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INTERACTIVE AND CONTEXTUALIZED INSTRUCTIONAL MATERIALS FOR ARALING PANLIPUNAN 7 IN THE MATATAG CURRICULUM IN SELECTED SCHOOLS IN DISTRICT II OF CARCAR CITY, CEBU

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ABSTRACT

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The implementation of the MATATAG Curriculum introduced substantial changes in classroom instruction in the Philippines. Despite this, many Araling Panlipunan 7 teachers face challenges due to the lack of instructional materials aligned with the revised Most Essential Learning Competencies (MELCs). This study aimed to develop interactive and contextualized instructional materials for Grade 7, particularly focusing on Week 4 – MELC 3: Nasusuri ang mga hamon at tugon ng ASEAN sa pagtamo ng likas-kayang pag-unlad for School Year 2024–2025.

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Guided by the ADDIE Model, the materials were crafted to suit learners' needs. A quasi-experimental design was employed involving 120 Grade 7 students from District II, Carcar City, Cebu, divided into three groups: Control (traditional methods), Blended (traditional and new materials), and Experimental (new materials only). A 40-item multiple-choice pretest and posttest were administered. The instrument, pilot-tested with twelve (12) Grade 8 students, yielded a Cronbach's Alpha of 0.952, indicating high reliability. Data were analyzed using Kruskal-Wallis and Wilcoxon Signed-Rank tests. Results showed that the Experimental Group achieved the highest academic performance, followed by the Blended Group, while the Control Group showed the least improvement. Hence, the study recommends the integration of interactive, contextualized materials to enhance student learning and teacher support in the MATATAG Curriculum.

INTRODUCTION

Across regions worldwide, there has been a growing emphasis on making education more inclusive, responsive, and learner-centered. Countries in Asia, Africa, Europe, and the Americas have begun making changes to schools to make them not just academically sound but also relevant to students' lives. These initiatives show how important it is to connect lessons to students' cultural backgrounds, encourage them to think critically, and help them understand how what they learn in school applies in real life. More and more, teachers are realizing that students learn better and are more interested when the lessons are based on their own lives and experiences. This lets them become more involved and learn more about the subject.

The fourth Sustainable Development Goal was presented by UNESCO in 2015. Ensuring that everyone has access to equitable, high-quality education and promoting lifelong learning are the goals. However, to make this vision a reality, it is necessary to overcome a persistent challenge: the dearth of contextualized, interactive instructional materials, particularly in fields associated with culture, history, and identity.

In various areas, people have worked to make teaching more interactive and culturally relevant. Digital tools are increasingly used in social studies classes in the United States. However, some studies suggest that these tools may not capture students' different cultural backgrounds (Flores, 2021). In Europe, there have been greater efforts to make education more inclusive, but most of the available digital content remains overly general and does not focus on specific historical events (European Commission, 2021). In many parts of Africa, foreign educational materials have not been effective because they do not align with local customs and ways of doing things (Unachukwu & Osawaru, 2024). There have been efforts in Australia to develop culturally appropriate tools for Indigenous students; however, some of these technologies do not provide sufficient engagement to keep students interested (Hicks,

2021). At the same time, schools in East and Southeast Asia continue to use technology; nevertheless, it remains difficult to connect the curriculum with local community cultures (Hadi Mogavi et al., 2024; Hussin et al., 2024).

These worldwide changes are still being felt in the Philippines through continuous changes to the education system. Starting in School Year 2024–2025, the MATATAG Curriculum will be implemented. It will focus on basic skills, critical thinking, and Filipino values. DepEd Memorandum No. 54, s. 2023, which encourages contextualization, and DepEd Order No. 35, s. 1988, which stresses the need to create instructional materials that meet students' needs, supports this tendency. Even with these policy directions, many Araling Panlipunan teachers still use traditional materials that may not adequately reflect what their kids have been through.

Students learn about the history, geography, economics, and administration of the Philippines through the course known as Araling Panlipunan, an important subject in the curriculum. There is a strong recommendation that students enroll in this class. Despite this, concerns about involvement and relevance persist. Some students feel that the subject matter is too remote or abstract, while others say that teachers have difficulty making their courses relevant to students' lives.

This problem is especially evident in rural areas such as District II in Carcar City, Cebu, where it is still difficult to obtain instructional materials that are distinctive to the area and anchored in its culture. There is a conspicuous lack of research on the development, implementation, and assessment of such resources within the MATATAG Curriculum, despite the existing body of literature emphasizing the significance of contextualization and interaction. Taking this into consideration, the work that is now being done is an attempt to remedy this deficiency.

RESEARCH METHODOLOGY

Research Design. For this investigation, a quasi-experimental design combined with a nonequivalent groups pretest–posttest methodology was utilized. This type of design is frequently used in educational research, particularly when random assignment is not practicable. This design enables researchers to investigate the impacts of interventions in classroom settings that are more natural in nature (John W. Creswell & J. David Creswell, 2018).

