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DEVELOPMENT OF DIGITALIZED AND CONTEXTUALIZED LEARNING MATERIALS IN ARALING PANLIPUNAN 4 AT FELICIANO MAGBANUA INTEGRATED SCHOOL IN NORTH CABADBARAN DISTRICT

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ABSTRACT

This study aimed to develop digitalized and contextualized learning materials for Araling Panlipunan 4 at Feliciano Magbanua Integrated School, North Cabadbaran District, Schools Division of Cabadbaran City. The study was prompted by the low Fourth Quarter Mean Percentage Score of 69.50 obtained by the 34 Grade 4 learners, which was below the Department of Education proficiency standard of 75%. Employing a developmental research design and guided by the ASSURE instructional design model, the study utilized both quantitative and qualitative approaches. Data were gathered through pre-test and post-test results, Focus Group Discussions, expert validation, and structured interviews.

The findings revealed that the least-learned competencies involved the concepts and principles of citizenship, the rights and responsibilities of citizens, and civic welfare. Teachers and learners expressed preference for digitalized, interactive, and contextualized learning resources that incorporate visuals, videos, games, and locally relevant content. Based on these identified needs, three digitalized and contextualized learning materials were developed. Expert evaluation showed that the materials attained a Very Satisfactory rating in terms of content quality, instructional quality, technical quality, and other criteria. Results further indicated that learners' mean score improved from 72.45 (Not Mastered) in the pre-test to 84.03 (Mastered) in the post-test. Qualitative data also revealed positive experiences among teachers and learners, highlighting enhanced engagement, participation, comprehension, and lesson relevance. Moreover, the paired-samples t-test yielded a

statistically significant difference between the pre-test and post-test scores ($t = -8.81$, $p < 0.05$), confirming the effectiveness of the developed learning materials.

The study concludes that the developed digitalized and contextualized learning materials effectively addressed the identified least-learned competencies and significantly improved learners' academic performance. It is recommended that learners be provided with continued access to such resources, teachers be supported through technology integration training, school administrators strengthen ICT infrastructure and professional development programs, and future researchers further implement and evaluate the remaining developed learning materials across different contexts and learning areas.

KEYWORDS: Digitalized Learning Materials, Contextualized Learning Materials, ASSURE Model, Developmental Research, Learner Performance, Instructional Materials.

INTRODUCTION

Among all the subjects in Filipino classrooms, Araling Panlipunan plays a crucial role in shaping a child's sense of self-worth, community, and responsibility. This impact is particularly noticeable at the Grade 4 level, where students move beyond basic knowledge to a more profound understanding of their local community, their country, and their role in it.

The Department of Education realized for some time that simply informing students was not enough. DepEd Orders No. 21, s. 2019 and No. 35, s. 2016 emphasized the need for learning materials that addressed learners' needs, improved academic performance, and made instruction more relevant to real-life situations.

A cue could be found in DepEd's ICT policies that pushed for various digital use to animate lessons, increase accessibility and suit the differing way learners absorb and digest knowledge. Not just policy statements, this was a fuller recognition that the classroom had to change in order to remain a meaningful space for today's learners.

While national policies promote the integration of technology in education, many schools, particularly those located in rural and geographically isolated areas, continue to experience challenges in implementing digital learning initiatives effectively. Recent studies have shown that limited access to digital resources, inadequate technological infrastructure, and insufficient teacher training remain significant barriers to the successful integration of technology in classroom instruction (Gabriel et al., 2022; Llego, 2023). Similar challenges have been observed in Philippine public schools, where teachers often face difficulties in accessing contextually appropriate digital resources and in maximizing available technologies

for instructional purposes. These conditions contribute to a gap between policy expectations and actual classroom practice, ultimately affecting learner engagement and learning outcomes.

The researcher firsthand experienced this gap at Feliciano Magbanua Integrated School. There was a real lack of teaching materials in Grade 4 Araling Panlipunan that were relevant to the socio-cultural reality of students themselves. There were a few pieces of digital material available, but too few to meet the class's needs specifically. Aligning the limited resources available with the diversity in the needs within 34 young learners was a daily hurdle. When the materials are viewed as non-specific or disconnected, it is then not surprising that student motivation and student engagement are impacted negatively.

The value of digitalized learning materials in addressing these challenged was well established in the research literature. Interactive, multimedia-rich digital resources have been shown to enhance engagement, improve comprehension, and support the kind of self-paced, differentiated learning that a diverse group of elementary learners needs. In a subject like Araling Panlipunan, where concepts like governance, civic responsibility, and national history can easily felt abstract, digital materials help made ideas concrete through visuals, simulations, and relatable real-life scenarios.

But digitalization alone was not enough. The researcher had come to understand, both through personal teaching experience and through the literature, that materials must also be contextualized grounded in the learner's immediate environment, culture, and lived experiences. Constructivist learning theory, particularly the work of Piaget and Vygotsky, had long argued that learners were able to make more sense of new information when it was connected to what they already knew and had experienced. When Araling Panlipunan lessons focused on local history, community practices, and issues they were familiar with, students stayed more engaged and were better able to truly understand the material.

To develop materials that were both digitally rich and contextually meaningful, the researcher turned to the ASSURE instructional design model. The ASSURE Model, which is based on learner-centered and media-driven techniques, provides educators with an explicit, structured framework for guiding them through the process of teaching starting with forming an understanding of the students and defining their educational objectives, selecting appropriate media for accomplishing the objectives, and providing opportunities for students to engage in active participation in the lesson and then assessing the extent to which or how well the objectives have been achieved. Studies of the use of the ASSURE Model demonstrate that it is effective at increasing student engagement, clarifying instruction, and improving students'

academic performance that were technology-enhanced. The need for this research study arose from more than merely theoretical considerations; a review of student achievement trends of the school over time had demonstrated that there were trends in student performance that required further investigation.

From 2020 to 2023, the Mean Percentage Scores (MPS) of Grade 4 learners in Araling Panlipunan showed modest but steady growth, rising from 75 in 2020–2021, to 76 in 2021–2022, and reaching 78 in 2022–2023. These numbers were not spectacular, but they suggested that learners were at least meeting the basic competency standard.

That stability, however, did not hold. The Fourth Quarter assessment results for the current group of 34 learners yielded an MPS of only 69.50, which fell below the DepEd proficiency standard of 75% and was categorized as critically low. This result indicated that a significant number of learners had not yet attained the desired level of mastery in the identified competencies, suggesting that the existing instructional approach required review and improvement.

This study was the researcher's response to that call. The objective of the study was to produce digitalized and contextualized learning materials for Araling Panlipunan 4, Fourth Quarter based on the complete competencies where learners had the most trouble, according to the ASSURE model of instructional design. The hope was that through better materials; materials that were engaging, culturally relevant, and systematically designed these learners would not just pass a test but genuinely connect with what they were learning.

1.1 Statement of the Problem

The study aimed to develop digitalized and contextualized learning materials for Araling Panlipunan 4. In particular, it focused on creating interactive digital resources for the Fourth Quarter topics, incorporating content that reflected the learners' own environment and experiences, with the goal of enhancing both understanding and engagement in Araling Panlipunan lessons.

Specifically, it sought to answer the following questions:

What were the least-learned competencies in Araling Panlipunan 4 based on the Fourth Quarter Pre-test Result?

What were the preferred learning resources of teachers and learners as gathered through Focus Group Discussion (FGD) and individual interview?

??. What learning resources can be developed based from the identified least learned competencies and from the inputs gathered from the FGD?

??. What was the level of validity of the developed digitalized and contextualized learning materials, as evaluated by experts in terms of:

4.1 Content Quality;

4.2 Instructional Quality;

4.3 Technical Quality; and

4.4 Other Findings?

5. How effective was the developed digitalized and contextualized learning materials in Araling Panlipunan 4 based on the Pre-test and Post-test results of the learners?

6. What were the experienced and feedback of learners and teachers on the use of the digitalized and contextualized learning materials?

7. Based on the results of the evaluation and feedback, what enhancements may be proposed to further improve the developed learning materials?

8. Is there a significant difference between the pretest and posttest result of learners after exposure to the digitalized and contextualized learning materials in AP 4 when data were analyzed at the 0.05 level of significance?

