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Differentiated Instruction as an Inclusive Educational Service: Improving Grade 9 Students' Academic Performance in Araling Panlipunan as Social and Cultural Studies

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ABSTRACT

This study examined the effect of differentiated instruction as an inclusive educational service in improving the academic performance of Grade 9 students in Araling Panlipunan at Sta. Ana National High School during the School Year 2024–2025. Anchored in the concept of school as a learning community, differentiated instruction was implemented to address learners' diverse academic readiness, interests, and learning profiles. A quasi-experimental pretest–posttest control group design was employed, involving two intact classes assigned as control and experimental groups. The control group received traditional instruction, while the experimental group was taught using differentiated strategies. A researcher-made achievement test aligned with the Most Essential Learning Competencies was administered as both pretest and posttest. Data were analyzed using descriptive statistics and inferential tests, including paired and independent samples t-tests. Results showed no significant difference between the groups' pretest scores, indicating comparable baseline performance. However, posttest results revealed a significant difference in favor of the experimental group, which also demonstrated a higher learning gain. The findings indicate that differentiated instruction effectively serves diverse learners and strengthens inclusive educational practice within the school community.

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1. INTRODUCTION

Classrooms in contemporary secondary education are characterized by increasing learner diversity in terms of academic readiness, interests, learning preferences, and sociocultural backgrounds (Ekunola *et al*., 2022; Zuyyinasyam *et al*., 2023; Babalola & Oludare, 2024; Agustin *et al*., 2026; Demalata *et al*., 2024). In the Philippine public school context, particularly in large and heterogeneous classes, addressing these differences remains a persistent instructional challenge. Traditional, teacher-centered approaches that apply uniform instruction often fail to accommodate individual learner needs, resulting in disengagement and uneven academic performance. These conditions highlight the need for instructional practices that promote equity, responsiveness, and inclusion within the school community.

Differentiated Instruction (DI) is widely recognized as an inclusive pedagogical approach that responds to learner diversity by intentionally varying content, process, product, and learning environment to maximize student learning opportunities (Joseph *et al*., 2019; Koutselini, 2020; Roy *et al*., 2023; Santamaria, 2020; Subban, 2020). Rather than treating students as a homogeneous group, DI views diversity as a resource for learning and seeks to provide equitable access to instruction for all learners. Empirical studies have demonstrated that differentiated instruction can enhance academic achievement, motivation, and engagement, particularly when compared to traditional instructional methods that do not account for individual differences (De Jager, 2019; Smale-Jacobse *et al*., 2019). In this sense, differentiated instruction functions as an inclusive educational service that supports diverse learners within a shared learning community.

In Araling Panlipunan, a subject that integrates social, cultural, historical, and civic perspectives, inclusive instructional practices are especially critical. The subject requires learners to engage in critical thinking, contextual analysis, and interpretation of social realities, which may be challenging for students with varied learning profiles when instruction relies heavily on lecture-based strategies. At Sta. Ana National High School, varying levels of academic performance among Grade 9 students in Araling Panlipunan have been observed despite consistent instructional delivery, suggesting that uniform teaching approaches may not sufficiently address learner diversity. As Araling Panlipunan also plays a key role in developing cultural awareness and social responsibility, inclusive instruction becomes essential to ensure meaningful participation and learning for all students within the school community.

Accordingly, this study aimed to examine the effect of differentiated instruction on the academic performance of Grade 9 students in Araling Panlipunan at Sta. Ana National High School during the School Year 2024–2025. Specifically, it compared the pretest and posttest performance of students taught using traditional teaching methodologies and those exposed to differentiated instruction. The novelty of this study lies in framing differentiated instruction as an inclusive educational service within a school community context, highlighting its role in promoting equitable learning opportunities and improved academic outcomes in social studies education. The findings are expected to contribute to instructional decision-making and community-oriented educational practices that support learner diversity in secondary classrooms.

2. METHOD

This study employed a quasi-experimental research design using a pretest–posttest control group approach to examine the effect of differentiated instruction as an inclusive educational service on the academic performance of Grade 9 students in Araling Panlipunan (Social and

Cultural Studies). This design was appropriate for determining causal differences in learning outcomes between groups exposed to different instructional approaches while controlling for initial academic differences through pretesting.

The participants of the study were two intact Grade 9 classes from Sta. Ana National High School during the School Year 2024–2025, with a total of 80 students. One class was assigned as the control group (n = 40) and was taught using traditional teaching methodologies, while the other served as the experimental group (n = 40) and was exposed to differentiated instruction. The selection of intact classes was based on class availability and similarity in academic performance to ensure comparability and maintain the natural classroom setting. This approach reflects the school as a learning community, where instructional interventions are implemented within authentic educational contexts.