The ADDIE model—Analysis, Design, Development, Implementation, and Evaluation—guided the development and implementation of the instructional materials and provides a systematic framework for instructional design and evaluation (Robert M. Branch, 2009). This approach allowed the study to examine both the effectiveness of the instructional strategies and the quality of the developed materials within a structured design process.

Since the groups were made up of existing classes, random assignment was not possible. To account for any initial differences between groups, we

used pre-test results as a covariate in the post-test analysis. We also examined gain scores, calculated by subtracting pre-test scores from post-test scores, to provide another view of learning outcomes. This method helps reduce bias due to starting differences and provides a clearer picture of the treatment effects.

Research Environment. The study was conducted in two public junior high schools in District II of the Carcar City Division, Cebu, Philippines—Kalangyawon National High School and Ocaña National High School. These schools were selected for their comparable learner characteristics and openness to instructional innovation. Conducting the study in authentic classroom environments helped ensure that the findings would reflect real-world teaching and learning conditions.

Respondents of the Study. A total of 120 Grade 7 students participated in the study. The participants were purposively selected and equally distributed into three groups: Control (traditional instruction), Experimental (interactive and contextualized instruction), and Blended (a combination of both approaches), with 40 students in each group.

The sample comprised 65 male and 55 female students. A review of school records showed no significant disparities in students' prior academic achievement, suggesting the groups were likely comparable at the start. Purposive sampling was employed to ensure that participants met the criteria relevant to the study's objectives (Creswell & Creswell, 2018).

Research Instruments and Instructional Materials. We created interactive, contextualized teaching materials aligned with Most Essential Learning Competency (MELC 3) and focused on ASEAN and sustainable development. The materials used examples from the local area, multimedia resources, games, and performance-based tasks to keep students interested and help them learn in a meaningful way. These design elements align with learner-centered and context-based learning, which prioritize relevance and active engagement (Lev Vygotsky, 1978).

A 40-item multiple-choice test was created to measure learning results. It addressed four areas of content: the ASEAN Sustainable Development Goals; the ASEAN Community 2015 and its pillars; the ASEAN Community Vision 2025; and the problems ASEAN faces. Experts checked the instrument to ensure it was clear, relevant, and aligned with curriculum standards, and made changes to improve it.

A modified checklist based on Unico (2022) was also used to evaluate the instructional materials. It looked at factors such as content accuracy, organization, cultural relevance, and learner engagement.

Procedure of the Study. The study followed the phases of the ADDIE model. During the analysis phase, learners' needs, curriculum requirements, and instructional challenges were examined. These informed the design and development of the instructional materials and assessment tools, which were organized into four thematic areas.

A pilot test with 12 eighth-grade students was done to see how clear

and useful the tool was. During the implementation phase, the three groups were pretested, given their own teaching methods, and then posttested using conventional techniques. In the evaluation phase, we assessed learners' performance and used feedback from experienced validators to improve the materials. Because ADDIE is iterative, it helps instructional interventions improve over time (Branch, 2009).

Data Collection and Statistical Treatment. Pretests and posttests were used to find out how learners' performance changed. We used descriptive statistics, including frequencies, means, and percentages, to summarize the data.

Nonparametric statistical tests were used for inferential analysis. The Kruskal–Wallis test was utilized to analyze intergroup differences, whilst the Wilcoxon Signed-Rank test was employed to evaluate intragroup changes. These tests are suitable for examining group differences and paired observations when the assumption of normalcy is not rigorously satisfied (Sidney Siegel & N. John Castellan Jr., 1988).

The proficiency standards of DepEd Order No. 8, s. 2015 was used to figure out how well the students did. The study examined the potential of interactive and contextualized teaching methods to enhance learning outcomes in Araling Panlipunan.

The proficiency standards specified in DepEd Order No. 8, section 2015, were used to interpret learners' performance levels. For the most part, the purpose of the analysis was to investigate how contextualized, interactive instructional methods could improve learning outcomes in Araling Panlipunan.

RESULTS AND DISCUSSION

Demographic Profile of Learners. 68.3 percent of the students were 13 years old, which is roughly equivalent to the age range that is often considered appropriate for seventh grade. Twelve-year-olds made up a smaller proportion (26.7%), which may indicate that they started school earlier. There were only a few students between the ages of 14 and 15, which may indicate that they were delayed in their education or repeating grades. A reasonable basis for interpreting the results is that the age distribution appears to be average for the grade level.

According to gender, there were 53.3% male learners and 46.7% female learners in the class. The discrepancy is not particularly significant, which indicates that the representation is fairly balanced. This contributes to a more consistent picture of the data, as both groups are reasonably represented in the sample.