2. METHODOLOGY

2.1 Research Design

The research design utilized in this study was a developmental research design. This type of research was appropriate when the primary aim was not merely to describe a situation or measure relationships, but to actively create a product in this case, digitalized and contextualized learning materials and then evaluate whether that product works. Unlike experimental studies that test pre-existing variables, developmental research involved a cycle of designing, implementing, validating, and refining an instructional output based on real learner needs. It was the most fitting approach for this study because the researcher did not simply want to document the problem in the classroom but to build something that can genuinely address it.

The decision to pursue this design was rooted in an honest and sobering classroom reality. As the Araling Panlipunan 4 teacher at Feliciano Magbanua Integrated School, the researcher observed firsthand how the learners struggle to connect with the subject matter, particularly during the Fourth Quarter. This observation was confirmed by hard data: the Fourth Quarter performance of the 34 Grade 4 learners yields a Mean Percentage Score (MPS) of only 69.50, which fell significantly below the Department of Education's required proficiency level of

75%. This places the learners at a critically low performance level and made clear that something had to change not just in terms of teacher effort, but in terms of the materials being used to deliver instruction.

In response to the identified gap in the knowledge base, the ASSURE instructional design model was used as a framework for instructional material development through its six-stage, systematic and learner-centered process. ASSURE guided the researcher from analyzing the learners' characteristics all the way through evaluating and revising the final output. This structured approach ensured that the developed materials were not only pedagogically sound but also aligned with the curriculum, responsive to the learners' contexts, and supported by evidence before, during, and after implementation.

2.2 Research Respondents

Feliciano Magbanua Integrated School has one Grade 4 class with 34 students (13 boys and 21 girls) that represent all the Grade 4 classes in the school for the 2025-2026 school year. Being a small community school, Feliciano Magbanua Integrated School did not maintain multiple sections per grade level, which means that all Grade 4 learners were automatically and completely included in the study. There was no need to apply any form of random or purposive sampling because the population and the sample were one and the same. Every child in the grade was a participant.

Since the study involved the entire Grade 4 population, total enumeration was employed. The inclusion criteria required that participants: be officially enrolled in Grade 4 at Feliciano Magbanua Integrated School during the School Year 2025–2026; regularly attend Araling Panlipunan 4 classes; participate in the administration of both the pre-test and post-test; and submit signed parental consent forms indicating their voluntary participation in the study.

Learners who were absent during the administration of either the pre-test or post-test, those who did not participate in the implementation activities, and those without signed parental consent forms were excluded from the data analysis.

This single-section reality, while reflective of the school's modest size, actually works in the study's favor. It ensured that the data gathered were free from the inconsistencies that might arise when comparing multiple sections, and it allowed the researcher to build a deeper understanding of each learner's individual profile and learning needs. The 34 learners came

from varying family backgrounds and socio-economic conditions, which were typical of a rural school community. Some have consistent access to smartphones or tablets at home, while others rely solely on the resources available at school for anything digital. This range of circumstances made it critical for the researcher to study the learners' technological readiness and preferred learning modalities before finalizing the design of the instructional materials, in order to ensure that the developed resources were practical, accessible, and meaningful for all students not just those with better resources at home.

In addition to the learner participants, the study involved Grade 4 teachers who participated in the Focus Group Discussions and interviews conducted for Research Question 2 and Research Question 6. Their insights regarding learner needs, preferred learning resources, classroom experiences, and feedback on the developed learning materials provided valuable information for the development and evaluation of the instructional resources.

Furthermore, a panel of expert validators composed of members of the Division Quality Assurance Team of the Schools Division of Cabadbaran City evaluated the developed learning materials in terms of Content Quality, Instructional Quality, Technical Quality, and Other Findings.

2.3 Research Locale

This research was conducted at Feliciano Magbanua Integrated School, which is a public school located in an area called Purok 1, Barangay Concepcion, Cabadbaran City, in Agusan del Norte, Philippines. Feliciano Magbanua Integrated School is under the North Cabadbaran District and forms part of the Schools Division of Cabadbaran City. This school serves the educational needs of students living in the areas surrounding the school and in nearby barangays. Feliciano Magbanua Integrated School is an example of many other public schools located outside urban centres in the Philippines that have little access to resources yet continue to provide quality education to their students.

Feliciano Magbanua Integrated School was what its name suggested an integrated school, meaning it offered both elementary and junior high school levels within a single campus. Because it was a small school, it runs only one section per grade level, which gave it a close-knit and community-centered atmosphere that was quite different from larger urban schools. Everyone knows everyone, and the relationships between teachers, students, and families tend to be more personal and collaborative. This environment made it natural and

comfortable for the researcher, who was also a teacher at the school, to engage meaningfully with both the learners and the rest of the faculty throughout the study.

Feliciano Magbanua Integrated School is a small educational setting, yet the staff and administrators are dedicated to keeping up to date with modern education and are providing students with a quality education. The principal of Feliciano Magbanua Integrated School (Primary I), an administrator (Administrative Officer), and support staff (Utility Staff) all work collaboratively to meet the needs of students. The instructional staff consists of eight teachers, one master teacher and seven teachers, who provide students with an excellent education. The physical environment is modern and can readily accommodate 21st century learning and instruction. Each of Feliciano Magbanua Integrated School's classrooms has been outfitted with a SMART TV with Wi-Fi capabilities and a projector to deliver the digital lessons developed during the course of this study. All of the classrooms have access to computers, multimedia instructional materials and the internet to support the use of these multimedia instructional materials in the classrooms. Because of the availability of these resources, Feliciano Magbanua Integrated School is an appropriate and a perfect place for conducting the study related to digital instruction and technology-enhanced instruction.

2.4 Research Instruments

The research included four different modalities which were selected and developed for specific purposes. The use of four different modes allowed the researcher to collect both quantitative and qualitative data, thereby gaining a complete understanding of the issue and effects of the interventions.

The first instrument was the 40-item Fourth Quarter Pre-test and Post-test in Araling Panlipunan 4, adapted from the Sukdanan Standardized Questionnaire developed by the Department of Education, Caraga Region. This instrument was used to directly address Research Question 1, Research Question 5, and Research Question 8. The pre-test scores provided the baseline data for identifying least-learned competencies (RQ1), while the comparison of pre-test and post-test scores measured the effectiveness of the intervention (RQ5) and served as the basis for the paired sample t-test to determine statistical significance (RQ8).

The second instrument was the Focus Group Discussion (FGD) and Interview Guide, which was the primary tool used to address Research Question 2. This qualitative instrument was

designed to gather in-depth information on the preferred learning modalities of both teachers and learners across three dimensions the type of learning materials they find most useful (printed, digitalized, or interactive digital resources); and the factors that influence their modality preferences, specifically accessibility, engagement, comprehension, and motivation. Rather than limiting respondents to a fixed set of choices, the FGD and interview format allowed for open, honest, and nuanced conversations making it possible to capture the real reasons behind the preferences of both teachers and learners in their own words. For the learners, the guide used simple, conversational questions and visual choice prompts to made participation comfortable and age-appropriate. For the teachers, the questions were structured to drew on their professional experience and classroom observations. The insights gathered through this instrument directly inform the contextualization, format, and digital design of the instructional materials developed in the study.

The third instrument was the DepEd Evaluation Rating Sheet for Non-Print Materials, which served as the primary tool for measuring the validity of the developed digitalized and contextualized learning materials and directly addressed Research Question 4. This official instrument of the Department of Education was used by a panel of expert validators composed of a Master Teacher I, the school Principal, a Special Education Supervisor in Araling Panlipunan, and the Division Learning Resource Management and Development System coordinator. The panel assessed the developed materials across four criteria: Content Quality, which evaluated the accuracy, relevance, and alignment of the subject matter; Instructional Quality, which examined the clarity, organization, and effectiveness of lesson delivery; Technical Quality, which assessed the functionality, multimedia elements, and usability of the materials; and Other Findings, which identified any errors such as conceptual, factual, grammatical, or typographical mistakes. Each criterion was scored on a four-point scale, and weighted mean scores were computed to determine the overall validity rating for each dimension.

The fourth instrument was the Structured Interview and Focus Group Discussion (FGD) Guide, designed to address Research Questions 2, 3, and 6. For Research Question 2, the FGD gathers additional qualitative insights from teachers and learners on their preferred instructional modalities and the factors that influence those preferences. For Research Question 3, the FGD helped identify what kinds of learning resources teachers and learners believe would be most effective and appropriate. For Research Question 6, the structured

interview guide was used with both teachers and learners to capture their firsthand experienced with the developed materials what works well, what was difficult, and what can be improved. These interviews add a human and experiential layer to the data that numbers alone can never fully convey.

