should be distinguished from practical significance when interpreting the effectiveness of an instructional intervention (Lakens, 2013).

Problem 4. What is the extent of effectiveness of the gamified learning materials in Araling Panlipunan 7 as perceived by the students in terms of motivation and engagement, learning experience and enjoyment, challenge and competitiveness, and knowledge retention and value?

Table 4. Extent of Effectiveness of Gamified Learning Materials as Perceived by the Learners

Particulars	Wtd Mean	Verbal Description	Interpretation
Motivation and Engagement			
1. The gamified learning materials motivated me	4.73	Strongly Agree	Very Effective
2. The gamified materials helped me stay focused..	4.73	Strongly Agree	Very Effective
3. I felt motivated to do my best while completing..	4.73	Strongly Agree	Very Effective
4. I was encouraged to complete the activities …	4.67	Strongly Agree	Very Effective
5. The game elements made me more interested in..	4.53	Strongly Agree	Very Effective
Overall Weighted Mean	4.68	Strongly Agree	Very Effective
Learning Experience and Enjoyment			Very Effective
1. I would like to use gamified learning materials..	4.83	Strongly Agree	Very Effective
2. The activities made the lesson more exciting..	4.73	Strongly Agree	Very Effective
3. The gamified materials made difficult topics...	4.73	Strongly Agree	Very Effective
4. I enjoyed learning Araling Panlipunan using the..	4.67	Strongly Agree	Very Effective

5. I enjoyed interacting with the different activities	4.5	Strongly Agree	Very Effective
Overall Weighted Mean	4.69	Strongly Agree	Very Effective
Challenge and Competitiveness			
1. The challenges encouraged me to improve my..	4.67	Strongly Agree	Very Effective
2. The competitive elements encouraged me…	4.67	Strongly Agree	Very Effective
3. The challenges made me want to continue until...	4.67	Strongly Agree	Very Effective
4. The activities provided an appropriate level ..	4.57	Strongly Agree	Very Effective
5. I enjoyed earning points, completing..,..	4.33	Agree	Effective
Overall Weighted Mean	4.58	Strongly Agree	Very Effective
Knowledge Retention and Learning Value			
1.The gamified materials helped me remember…	4.83	Strongly Agree	Very Effective
2. I can recall the lesson better because..	4.83	Strongly Agree	Very Effective
3.The activities helped me understand the lesson	4.83	Strongly Agree	Very Effective
4.The knowledge I gained from the gamified..	4.83	Strongly Agree	Very Effective
5. I learned important information while playing..	4.57	Strongly Agree	Very Effective
Overall Weighted Mean	4.78	Strongly Agree	Very Effective
1. The instructions in the gamified materials were..	4.83	Strongly Agree	Very Effective
2. The activities were appropriate for my grade ..	4.83	Strongly Agree	Very Effective
3. The pictures, graphics, animations, and other.	4.83	Strongly Agree	Very Effective
4. The gamified learning materials were easy to..	4.83	Strongly Agree	Very Effective
5. The content presented in the gamified...	4.57	Strongly Agree	Very Effective
Overall Weighted Mean	4.78	Strongly Agree	Very Effective

Legend: 1.00-1.49-Strongly disagree/Very Ineffective;1.50-2.49-Disagree/Ineffective; 2.50-3.49-Neutral/Not Certain; 3.50-4.49-Agree/Effective; 4.50-5.00-Strongly Agree/Very Effective

The results revealed that Motivation and Engagement obtained an overall weighted mean of 4.68, verbally described as Strongly Agree and interpreted as Very Effective. This indicates that the gamified learning materials successfully encouraged students to participate, maintain focus, and remain motivated while completing the learning activities. The highest-rated indicators, with a weighted mean of 4.73, showed that students felt motivated, focused, and encouraged to perform their best. These findings suggest that the integration of game elements contributed to creating an engaging learning environment. This is supported by Ramírez Ruiz et al. (2024), whose systematic review of gamification interventions in primary and secondary education emphasized the role of game-based elements in promoting students' academic, emotional, and behavioral engagement.

In terms of Learning Experience and Enjoyment, the materials obtained an overall weighted mean of 4.69, interpreted as Very Effective. The highest-rated indicator was the students' willingness to use the gamified learning materials again, which obtained a weighted mean of 4.83. This suggests that students found the learning activities enjoyable, exciting, and helpful in understanding difficult topics in Araling Panlipunan 7. The positive responses indicate that the gamified approach provided an enjoyable alternative to conventional classroom activities. This finding is supported by Zeng et al. (2024), whose meta-analysis of 22 experimental studies reported a moderately positive effect of gamification on students' academic performance and discussed its potential to increase engagement and enjoyment in learning.

Regarding Challenge and Competitiveness, the developed materials obtained an overall weighted mean of 4.58, verbally described as Strongly Agree and interpreted as Very Effective. This indicates that the challenges, competitive elements, and opportunities to earn points encouraged students to continue participating and improve their performance. Although the indicator concerning earning points and completing activities received a slightly lower weighted mean of 4.33, interpreted as Agree and Effective, the overall result remained Very Effective. This suggests that the challenges and competitive features were generally well-received by the learners. Similarly, Kaya and Ercag (2023) found that challenge-based gamification positively influenced students' academic performance and motivation, particularly through activities that incorporated competition and learning challenges.