Pretest Performance of the Three Groups

Control Group (Traditional Instruction). The Control Group showed that more than half of the learners (57.5%) did not meet expectations during the pretest. Only a small portion reached higher performance levels. This may

suggest that many learners had limited prior understanding of the topic before the intervention.

These findings seem consistent with earlier observations that traditional approaches, when used alone, may not always fully support learner engagement, especially when lessons are not closely connected to students' experiences.

Experimental Group (Interactive and Contextualized Instruction). In the Experimental Group, 45% of learners did not meet expectations, while some learners (25%) already showed strong performance. This suggests that although many students still struggled at the beginning, a portion may have already been somewhat familiar with the concepts.

Exposure to more engaging or relatable learning experiences may help explain this pattern, as previous studies have noted the potential of interactive and contextualized materials to support understanding and interest.

Blended Group. The Blended Group recorded the highest pretest results, with 77.5% of learners classified as outstanding and only 10% not meeting expectations. This may indicate that learners in this group had stronger prior knowledge or were more prepared at the outset.

At the same time, this difference in baseline performance suggests that the groups were not entirely comparable before the intervention, an important consideration when interpreting the results.

Summary of Pretest Performance. Overall, the pretest results show noticeable differences among the three groups. The Blended Group appeared to have the strongest starting point, followed by the Experimental Group, while the Control Group showed the lowest performance.

These variations suggest that learners entered the study with different levels of prior knowledge. While this is common in classroom-based studies, it highlights the importance of examining changes in performance after the intervention rather than relying solely on initial results.

Table 1. *Pretest Performance Distribution of Learners by Group*

Performance Level	Experimental (n=40)	Blended (n=40)	Control (n=40)	Total (N=120)
Outstanding	10 (25.0%)	31 (77.5%)	9 (22.5%)	50 (41.7%)
Very Satisfactory	7 (17.5%)	4 (10.0%)	2 (5.0%)	13 (10.8%)
Satisfactory	3 (7.5%)	0 (0.0%)	2 (5.0%)	5 (4.2%)
Fairly Satisfactory	2 (5.0%)	1 (2.5%)	4 (10.0%)	7 (5.8%)
Did Not Meet Expectations	18 (45.0%)	4 (10.0%)	23 (57.5%)	45 (37.5%)
Total	40 (100%)	40 (100%)	40 (100%)	120 (100%)

Significant Difference in the Level of Performance of the Three Groups Based on the Pretest Result

The Kruskal–Wallis test was conducted to determine whether there were differences in pretest performance among the Control, Experimental, and

Blended groups. A statistically significant difference was observed in the data, with the H(2) value being 31.97 and the p-value being less than.001. In light of this, it appears that the three groups did not start at the same level of comprehension prior to the intervention.

The results indicate that the groups did not begin at the same level of understanding prior to the intervention. This is not uncommon in quasi-experimental studies conducted in natural classroom settings. However, it suggests that subsequent comparisons should be interpreted with care. To address this, the analysis focuses not only on between-group differences but also on within-group changes and, where appropriate, controls for pretest scores.

Table 2. *Summary of Statistical Analysis for Pretest Performance Across Groups*

Variable	Statistical Test	Test Statistic (H)	p-value	Decision	Interpretation
Group and Pretest Performance	Kruskal–Wallis Test	31.97	< .001	Reject the null hypothesis	Significant difference among groups

These findings also point to the need for instructional approaches that can respond to differences in learners' readiness. As noted in previous studies, learning environments that allow for flexibility and responsiveness—such as those incorporating interactive or contextualized elements—may better support students with varying levels of prior knowledge (Rienties et al., 2020).

In general, the significant differences at the pretest stage indicate that not all children understand the material to the same extent before entering school. This underscores the need to develop adaptable, student-centered instructional materials that align with the overarching goals of the MATATAG Curriculum.

The Wilcoxon Signed-Rank Test was employed to evaluate the significance of the performance variance in the Control Group between the pretest and posttest. The results showed that the difference was not statistically significant ($Z = -1.48$, $p = .140$). This suggests that, within this group, performance levels were rather stable during the intervention.

Significant Difference in Performance Based on Pretest and Posttest Results

Table 3. *Wilcoxon Signed-Rank Test for Control Group Pretest and Posttest Performance*

Variable	Statistical Test	Z-value	p-value	Decision	Interpretation
Control Group (Pretest vs Posttest)	Wilcoxon Signed-Rank Test	-1.48	.140	Fail to reject the null hypothesis	No significant difference observed

In practical terms, the findings indicate that the use of traditional

instruction alone may not have been sufficient to produce measurable improvement in learners' performance. While some students may have shown individual progress, the overall change was not strong enough to be reflected at the group level. This pattern is not uncommon in classroom-based studies, where lecture-driven approaches tend to produce varied outcomes depending on learners' initial understanding and engagement.