2.4 Statistical Treatment

Understanding what the data mean was just as important as collecting them in the first place. In this study, both quantitative and qualitative methods were used to analyze the information gathered, because numbers alone cannot told the full story of how learners experience instruction. Together, these approaches allow the researcher to address each research question with both precision and depth.

The purpose of calculating the mean percentage score (MPS) for Araling Panlipunan 4 was to determine those competencies that were less well acquired, based on the results from the Fourth Quarter Pre-Test Given the MPS for the entire class provided an overall measure of the average grade attained by the learners compared to the curriculum-based standards, it was important that an analysis of the scores be undertaken to identify any items that were below acceptable levels of mastery among the students who completed the test. The total number of learners who correctly answered each individual test item was identified by using frequency or count, and percentage distributions to provide precise information about how many learners answered each question correctly. Based on the results from this analysis, an item analysis was performed to determine the competencies required for acceptable levels of mastery in each of the test items. The competencies with the lowest percentage of correct responses were identified as the least learned, and these became the foundation upon which the digitalized and contextualized learning materials were built. In a very real sense, the learners themselves through their pre-test performance help shape what the materials would focus on.

In order to investigate Research Question 2: " What are the preferred learning resources of teachers and learners as gathered through Focus Group Discussion (FGD) and individual interview?", data collected from Focus Group Discussions and individual interviews were analyzed using a thematic analysis approach. All responses to the focus groups and interviews were transcribed, read through thoroughly and then assigned a code (or codes) to identify the type of response. Once the codes were assigned, recurring concepts were grouped under major themes that represent participants' authentic preferences and provide an

understanding of how those preferences are created by their practical experiences. For quantifiable responses such as when participants indicate a specific modality choice or rate a factor frequency counts and percentage distributions were also used to provide a clearer picture of the group's overall direction. These findings directly inform the design and contextualization of the instructional materials developed in Research Question 3.

To determine the level of validity of the developed digitalized and contextualized learning materials, the weighted mean was computed for each evaluation criterion based on the ratings given by the panel of expert validators. The four criteria Content, Instructional, Technical, and Other Findings were each scored on a four-point scale, and the resulting weighted mean scores were interpreted according to a prescribed rating scale to classify the materials' level of validity. This step matters deeply, because it ensured that the materials do not just look appealing but were genuinely accurate, well-organized, and instructionally appropriate before any learner ever encountered them in the classroom. The expert validators serve as critical friends whose professional judgment helped raise the quality of the materials before implementation.

To evaluate how effective the developed materials were in improving learner performance, the Pre-test and Post-test scores of the 34 Grade 4 learners were compared. The mean scores for both tested were computed, and the mean gain score obtained by subtracting the Pre-test mean from the Post-test mean showed how much improvement takes place after the intervention. But knowing that scores went up was not enough; it was equally important to knew whether that improvement was real and not simply a matter of chance. For this reason, a paired-samples t-test was conducted at the 0.05 level of significance. This inferential statistical test examined whether the difference in learner performance before and after the use of the digitalized and contextualized materials was statistically significant, giving the study the rigor needed to made confident claimed about the materials' effectiveness.

The qualitative dimension of the study was just as important as the numbers. The data gathered from focus group discussions and structured interviews with both learners and teachers were analyzed through thematic analysis. Responses are transcribed and read carefully, then coded and organized into meaningful categories. From these categories, recurring themes emerge that describe how learners and teachers experience the materials what excites them, what challenged them, and what they believe could still be improved. These themes were not treated as secondary or supplementary; they were woven together

with the quantitative findings to build a fuller and more honest picture of the materials' real-world impact.

By bringing together descriptive statistics, inferential analysis, and thematic interpretation, the study ensured that the evaluation of the developed digitalized and contextualized learning materials in Araling Panlipunan 4 was both rigorous and humane grounded in data, but never losing sight of the learners at the center of it all.

3. RESULTS AND DISCUSSION

Problem 1. What are the least-learned competencies in Araling Panlipunan 4 based on the Fourth Quarter Pre-test Result?

This section aims to determine students' difficulties with competencies from Araling Panlipunan 4 as reflected in the Fourth Quarter Pre-test results. Matatag Curriculum outlines these Competencies. Also, using the averages of Mean Percentage Scores (MPS) and how many learners achieved the competency will indicate the areas requiring improvement for additional instruction and continuing instructional development. Table 1 shows the list of the competencies and their scores and interpretations.

Table 3: Araling Panlipunan 4, Quarter 4-Least Learned Competencies (Pre-test).

#	Kasanayang Pampagkatuto (MATATAG Curriculum)	Mean Percentage Score (MPS) Give the MPS (in whole number) of each competency.	No. of Learners Give the total number of learners showing mastery of each competency.	Interpretation
1	Naipaliliwanag ang mga sagisag ng pagkakakilanlang Pilipino	76%	26	Mastered
2	Natutukoy ang konsepto at prinsipyo ng pagkamamamayan	68%	23	Not Mastered
3	Natatalakay ang mga karapatan at tungkulin ng isang mamamayan	69%	23	Not Mastered
4	Natatalakay ang konsepto ng kagalingang pansibiko	70%	24	Not Mastered
5	Napahahalagahan ang papel na ginagampanan ng mga mamamayan sa pagtataguyod ng karapatan at tungkulin tungo sa pagtamo ng kagalingang pansibiko	77%	26	Mastered

Legend: 1%-74% - Not Mastered; 75%-100% - Mastered

Table 3 shows that Grade 4 learners demonstrated varying levels of mastery in the Fourth Quarter competencies of Araling Panlipunan 4. Two competencies were classified as Mastered, namely Naipaliliwanag ang mga sagisag ng pagkakakilanlang Pilipino (76%) and Napahahalagahan ang papel na ginagampanan ng mga mamamayan sa pagtataguyod ng karapatan at tungkulin tungo sa pagtamo ng kagalingang pansibiko (77%). However, three competencies were classified as Not Mastered: Natutukoy ang konsepto at prinsipyo ng pagkamamamayan (68%), Natatalakay ang mga karapatan at tungkulin ng isang mamamayan (69%), and Natatalakay ang konsepto ng kagalingang pansibiko (70%).

These findings indicate that learners experienced difficulty in understanding concepts related to citizenship, civic rights and responsibilities, and civic welfare. The results served as the basis for identifying the least-learned competencies and guided the development of the digitalized and contextualized learning materials.

Problem 2. What are the preferred learning resources of teachers and learners as gathered through Focus Group Discussion (FGD) and individual interview?

The table below presents the findings from teachers regarding their preferred learning resources, reflecting their preference for materials that are interactive, digital, and relevant to students' real-life experiences.

Table 4: Preferred Learning Resources of Teachers in Araling Panlipunan 4.

Code	Themes	Verbatim Responses (Bisaya-English)	English Translation	Interpretation
T1, T2, T3	Preference for Interactive Digital and Combination of Materials	Nag-gamit ko ug printed ug digital materials karon, pero mas gusto nako ang interactive digital materials kay mas engaging sila ug mas dali ma-absorb sa mga estudyante.	I currently use printed and digital materials, but I prefer interactive digital materials because they are more engaging and easier for students to absorb.	A large proportion of educators have communicated a preference for using interactive digital resources over print resources. This shows an understanding of how much engagement is important in providing learners with quality instruction.
T4, T5, T6	Effectiveness of Multimedia Activities	Nag-gamit ko ug printed materials sama sa modules ug worksheets, digital materials	I use printed materials like modules and worksheets, digital materials	Through the use of multimedia activity, such as quizzes or videos, teachers believed they had provided a more engaging