A researcher-made achievement test in Araling Panlipunan was used as both the pretest and posttest. The instrument consisted of multiple-choice items aligned with the Most Essential Learning Competencies (MELCs) prescribed by the Department of Education. Content validity was established through expert review by Araling Panlipunan teachers and subject specialists, while a pilot test was conducted to determine the reliability of the instrument before its use in the main study.

Before the intervention, both the control and experimental groups were administered the pretest to establish baseline academic performance. The control group received instruction through traditional approaches, including lecture-based teaching, textbook-centered discussions, and uniform learning activities. In contrast, the experimental group was taught using differentiated instruction strategies that varied content, process, product, and learning activities based on students' readiness, learning preferences, and classroom performance. These strategies were designed to promote inclusive participation, equitable access to learning, and meaningful engagement within the classroom community.

After the instructional period, a posttest identical to the pretest was administered to both groups. The collected data were tabulated and analyzed using appropriate statistical procedures. Descriptive statistics, including mean and standard deviation, were used to describe students' academic performance. Inferential statistics were applied to determine significant differences between and within groups: an independent samples t-test was used to compare the posttest scores of the control and experimental groups, while paired samples t-tests were employed to examine pretest–posttest differences within each group. All statistical tests were conducted at a 0.05 level of significance.

Ethical considerations were observed throughout the study. Permission to conduct the research was obtained from the school administration. Participants were informed of the purpose of the study, and confidentiality of student data was ensured by using aggregated results and omitting identifying information in all analyses and reports.

3. RESULTS AND DISCUSSION

This section presents and discusses the results of the study on the effect of differentiated instruction on the academic performance of Grade 9 students in Araling Panlipunan (Social and Cultural Studies). The findings are interpreted in relation to inclusive pedagogy and differentiated instructional practices.

Table 1 presents the pretest performance of the control and experimental groups. The control group obtained a mean score of 24.35 (SD = 4.21), while the experimental group recorded a mean score of 24.80 (SD = 4.09), both interpreted as "Fair." The similarity of mean scores and variability indicates that the two groups were academically comparable before the

intervention. This equivalence is further supported by the statistical analysis shown in **Table 2**, where no significant difference was found between the pretest scores of the two groups ($t = 0.52$, $p = 0.604 > 0.05$). These results confirm that both groups started from a similar baseline, allowing the instructional intervention to be examined without confounding effects from initial performance differences.

Posttest results are presented in **Table 3**. After the instructional period, the control group achieved a mean score of 27.10 (SD = 4.05), interpreted as "Satisfactory," while the experimental group attained a higher mean score of 32.45 (SD = 3.88), interpreted as "Very Satisfactory." The noticeable increase in the experimental group's mean score suggests that differentiated instruction was more effective in improving academic performance than traditional teaching methodologies. The lower standard deviation observed in the experimental group also indicates more consistent learning outcomes among students exposed to differentiated instruction.

The test of the significant difference between the posttest scores of the two groups is shown in **Table 4**. The computed t-value of 6.21 and p-value of 0.000 indicate a statistically significant difference favoring the experimental group. This finding provides strong evidence that differentiated instruction leads to higher academic achievement in Araling Panlipunan compared to traditional instruction. Further analysis of learning gains within each group is presented in **Tables 5** and **6**. As shown in **Table** 5, the control group demonstrated a significant improvement from pretest to posttest, with a mean gain of 2.75 ($t = 3.48$, $p = 0.001$). This indicates that traditional teaching methodologies contributed to learning gains, although the magnitude of improvement was relatively modest. In contrast, **Table 6** shows that the experimental group achieved a substantially larger mean gain of 7.65 from pretest to posttest ($t = 9.12$, $p = 0.000$), reflecting a highly significant improvement in academic performance. The larger gain in the experimental group highlights the effectiveness of differentiated instruction in supporting student learning.

The comparative results across **Tables 1** to **6** consistently indicate that while both instructional approaches improved students' academic performance, differentiated instruction produced greater and more meaningful learning gains. These findings align with previous research suggesting that differentiated instruction is particularly effective in heterogeneous classrooms because it accommodates learners' diverse readiness levels and learning profiles (Smale-Jacobse *et al*., 2019).

In the context of Araling Panlipunan as Social and Cultural Studies, differentiated instruction supports inclusive learning by enabling students to engage with complex social, historical, and cultural concepts through varied tasks and learning activities. By adapting instruction to learners' needs, differentiated instruction functions as an inclusive educational service that promotes equitable participation and achievement within the classroom community. Overall, the findings demonstrate that differentiated instruction significantly enhances academic performance and provides a practical, inclusive approach to teaching Social and Cultural Studies in secondary education.

Table 1. Pretest performance of the control and experimental groups.