The result may also be viewed in light of existing literature, which suggests that more interactive and culturally responsive learning environments can better support student motivation and achievement (Gay, 2018; Zainuddin & Halili, 2021). In contrast, instructional approaches that rely primarily on conventional methods may offer fewer opportunities for active participation and contextual understanding.

It is important, however, to interpret these findings with some caution. The absence of a statistically significant difference does not necessarily mean that no learning occurred, but rather that the overall improvement was not substantial enough to be detected using the statistical test applied. Other factors—such as differences in prior knowledge, classroom dynamics, or assessment sensitivity—may also have influenced the results.

Overall, the findings suggest that while traditional instruction remains common, there may be value in complementing it with more interactive and contextualized strategies. This perspective is consistent with the direction of the MATATAG Curriculum, which emphasizes learner-centered and meaningful learning experiences.

The results indicate a statistically significant improvement ($Z = -4.92$, $p < .001$), suggesting that learners' performance increased following exposure to the interactive and contextualized instructional materials. While the posttest results appear highly favorable, it is more appropriate to interpret these findings as evidence of substantial improvement rather than complete mastery. The consistently high scores may also reflect factors such as alignment between instruction and assessment or the test's relative difficulty (See Table 4).

Table 4. *Wilcoxon Signed-Rank Test for Experimental Group Pretest and Posttest Performance*

Variable	Statistical Test	Z-value	p-value	Decision	Interpretation
Experimental Group (Pretest vs Posttest)	Wilcoxon Signed-Rank Test	-4.92	< .001	Reject the null hypothesis	Significant improvement observed

In practical terms, the findings indicate a noticeable shift in learners' understanding after the intervention. While the pretest results showed that some students initially struggled with the concepts, the posttest outcomes suggest that many were able to develop a clearer grasp of the material. This pattern may reflect the role of instructional strategies that emphasize relevance, interaction, and active participation.

It is also important to note a possible ceiling effect, as a large proportion of learners achieved the highest performance category in the posttest. While this suggests strong learning outcomes, it may limit the assessment's ability to capture finer differences at higher levels of understanding.

These results are generally consistent with previous studies, which suggest that interactive learning environments can support student engagement and learning outcomes (Zainuddin & Halili, 2021). Similarly, culturally responsive approaches have been shown to help learners connect more meaningfully with the content, potentially contributing to improved performance (Gay, 2018).

At the same time, it is important to interpret the findings with some balance. While the statistical results indicate a significant improvement, this does not automatically imply that all aspects of learning were equally developed. Other factors—such as assessment design, prior exposure, or classroom dynamics—may also have influenced the results.

Overall, the findings suggest that the use of interactive and contextualized instructional materials may provide a supportive learning environment, particularly by helping students engage with and better understand concepts in Araling Panlipunan. This observation aligns with the broader direction of the MATATAG Curriculum, which encourages more learner-centered and contextually meaningful approaches to instruction.

The results show a statistically significant improvement ($Z = -2.71$, $p = .007$). However, the magnitude of change should be interpreted in relation to the group's higher starting point. Because many learners in the Blended Group already demonstrated strong performance on the pretest, the observed gains may reflect reinforcement rather than large shifts in understanding (See Table 5 below).

Table 5. *Wilcoxon Signed-Rank Test for Blended Group Pretest and Posttest Performance*

Variable	Statistical Test	Z-value	p-value	Decision	Interpretation
Blended Group (Pretest vs Posttest)	Wilcoxon Signed-Rank Test	-2.71	.007	Reject the null hypothesis	Significant improvement observed

In the aftermath of the intervention, the statistics show a discernible improvement in learners' comprehension. Although the group had commendable proficiency on the pre-test, the post-test results indicate they showed even greater improvement. The findings of this study suggest that incorporating structured training with interactive, contextualized resources can improve both the reinforcement of ideas and their comprehension.

The results align with previous studies emphasizing the importance of learning settings that are both interactive and well-organized. Hamari et al. (2019) and Zainuddin and Halili (2021) assert that integrating gamified

and interactive elements can markedly improve learner engagement and participation. Furthermore, context-based methodologies have been linked to enhanced comprehension, as students may more adeptly relate newly acquired material to their personal experiences (Gay, 2018; He & Wang, 2021).

It is also important to remember that the Blended Group started with a score far higher than the other groups'. This may have affected how obvious the gains were. Even though the statistics show a big change, it may not be as large as in groups that started with lower performance levels.

The evidence suggests that a blended educational strategy, integrating conventional pedagogical approaches with interactive, contextualized resources, may provide a balanced and efficacious means of enhancing student learning. The MATATAG Curriculum places a strong emphasis on methods that are both structured and flexible to meet each student's needs. This goes along with that focus.

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