		sama sa PowerPoint ug videos, ug interactive digital materials sama sa quizzes. Mas prefer nako ang interactive digital kay mas engaging kini ug nagahatag og daghang opportunities para sa aktibong partisipasyon sa mga estudyante.	like PowerPoint and videos, and interactive digital materials like quizzes. I prefer interactive digital because they are more engaging and provide more opportunities for active student participation.	and accessible approach to lesson delivery. They supported Mayer's Cognitive Theory of Multimedia Learning by allowing learners to have greater levels of engagement and retentiveness through interactive and comprehensive learning.
T7	Interactive Digital Materials Enhance Comprehension and Retention	Mas maayo ang interactive digital materials sa pagtabang sa mga estudyante nga masabtan ang leksyon, kay mas interesante, mas dali sundon, ug maka-engganyo sa mga estudyante nga magpadayon sa pagtuon.	Interactive digital materials are better at helping students understand lessons because they are more interesting, easier to follow, and encourage students to continue learning.	Teachers found that when students use interactive materials which have components of sight/sound/engagement (such as books/videotapes, etc.), there is an increase in the comprehension and retention of the material after completion of the activity, as well as a greater likelihood of students being actively involved with the content being learned.
T8	Preference for Contextualized, Digital, and Interactive Materials	Irekomenda nako ang combination sa tulo — contextualized, digital, ug interactive materials — kay mas relevante ug mas engaging kini alang sa mga learners, ug makahatag og mas maayo nga kasinatian sa pagtulun-an.	I recommend a combination of the three — contextualized, digital, and interactive materials — because they are more relevant and engaging for learners and provide a better learning experience.	According to teachers, a combination of digital, interactive and contextualized instructional resources would best address the diverse needs of their learners. This is consistent with Universal Design for Learning (Rose & Meyer, 2002), which supports multiple types of flexible and inclusive instructional materials.
T9	Accessibility as a Key Factor in Material Preference	Mas gusto nako ang digitalized materials kay sayon kining ma-access bisan	I prefer digitalized materials because they are easy to access	The availability of learning materials to teachers has been established as a primary reason for using digital

		kanus-a ug bisan asa. Nakatipig usab kini ug space ug nagpadali sa pagpangita ug pagpaambit sa impormasyon.	anytime and anywhere. They also save space and make it faster to find and share information.	resources. With digital resources, both teachers and students are able to access, find, and share materials more effectively and quickly than if they used printed materials. The actions taken by teachers reflect the DepEd's (Department of Education) philosophy behind their Open Educational Resources initiative (Llego, 2023); that all learning materials are available to all individuals and are shared in an efficient manner.

Table 4 presents the preferred learning resources of teachers in Araling Panlipunan 4. The responses revealed a strong preference for digital, interactive, contextualized, and accessible learning materials. Teachers emphasized the importance of multimedia resources such as videos, presentations, and interactive activities in improving learner participation and lesson delivery.

The findings suggest that teachers value instructional materials that are engaging, relevant to learners' experiences, and easily accessible. These preferences served as important considerations in the development of the digitalized and contextualized learning materials.

Table 5 presents the learners' responses on their preferred digital, interactive, and contextualized materials, which were shown to enhance their engagement, comprehension, and overall enjoyment of the subject.

Table 5: Preferred Learning Resources of Learners in Araling Panlipunan 4.

Code	Themes	Verbatim Responses (Bisaya-English)	English Translation	Interpretation
L1, L4	Preference for Interactive and Digital Learning Resources	Ganahan ko magtan-aw ug mga video ug magduwa-duwa kay lingaw kaayo ug dali ra nako masabtan	I like watching videos and playing games because it's really fun and I understand better.	Learners love digital resources like videos and games because they find them fun and easy to understand. These interactive elements help keep their attention and

		ang lesson.		make learning more enjoyable.
L9, L11	Motivation and Interest through Games and Visuals	Ganahan ko magtuon kung naa'y mga duwa ug mga istorya nga naa sa leksyon, kay mas lingaw.	I like learning when there are games and stories in the lesson because it's more fun.	Students reported that incorporating games and stories into their lesson makes learning more enjoyable and engaging which encourages them to stay motivated and enthusiastic about learning; they will be more likely to stay focused and involved in the lesson when they are able to combine play with their educational experience.
L5, L8	Need for Relatable and Contextualized Content	Mas maayo kung ang lesson maghisgot sa among lugar, like ang mga tawo sa among barangay.	It's better when the lesson talks about our place, like the people in our barangay.	Using examples from a student's community, including local leaders and events that students are familiar with, helps the students connect with and learn the material being presented. This will help make the lesson more meaningful for the student and allow them to better understand the information presented. This supports the Constructivist Theory of Piaget (1952), which states that a connection between new information and what the student already knows or has experienced in real life will help the student learn more effectively.
L2, L6	Preference for Easy-to-Access Digital Resources	Gusto ko nga pwede ko makatan-aw sa video bisan asa, kay makatabang sa pagsabot.	I want to watch the video anytime, anywhere, because it helps me understand.	Digital resources provide students the ability to have flexibility and convenience, particularly with easy access. The accessibility of viewing videos at any time and any place allows learners to view past lessons at their individual pace to develop an understanding and retain information learned in a classroom setting.
L10,	Enjoyment of	Mas dali nako	I can remember	Having fun while playing

L12	Multimedia Learning and Games	maalala ang leksyon kung naa'y duwa kay lingaw man.	the lesson better if there's a game because it's fun.	games helps students learn from their experiences in a way that's unique to each student. When we enjoy what we do, we have greater likelihood of remembering what we've learned. Therefore, if students enjoy playing games while studying for exams, they'll likely be able to keep their knowledge longer than otherwise.
L3, L7	Engagement through Multimedia and Interactive Activities	Mas lingaw kung naa'y mga duwa ug mga quiz kay makalimtan nako ang pagtuon, pero lingaw gihapon.	It's more fun when there are games and quizzes because I don't feel like studying, but I'm still learning.	Learners will have an easier time studying because they are learning through games and quizzes instead of reading a book or listening to the teacher talk. Games, quizzes, and other types of interactive learning activities are fun for learners, and they keep them engaged and motivated. Games and quizzes do not seem like work to learners and are a fun way for learners to learn.

Table 5 shows the preferred learning resources of Grade 4 learners. The responses revealed that learners preferred materials that are interactive, enjoyable, accessible, and connected to their daily experiences. Videos, games, quizzes, stories, and community-based examples were identified as the most preferred learning resources.

The findings indicate that learners are more engaged when lessons are presented through interactive and contextualized approaches. These preferences guided the design and development of the learning materials used in this study.

Problem 3. What learning resources can be developed based from the identified least learned competencies and from the inputs gathered from the FGD?

The development of the digitalized and contextualized learning materials was guided by the least-learned competencies identified through the pre-test administered to the Grade 4 learners. To ensure alignment with the MATATAG Curriculum, the organization and sequencing of the learning materials followed the order of the competencies prescribed for

the Fourth Quarter of Araling Panlipunan 4.

Three learning materials were developed corresponding to the three competencies identified as not mastered by the learners. Learning Material 1 focused on Natutukoy ang konsepto at mga prinsipyo ng pagkamamamayan, Learning Material 2 focused on Natatalakay ang mga karapatan at tungkulin ng isang mamamayan, and Learning Material 3 focused on Natatalakay ang konsepto ng kagalingang pansibiko. The sequence of the lessons was intentionally arranged to follow the progression of concepts in the curriculum, beginning with the foundational concept of citizenship, followed by the discussion of citizens' rights and responsibilities, and culminating in the concept of civic welfare.

This alignment ensured that the developed learning materials addressed the identified learning gaps while maintaining consistency with the intended learning outcomes and sequence of competencies prescribed in the curriculum.

Table 6: Alignment of the Identified Least-Learned Competencies and Developed Learning Materials.

Identified Least-Learned Competency	Developed Learning Material
Natutukoy ang konsepto at mga prinsipyo ng pagkamamamayan	Aralin 1 – Konsepto at Prinsipyo ng Pagkamamamayan
Natatalakay ang mga karapatan at tungkulin ng isang mamamayan	Aralin 2 – Karapatang Panlipunan at Pangkabuhayan at Tungkulin ng Mamamayan
Natatalakay ang konsepto ng kagalingang pansibiko	Aralin 3 – Kagalingang Pansibiko

Based on the results of the competency analysis, Focus Group Discussions (FGDs), interviews with teachers and learners, and the identified least-learned competencies in Araling Panlipunan 4, three digitalized and contextualized learning materials were developed. These materials were designed to address the learning gaps of Grade 4 learners while promoting engagement, accessibility, and meaningful learning experiences. The learning materials were developed using Canva and incorporated multimedia elements, contextualized content, interactive activities, and formative assessments.

The three developed learning materials are:

Konsepto at Prinsipyo ng Pagkamamamayan

Karapatang Panlipunan at Pangkabuhayan at Tungkulin ng Mamamayan

??. Kagalingang Pansibiko

The developed materials were designed to be learner-centered and self-paced, allowing learners to navigate the lessons independently while receiving immediate feedback through embedded activities and assessments.