For Knowledge Retention and Learning Value, the developed gamified learning materials obtained an overall weighted mean of 4.78, interpreted as Very Effective. This was among the highest-rated dimensions, indicating that students perceived the materials as helpful in remembering information, recalling lessons, and understanding important concepts. The results suggest that the interactive activities provided meaningful opportunities for learners to reinforce and retain the knowledge gained during the lessons. This finding is supported by Sailer and Homner (2020), whose meta-analysis established positive effects of gamification on cognitive, motivational, and behavioral learning outcomes. Their findings provide support for the potential of game-based learning approaches to strengthen students' learning experiences and cognitive engagement.

The final set of indicators, which focused on the clarity of instructions, appropriateness of activities, visual presentation, ease of use, and content, obtained an overall weighted mean of 4.78, interpreted as Very Effective. The first four indicators received weighted means of 4.83, while the content-related indicator obtained 4.57. These results indicate that students found the learning materials easy to understand and use, with appropriate activities and appealing visual elements. The favorable assessment suggests that the materials provided an organized and learner-friendly instructional experience. This finding is supported by Mayer (2024), who explained through the Cognitive Theory of Multimedia Learning that meaningful learning can be enhanced when words and graphics are appropriately organized and presented to support learners' information processing.

The findings revealed that students had highly positive perceptions of the developed gamified learning materials for Araling Panlipunan 7. All five dimensions obtained Very Effective interpretations, with Knowledge Retention and Learning Value and Instructional Presentation and Usability receiving the highest weighted mean of 4.78. Challenge and Competitiveness obtained the lowest overall weighted mean of 4.58 but still remained within the Very Effective category. The results indicate that the developed materials were perceived as motivating, enjoyable, engaging, challenging, and helpful in reinforcing learning. These findings suggest that the developed gamified learning materials provided a positive learning experience and may serve as an effective supplementary instructional resource for Araling Panlipunan 7.

Conclusions

Based on the findings of the study, the following conclusions were drawn:

1. The developed gamified learning materials for Araling Panlipunan 7 were evaluated as Very Satisfactory by the experts in terms of content quality, instructional quality, technical quality, and accuracy. This establishes that the materials possessed the essential qualities of appropriate instructional resources and were suitable for classroom implementation.

2. Students demonstrated improved academic performance in knowledge, comprehension, and application after the implementation of the developed gamified learning materials. The increases in mean scores and the favorable changes in performance classifications indicate that the materials provided opportunities for learners to strengthen their understanding and application of the concepts in Araling Panlipunan 7.
3. There was a statistically significant difference between students' pretest and posttest performance in knowledge, comprehension, and application. Therefore, the null hypothesis was rejected at the 0.05 level of significance. The findings provide statistical evidence of improved student performance following the implementation of the developed gamified learning materials.
4. Students demonstrated highly positive perceptions of the developed gamified learning materials, as reflected in the Very Effective ratings across all five dimensions. The findings indicate that students appreciated the interactive activities, game elements, challenges, instructional presentation, and opportunities to reinforce their learning.
5. The findings establish that the developed gamified learning materials were favorably evaluated by experts, were associated with significant improvements in students' academic performance, and were positively perceived by the learners. Thus, HISTORY QUEST may serve as a supplementary instructional innovation to support the teaching and learning of Araling Panlipunan 7.

Recommendations

In light of the findings and conclusions of the study, the following recommendations are proposed:

Teachers are encouraged to utilize the developed gamified learning materials as supplementary instructional resources in teaching Araling Panlipunan 7. They may integrate missions, challenges, badges, experience points, and other game elements into classroom activities to promote active participation, motivation, and meaningful learning experiences. Teachers should also provide appropriate guidance and feedback to ensure that game activities remain aligned with the intended learning competencies.

School heads and administrators are encouraged to support the development, evaluation, and implementation of innovative instructional materials, particularly gamified learning resources. They may provide opportunities for teacher training, collaborative material development, and instructional supervision to strengthen the integration of technology-supported and interactive teaching strategies in the classroom.

Teachers and learning resource developers are encouraged to develop and continuously improve gamified learning materials by ensuring the accuracy, relevance, cultural responsiveness, instructional appropriateness, and technical quality of the content. They should consider expert evaluation and learners' feedback when revising instructional resources to ensure that the materials address students' learning needs and curriculum requirements.

Students are encouraged to actively participate in gamified learning activities and use the developed materials as supplementary resources for reviewing lessons, strengthening their understanding, and applying their knowledge. They should also practice responsible participation, collaboration, and healthy competition while engaging in classroom activities.

The Department of Education and curriculum implementers may consider the potential of gamified learning materials as supplementary instructional innovations in supporting the delivery of the Araling Panlipunan

curriculum. The developed material may serve as a reference for teachers who intend to design interactive and learner-centered instructional resources consistent with curriculum standards and learning competencies.

Future researchers are encouraged to conduct similar studies involving a larger number of participants, different grade levels, and other learning areas to further examine the applicability of gamified learning materials. They may also consider using quasi-experimental or experimental research designs involving comparison groups to obtain stronger evidence regarding the effectiveness of gamified instruction. Further investigations may examine long-term knowledge retention, learner motivation, engagement, and the effects of different game elements on students' academic performance.

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