Group	N	Mean	SD	Interpretation
Control Group	40	24.35	4.21	Fair
Experimental Group	40	24.80	4.09	Fair

Table 2. Difference between pretest scores of the control and experimental groups (α = 0.05).

Comparison	Mean Difference	t-value	p-value	Decision	Interpretation
Control vs Experimental	0.45	0.52	0.604	Fail to Reject Ho	Not Significant

Table 3. Posttest performance of the control and experimental groups.

Group	N	Mean	SD	Interpretation
Control Group	40	27.10	4.05	Satisfactory
Experimental Group	40	32.45	3.88	Very Satisfactory

Table 4. Difference between posttest scores of the control and experimental groups (α = 0.05).

Comparison	Mean Difference	t-value	p-value	Decision	Interpretation
Control vs Experimental	5.35	6.21	0.000	Reject Ho	Significant

Table 5. Difference between pretest and posttest scores of the control group (α = 0.05).

Test	Mean	Mean Gain	t-value	p-value	Decision	Interpretation
Pretest	24.35	2.75	3.48	0.001	Reject Ho	Significant Improvement
Posttest	27.10					

Table 6. Difference between pretest and posttest scores of the experimental group (α = 0.05).

Test	Mean	Mean Gain	t-value	p-value	Decision	Interpretation
Pretest	24.80	7.65	9.12	0.000	Reject Ho	Highly Significant Improvement
Posttest	32.45					

4. CONCLUSION

This study concludes that differentiated instruction significantly improves the academic performance of Grade 9 students in Araling Panlipunan compared to traditional teaching methodologies. While both instructional approaches resulted in learning gains, students exposed to differentiated instruction demonstrated substantially higher posttest scores and greater improvement from pretest to posttest. These findings confirm that differentiated instruction effectively addresses learner diversity by providing equitable access to learning opportunities within the classroom community. As an inclusive educational service, differentiated instruction supports varied learning needs and enhances engagement in Social and Cultural Studies. The study highlights the value of adopting differentiated strategies to strengthen inclusive, responsive, and community-oriented instructional practices in secondary education.

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6.AUTHORS' NOTE

The authors declare that there is no conflict of interest regarding the publication of this article. Authors confirmed that the paper was free of plagiarism.

7. REFERENCES

Agustin, N.D., Sumantri, M.S., and Marini, A. (2026). Fostering advanced mathematical thinking through Islamic ethical integration in elementary classrooms to support sustainable development goals (SDGs). *ASEAN Journal of Educational Research and Technology, 5*(2), 181-200.

Babalola, E.O., and Oludare, P.I. (2024). A quantitative approach to challenges facing online and physical classrooms in higher institution *ASEAN Journal of Educational Research and Technology, 3*(2), 125-134.

De Jager, T. (2019). Differentiated instruction in heterogeneous classrooms: A practical guide. *Africa Education Review, 16*(1), 1–17.

Demalata, J.G., Teves, R.M.C., Oreiro, L.N.A., Mariano, G.F.A., Estrellan, J.C., Valdez, A.G., and Valdez, D.M. (2024). Gender influence on students' interest, classroom participation, academic achievement and academic performance in science. *ASEAN Journal of Community Service and Education, 3*(2), 119-134.

Ekunola, G.T., Obielodan, O.O., and Babalola, E.O. (2022). Lecturers perceived proficiency in the use of virtual classrooms for instruction in colleges of education. *ASEAN Journal of Educational Research and Technology, 1*(1), 7-16.

Joseph, S., Thomas, M., Simonette, G., and Ramsook, L. (2019). The impact of differentiated instruction in a teacher education setting. *International Journal of Higher Education, 8*(5), 253–264.

Koutselini, M. (2020). Differentiation of teaching and learning: The teacher's perspective. *Educational Research Review, 31*, 100–110.

Roy, A., Guay, F., and Valois, P. (2023). Teaching to address diverse learning needs: Effects of differentiated instruction. *Teaching and Teacher Education, 118*, 103812.

Santamaria, L. J. (2020). Culturally responsive differentiated instruction. *Educational Leadership, 77*(7), 54–59.

Smale-Jacobse, A. E., Meijer, A., Helms-Lorenz, M., and Maulana, R. (2019). Differentiated instruction in secondary education: A systematic review. *Educational Research Review, 28*, 100–121.

Subban, P. (2020). Differentiated instruction: A research basis. *International Journal of Learning, 27*(2), 1–13.

Zuyyinasyam, S., Nandiyanto, A.B.D., Kurniawan, T., and Al Husaeni, D.F. (2023). Implementation of the educational personnel program for elementary school students in the digital age using Google Classroom. *ASEAN Journal of Educational Research and Technology, 2*(1), 29-34.