Overview of the Developed Learning Materials

Each learning material contains the following components:

Title Page

Learning Objectives

??. Motivation Activity

??. Lesson Proper

??. Multimedia Presentations

??. Interactive Activities

??. Formative Assessments

??. Reflection Activities

??. Summary of Key Concepts

Quiz and Evaluation Activities

The learning materials also incorporate contextualized examples, community-based situations, and real-life applications relevant to the experiences of Grade 4 learners.

Learning Material 1

Konsepto at Prinsipyo ng Pagkamamamayan

This learning material was developed to strengthen learners' understanding of the concept and principles of citizenship. It includes contextualized discussions, visual presentations, videos, interactive activities, and assessments designed to help learners understand their roles and responsibilities as citizens.

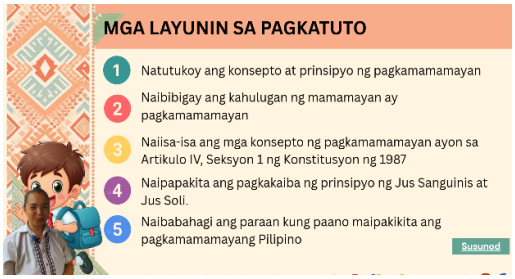
Access Information

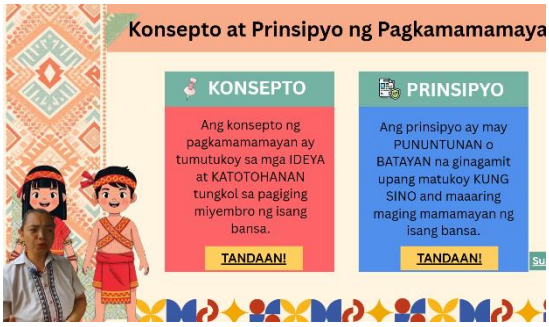
QR Code:

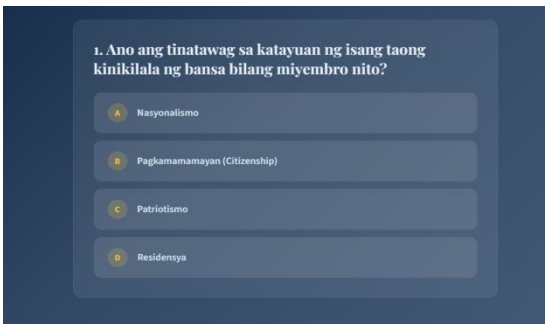
URL Link:

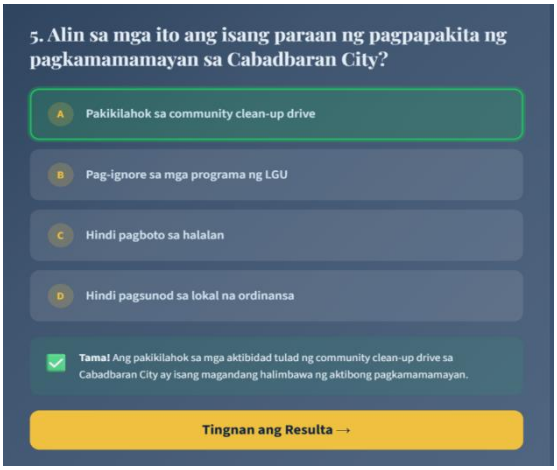
https://www.canva.com/design/DAHHe1KARzk/6uO56HiGhvUuy1UkdAIhA/edit

Sample Screenshots of Learning Material 1









Assessment Activities Included

Multiple-choice quiz

Matching-type activities

??. Reflection questions

??. Interactive exercises

Learning Material 2

Karapatang Panlipunan at Pangkabuhayan at Tungkulin ng Mamamayan

This learning material focuses on helping learners understand their social and economic rights as well as their responsibilities as members of society. The module utilizes multimedia presentations, contextualized scenarios, and interactive assessments to make the concepts easier to understand and apply.

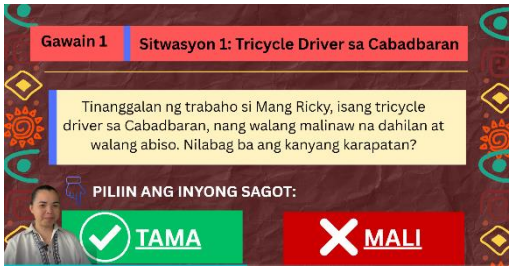
Access Information

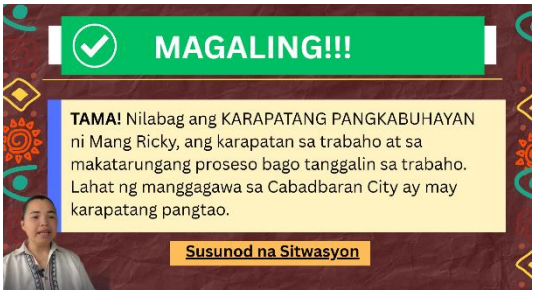
QR Code:

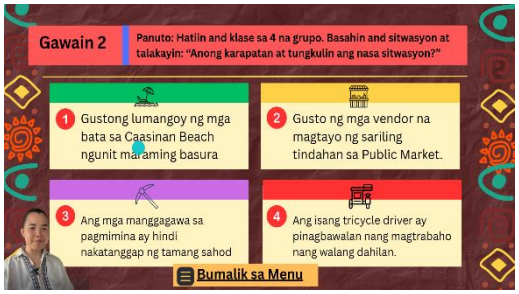
URL Link:

https://www.canva.com/design/DAHEdx9xa2s/KBX5OLMaVsOU_EIBddiVcA/edit

Sample Screenshots of Learning Material 2







Assessment Activities Included

Multiple-choice questions

Scenario-based activities

??. Short-answer exercises

??. Reflection activities

Learning Material 3

Konsepto ng Kagalingang Pansibiko

This learning material was developed to promote civic responsibility, participation, and awareness among learners. Through contextualized examples and community-based activities, learners are encouraged to appreciate the importance of civic engagement and active citizenship.

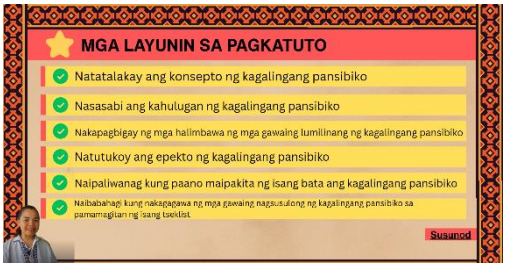
Access Information

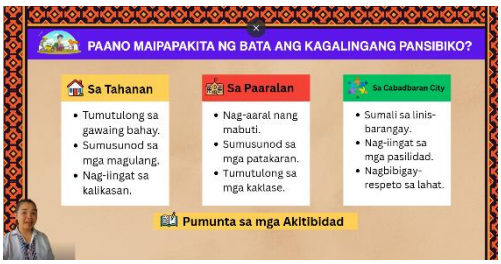
QR Code:

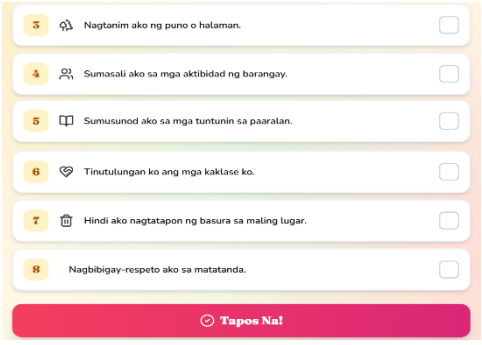
URL Link:

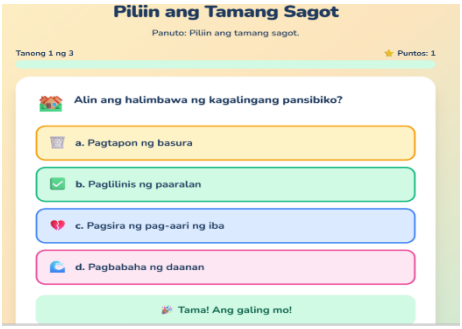
https://www.canva.com/design/DAHFyUTWaBQ/uLcH91UY9kYvGubQh7zAA/edit

Sample Screenshots of Learning Material 3









Assessment Activities Included

Interactive quizzes

Reflection questions

??. Community-based activities

??. Performance tasks

Features of the Developed Learning Materials

The developed learning materials contain several features that support effective instruction and learner engagement. These include multimedia resources such as videos, images, animations, and visual presentations. The modules also provide self-paced navigation, immediate feedback mechanisms, contextualized examples, interactive quizzes, and learner-centered activities. These features were incorporated to enhance accessibility, comprehension, motivation, and active participation among Grade 4 learners.

The developed digitalized and contextualized learning materials were specifically designed to address the least-learned competencies identified in Araling Panlipunan 4. Through the integration of multimedia elements, contextualized content, and interactive activities, the materials provide learners with meaningful opportunities to engage with the lessons actively. The use of localized examples and community-based situations helps learners connect academic concepts with their everyday experiences. Furthermore, the inclusion of embedded assessments and feedback mechanisms allows learners to monitor their own progress while supporting teachers in facilitating instruction. These characteristics demonstrate that the developed learning materials are responsive to learners' needs and aligned with the objectives of the Araling Panlipunan 4 curriculum.

Problem 4. What is the level of validity of the developed digitalized and contextualized learning materials, as evaluated by experts in terms of Content, Instructional, Technical, and Other Findings?

Before the implementation of the developed digitalized and contextualized learning materials, a formal validation process was conducted to determine their level of validity and suitability for instructional use. The evaluation was carried out by a panel of expert validators composed of a Master Teacher I, the school Principal, a Special Education Supervisor in Araling Panlipunan, and the Division Learning Resource Management and Development System (LRMDS) Coordinator. These validators were selected based on their expertise in curriculum implementation, instructional supervision, educational leadership, and learning resource evaluation.

The developed learning materials were evaluated using the Department of Education Evaluation Rating Sheet for Non-Print Materials. The evaluation focused on four areas: Content Quality, Instructional Quality, Technical Quality, and Other Findings. The validation process aimed to ensure that the materials were aligned with the learning competencies prescribed in the MATATAG Curriculum and met the standards required for classroom implementation.

The results of the expert evaluation are presented in Tables 7 to 10. Table 7 presents the evaluation of the developed learning materials in terms of Content Quality, particularly their alignment with the learning competencies, accuracy, relevance, organization, and appropriateness for Grade 4 learners.

Table 7: Result of the evaluation of experts based on content quality.

Factor	**A. Content**		**Quality**
Item	**Criterion**	**Score**	**Meaning**
1	Content is consistent with topics/skills found in the DepED Learning Competencies for the subject and grade/year level it was intended.	4.0	VS
2	Concepts developed contribute to enrichment, reinforcement, or mastery of the identified learning objectives.	4.0	VS
3	Content is accurate.	4.0	VS
4	Content is up-to-date.	4.0	VS
5	Content is logically developed and organized.	4.0	VS
6	Content is free from cultural, gender, racial, or ethnic bias.	4.0	VS
7	Content stimulates and promotes critical thinking.	3.8	VS
8	Content is relevant to real-life situations.	4.0	VS
9	Language (including vocabulary) is appropriate to the target user	4.0	VS

	level.		
10	Content promotes positive values that support formative growth.	4.0	VS
Total	Points	39.8	Passed
Passing rule: at least 30 points out of 40.			

Table 7 presents the evaluation of the developed learning materials in terms of content quality. The results show that all indicators received ratings within the Very Satisfactory level, with scores ranging from 3.8 to 4.0. The evaluators found that the materials were aligned with the DepEd learning competencies, accurate, up-to-date, logically organized, relevant to real-life situations, and appropriate for the target learners.

The overall score of 39.8 out of 40 exceeded the required passing score of 30, indicating that the developed learning materials possess high content quality and are suitable for instructional use in Araling Panlipunan 4.

Table 8: Result of the evaluation of experts based on instructional quality.

Factor	**B. Instructional**		**Quality**
Item	**Criterion**	**Score**	**Meaning**
1	Purpose of the material is well defined.	4.0	VS
2	Material achieves its defined purpose.	4.0	VS
3	Learning objectives are clearly stated and measurable.	4.0	VS
4	Level of difficulty is appropriate for the intended target user.	3.8	VS
5	Graphics / colors / sounds are used for appropriate instructional reasons.	3.8	VS
6	Material is enjoyable, stimulating, challenging, and engaging.	4.0	VS
7	Material effectively stimulates creativity of target user.	4.0	VS
8	Feedback on target user's responses is effectively employed.	4.0	VS
9	Target user can control the rate and sequence of presentation and review.	4.0	VS
10	Instruction is integrated with target user's previous experience.	4.0	VS
Total	Points	39.5	Passed
Passing rule: at least 30 points out of 40.			

Table 8 presents the evaluation of the developed learning materials in terms of instructional quality. The results show that all indicators obtained ratings within the Very Satisfactory level, with scores ranging from 3.8 to 4.0. The evaluators found that the learning objectives were clearly stated, the activities were appropriate for the learners, and the materials effectively supported learner participation and feedback.

The overall score of 39.5 out of 40 exceeded the minimum passing score of 30, indicating that the developed learning materials possess very satisfactory instructional quality and effectively support the learning process of Grade 4 learners.

Table 9: Result of the evaluation of experts based on technical quality.

Factor	C. Technical		Quality
Item	**Criterion**	**Score**	**Meaning**
1	Audio enhances understanding of the concept.	4.0	VS
2	Speech and narration (correct pacing, intonation, and pronunciation) is clear and can be easily understood.	4.0	VS
3	There is complete synchronization of audio with the visuals, if any.	4.0	VS
4	Music and sound effects are appropriate and effective for instructional purposes.	4.0	VS
5	Screen displays (text) are uncluttered, easy to read, and aesthetically pleasing.	4.0	VS
6	Visual presentations (non-text) are clear and easy to interpret.	3.8	VS
7	Visuals sustain interest and do not distract user's attention.	4.0	VS
8	Visuals provide accurate representation of the concept discussed.	4.0	VS
9	The user support materials (if any) are effective.	4.0	VS
10	The design allows the target user to navigate freely through the material.	4.0	VS
11	The material can easily and independently be used.	4.0	VS
12	The material will run using minimum system requirements.	4.0	VS
13	The program is free from technical problems.	3.8	VS
Total	Points	51.5	Passed
Passing rule: at least 39 points out of 52.			

Table 9 presents the evaluation results of the developed learning materials in terms of technical quality. Most indicators received a score of 4.0, while two indicators obtained a score of 3.8, all interpreted as Very Satisfactory. The evaluators found that the audio, visuals, navigation features, and usability of the materials met the required technical standards.

The overall score of 51.5 out of 52 exceeded the required passing score of 39, indicating that the developed learning materials are technically sound, user-friendly, and appropriate for classroom implementation.

Table 10: Result of the evaluation of experts based on other findings.

Factor	D. Other		Findings
Item	**Criterion**	**Score**	**Meaning**
1	Conceptual errors.	4.0	Not present
2	Factual errors.	4.0	Not present
3	Grammatical and / or typographical errors.	4.0	Not present
4	Other errors (i.e., computational errors, obsolete information, errors in the visuals, etc.).	4.0	Not present
Total	Points	16	Passed
Passing rule: at least 16 points out of 16.			

Table 10 presents the evaluation results based on other findings. All indicators received a score of 4.0, interpreted as Not Present. The evaluators found no conceptual errors, factual inaccuracies, grammatical errors, typographical mistakes, or other technical issues in the developed learning materials.

The perfect score of 16 out of 16 confirms that the materials are accurate, error-free, and ready for instructional use.

Problem 5. How effective is the developed digitalized and contextualized learning materials in Araling Panlipunan 4 based on the Pre-test and Post-test results of the learners?

This section compares learners' progress toward mastering specific competencies outlined in their Fourth Quarter Araling Panlipunan 4 curriculum based on pretest and posttest scores. Specifically, this comparison will assess how effective the use of digitalized and contextualized learning materials was in enhancing learners' comprehension of concepts in Araling Panlipunan. The mean percentage score (MPS) on each competency was used to determine the number of learners who progressed from not mastering to mastering their competencies as a result of their use of digitalized and contextually relevant learning materials. The table beneath shows learners' scores for progression toward mastering their competencies as they relate to citizenship, duties and responsibilities, the civic welfare of the community and how citizens contribute to the promotion of each of these concepts. Using the percentage gain for each of these competencies provides a measure of improvement, thereby demonstrating a successful impact of the intervention.

Table 11: Araling Panlipunan 4, Quarter 4- Competencies (Pre-test and Post-test Result).

#		Pre-test Result		Post-test Result		
	Kasanayang Pampagkatuto (MATATAG Curriculum)	Mean Percentage Score (MPS) Give the MPS (in whole number) of each competency.	Interpretation	Mean Percentage Score (MPS) Give the MPS (in whole number) of each competency.	Interpretation	% Gain (Increase in MPS)
1	Naipaliliwanag ang mga sagisag ng pagkakakilanlang Pilipino	76%	Mastered	85%	Mastered	9%

2	**Natutukoy ang konsepto at prinsipyo ng pagkamamamayan**	**68%**	**Not Mastered**	**82%**	**Mastered**	**14%**
3	Natatalakay ang mga karapatan at tungkulin ng isang mamamayan	69%	Not Mastered	83%	Mastered	14%
4	Natatalakay ang konsepto ng kagalingang pansibiko	70%	Not Mastered	84%	Mastered	14%
5	Napahahalagahan ang papel na ginagampanan ng mga mamamayan sa pagtataguyod ng karapatan at tungkulin tungo sa pagtamo ng kagalingang pansibiko	77%	Mastered	86%	Mastered	9%

Legend: 1%-74% - Not Mastered; 75%-100% - Mastered

Table 11 presents the pre-test and post-test Mean Percentage Scores of the learners in the Fourth Quarter competencies of Araling Panlipunan 4. The results show improvements across all competencies, with percentage gains ranging from 9% to 14%.

The competency *Natutukoy ang konsepto at prinsipyo ng pagkamamamayan* increased from 68% (Not Mastered) in the pre-test to 82% (Mastered) in the post-test, resulting in a 14% gain. Since this competency was the focus of Learning Material 1, the improvement suggests that the implemented learning material contributed positively to learners' mastery of the targeted competency.

While gains were also observed in the remaining competencies, only Learning Material 1 was implemented during the intervention period. Therefore, the effectiveness findings of the study

are interpreted primarily in relation to the competency on the concept and principles of citizenship.

Table 12 below, presents the overall results of the Pre-test and Post-test conducted to assess the effectiveness of the digitalized and contextualized learning materials.

Table 12: ***Overall Result of the pre and post test.***

Item	Pretest	Remarks	Posttest	Remarks
Mean	72.45	Not mastered	84.03	Mastered

Legend: 1%-74% - Not Mastered; 75%-100% - Mastered

Table 12 presents the overall performance of the learners in the pre-test and post-test. The mean pre-test score of 72.45 was interpreted as Not Mastered, while the mean post-test score of 84.03 was interpreted as Mastered.

The increase in the mean score indicates an improvement in learner performance after exposure to the developed digitalized and contextualized learning material. The findings suggest that the intervention contributed positively to learners' understanding of the targeted competency in Araling Panlipunan 4.

Problem 6. What were the experiences and feedback of learners and teachers on the use of the digitalized and contextualized learning materials?

This section presents the experiences and feedback of teachers and learners regarding the use of the developed digitalized and contextualized learning materials in Araling Panlipunan 4. Data were gathered through Focus Group Discussions (FGDs) and individual interviews conducted after the implementation of the learning material.

The participants shared their observations, experiences, and perceptions concerning the use of the materials in the teaching and learning process.

The qualitative responses were analyzed and organized into themes to provide a deeper understanding of how the developed learning materials influenced lesson delivery, learner engagement, comprehension of concepts, and overall learning experiences. The findings also served as a basis for identifying strengths of the materials and areas that may be enhanced for future implementation.

The Focus Group Discussion (FGD) among teachers involved *10 teachers* from Feliciano Magbanua Integrated School. The discussion aimed to gather their experiences, observations, and feedback regarding the use of the developed digitalized and contextualized learning material during the implementation phase.

Table 13 presents the major themes that emerged from the teachers' responses, together with their verbatim statements, English translations, and corresponding interpretations.

Table 13: ***Teachers' Experiences and Feedback.***

Code	Themes	Verbatim Responses (Bisaya-English)	English Translation	Interpretation
T1, T2, T5	Smooth Implementation	"Nag-gamit mi ug digital materials ug nalingaw mi kay wala kaayo problema sa pag-deliver sa leksyon. Mas organize ang mga lessons, ug klaro ang flow."	The use of digital resources has provided us with a better experience in terms of how successful the delivery of lessons may be compared to the traditional "blackboard and chalk" method. Digital resources also allow lesson planning in a more efficient manner.	Testimony from teachers supports the idea that by using digitalized resources to support the delivery of lessons made the delivery process much more organized and efficient when formulating the plan.
T3, T7	Increased Student Engagement	"Ang mga slides, video, ug mga interactive nga activities nakapadugang sa engagement ug participation sa mga estudyante."	Many teachers reported that their students were more engaged in learning abstract concepts when they used slides, videos, and interactive activities.	Many of the teachers participating in this survey, stated that multimedia and activities help to increase student engagement.
T8, T9, T10	Better Understanding of Abstract Concepts	"Mas sayon masabtan ang abstract nga mga konsepto tungod sa mga visuals ug contextualized elements sa mga materyales."	The use of visuals (such as pictures, diagrams, charts) helps learners to understand abstract concepts more easily than if they were to read only text about those concepts.	According to the teachers who completed the survey, both use of visuals and contextualization help students to understand abstract concepts.

Table 13 presents the experiences and feedback of teachers regarding the use of the developed learning materials. Three major themes emerged from the responses: smooth implementation, increased student engagement, and better understanding of abstract concepts.

The findings indicate that teachers perceived the materials as organized, easy to use, and helpful in delivering lessons. Teachers also observed that the use of multimedia and contextualized content enhanced learner participation and supported the understanding of difficult concepts.

The learner FGD involved selected Grade 4 learners who participated in the implementation of the developed learning material. The discussion explored their experiences, perceptions, and reactions toward the use of the digitalized and contextualized learning material in Araling Panlipunan 4.

Table 14: ***Learners' Experiences and Feedback.***

Code	Themes	Verbatim Responses (Bisaya)	English Translation	Interpretation
L1, L2	Enjoyment and Motivation	"Lingaw kaayo ang mga lessons karon, labi na ang mga duwa ug video, kay dili boring."	The new methods of lesson delivery in terms of using games and videos provide learners with a more enjoyable and motivating way to participate in class.	Compared to the old methods of lesson delivery, learners found the new methods to be more entertaining and provide an excellent incentive to participate in class.
L3, L4	Active Engagement	"Mas active ko karon sa klase, kay naay mga interactive nga activities nga makatabang sa akong pagtuon."	I have been getting involved in class more than I have done before through the use of interactive activities.	Students feel more engaged in lesson delivery due to the use of interactive activities.
L5, L6	Relating Lessons to Real Life	"Ang mga leksyon kay mas nakarelate ko kay ang mga examples gigamit kay gikan sa among lugar ug mga panghitabo sa community."	Lessons are more relatable as they include examples related to where we live and have been involved in community activities.	There was support for the inclusion of contextually-specific lessons by students as they were relevant to their local community.
L7,	Overall	"Mas nindot ang	Because of the	Beneficial shifts in the

L8	Positive Learning Experience	akong learning experience karon, kay mas sayon masabtan ug lingaw ang mga lessons.”	way the lessons are now presented, they can be understood, and thus making my learning experience more enjoyable.	students' overall learning experiences were evident as reported by the student’s experiencing changes to how the material is presented which has increased both their ability to comprehend the subject matter as well as increasing their enjoyment of those materials.

Table 14 presents the experiences and feedback of learners after using the developed learning materials. Four themes emerged from the responses: enjoyment and motivation, active engagement, relating lessons to real-life situations, and overall positive learning experience.

The findings suggest that learners found the materials enjoyable, engaging, and relevant to their daily experiences. The use of videos, games, quizzes, and contextualized examples helped make lessons easier to understand and contributed to a more positive learning experience.

A comparison of the teachers’ and learners’ responses revealed both similarities and differences in their experiences with the developed learning material. Three themes emerged from the teachers’ responses, namely: smooth implementation, increased learner engagement, and improved understanding of abstract concepts. On the other hand, four themes emerged from the learners’ responses: enjoyment and motivation, active engagement, relating lessons to real-life situations, and overall positive learning experience.

Despite the differences in wording, both groups emphasized learner engagement and improved understanding as key outcomes of using the learning material. Teachers highlighted the instructional benefits of the material, particularly its usefulness in lesson delivery and concept clarification. In contrast, learners focused on their personal experiences, describing the material as enjoyable, interactive, and relevant to their daily lives.

These findings suggest that the developed digitalized and contextualized learning material was positively received by both teachers and learners. While teachers viewed the material from an instructional perspective, learners evaluated it based on their learning experiences and level of engagement. Together, these responses indicate that the material supported both effective teaching and meaningful learning.

Problem 7. Based on the results of the evaluation and feedback, what enhancement may be proposed to further improve the developed materials?

Based on the evaluation results and feedback from teachers and learners, several enhancements may be proposed to further improve the developed digitalized and contextualized learning materials. While the materials were found to be effective and engaging, participants suggested improvements in four key areas: readability, accessibility, interactivity, and contextualization.

Improving font size, color contrast, and text visibility may enhance readability and make the materials easier for learners to understand. Accessibility may be strengthened by ensuring that the materials can be used even in areas with limited or no internet connectivity. Interactivity may be enhanced through the inclusion of additional quizzes, games, and learner-response activities that promote active participation.

Furthermore, incorporating more localized examples and community-based situations may increase the relevance of the lessons and help learners connect new concepts to their own experiences.

In addition, the development of a teacher implementation guide may support the effective and consistent use of the materials in the classroom. These proposed enhancements indicate that although the developed materials were already found to be useful and effective, further improvements in readability, accessibility, interactivity, and contextualization may increase their overall quality and instructional effectiveness.

Problem 8. Is there a significant difference between the pretest and posttest result of the learners after exposure to the digitalized and contextualized learning materials in AP 4 when data were analyzed at the 0.05 level of significance?

Results are provided in the table below including the mean, standard deviation, standard error, t-value, and p-value to confirm whether the improvement in test scores is statistically significant or not.

Table 15: ***Result of the test of significant difference of pre and post test.***

Item	Mean	StDev	SE Mean	T value	P Value
Pre-test	72.45	6.69	1.03	-8.81	0.000
Post-test	84.03	4.68	0.74		
Result	Significant				
Decision	Reject Ho				

Table 15 presents the results of the paired-samples t-test conducted to determine whether a significant difference existed between the pre-test and post-test scores of the learners. The pre-test mean score was 72.45, while the post-test mean score increased to 84.03. The computed t-value of -8.81 and p-value of 0.000 indicate that the difference between the two scores is statistically significant at the 0.05 level of significance.

Since the p-value is less than 0.05, the null hypothesis was rejected. This finding indicates that learner performance significantly improved after exposure to the developed digitalized and contextualized learning material. Since the implementation focused on Learning Material 1, the significant improvement is interpreted primarily in relation to the competency "Natutukoy ang konsepto at prinsipyo ng pagkamamamayan."

4. SUMMARY, FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

4.1 Summary

This study was conducted to develop digitalized and contextualized learning materials for Araling Panlipunan 4 at Feliciano Magbanua Integrated School, North Cabadbaran District, Schools Division of Cabadbaran City. The impetus for the study was the alarmingly low Fourth Quarter Mean Percentage Score of 69.50 recorded by the 34 Grade 4 learners, a figure that fell well below the DepEd proficiency standard of 75% and signaled a pressing need for a more effective instructional intervention. Following a developmental research design and guided by the ASSURE instructional design model, the study addressed eight research questions using a combination of quantitative and qualitative methods, drawing on pre-test and post-test results, Focus Group Discussions, expert validation, and structured interviews to develop and evaluate the materials.

4.2 Findings

Based on the results of the study, the following findings were obtained:

1. Three least-learned competencies were identified from the Fourth Quarter pre-test results, namely: Natutukoy ang konsepto at prinsipyo ng pagkamamamayan (68%), Natatalakay ang mga karapatan at tungkulin ng isang mamamayan (69%), and Natatalakay ang konsepto ng kagalingang pansibiko (70%).
2. Teachers and learners preferred digitalized, interactive, and contextualized learning resources that incorporate visuals, videos, games, and locally relevant content.

3. Three digitized and contextualized learning materials were developed based on the identified least-learned competencies and input gathered from the FGDs and interviews.
4. The developed learning materials received a Very Satisfactory rating for Content Quality, Instructional Quality, Technical Quality, and Other Findings.
5. The learners' mean score increased from 72.45 (Not Mastered) in the pre-test to 84.03 (Mastered) in the post-test, indicating improved performance after exposure to the learning material.
6. The positive experiences of teachers and learners with this product were reflected in comments about increased engagement, participation, comprehension, and lesson relevance
7. . Participants suggested enhancements to improve the readability, accessibility, interactivity, and contextualization of the developed product.
8. The paired-samples t-test revealed a statistically significant difference between the pre-test and post-test scores ($t = -8.81$, $p < 0.05$), leading to the rejection of the null hypothesis.

4.3 CONCLUSIONS

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

1. Grade 4 learners had trouble mastering competencies regarding citizenship, rights and responsibilities, and civic welfare. This creates an opportunity for instructional intervention.
2. Teachers and learners liked digital, interactive, and contextual learning technologies relevant to their experiences that reinforce engagement in the learning process.
3. The ASSURE Model provided an effective framework for developing learning materials that were aligned with learner needs, curriculum requirements, and local context.
4. The developed digitalized and contextualized learning materials met the quality standards set by the Department of Education and were deemed suitable for classroom use.
5. The implementation of Learning Material 1 contributed to improved learner performance, moving learners from the Not Mastered level to the Mastered level.
6. The developed learning material positively influenced learner engagement, participation, and understanding of the lessons.
7. Continuous refinement of instructional materials is necessary further to improve their quality, accessibility, and effectiveness.

8. The significant difference between the pre-test and post-test scores confirmed the effectiveness of the developed digitalized and contextualized learning material.

4.4 Recommendations

Based on the findings of this study, the following recommendations may be made for the different parties involved in the development and use of digitalized and contextualized learning materials in Araling Panlipunan 4:

Learners. Based on this research, interactive and contextualized learning resources may greatly improve students' level of engagement. and understanding. Therefore, it is suggested that Grade IV students have ongoing access to digital, contextualized resources that support their learning needs and their connection to real life. These resources can provide
both academic content and actively engage students in the learning process, helping create a more motivated and engaged approach to learning the subject matter. In addition, it may be essential that students provide ongoing feedback on how they interact with the digital and contextualized learning resources they use, helping educators and researchers improve the resources over time to meet students' evolving needs better. Through continual interaction with these resources, students will likely improve their understanding, memory retention, and overall performance in Araling Panlipunan.

Teachers. This research focuses on how schools use digital and contextualized resources in their classrooms to achieve higher levels of student engagement and a better understanding of the curriculum. As a result, educators may continue to receive training on effectively integrating technology into their classroom practice, which may ultimately improve the quality of instruction. The training may focus on maximizing the benefits of digital resources by ensuring they are both engaging and relevant to students' local context. An additional recommendation for educators is to implement new and innovative teaching techniques, such as as using interactive elements (i.e., games, quizzes, multimedia) to increase student motivation and participation, last but not least, as educators work together and share their experiences and ideas on how to incorporate digital resources into their instruction best, schools will improve their use of technology by having more resources available for providing ongoing Professional Development and to provide user-friendly guides to equip their educators with confidence and competence.

School Administrators. Findings from this research support the idea that successfully incorporating digital resources into the curriculum requires sufficient backing from school administrators. Digital devices, internet access, and appropriate learning platforms help school leaders improve ICT infrastructure. These tools help teachers effectively integrate digital learning materials into classroom instruction.

In addition, school administrators could support teachers by encouraging them to participate in professional development programs that improve their fluency with technology and interactive classroom resources. School administrators could also create an environment that promotes collaboration among teachers, helping them share effective ways to use these materials.

Future Researchers. May conduct similar studies to evaluate further the effectiveness of the developed digitalized and contextualized learning materials. In particular, Learning Material 2, Karapatang Panlipunan at Pangkabuhayan at Tungkulin ng Mamamayan, and Learning Material 3, Konsepto ng Kagalingang Pansibiko, which were developed and validated but not implemented during the present study, may be subjected to classroom implementation and effectiveness testing. Future studies may also examine their impact on learner performance, engagement, and retention, and explore their applicability across different grade levels, learning areas, and school settings.

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