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Accelerating the Performance of Grade 8 Students in Araling Palipunan Through the Facture, Reasoning, Operations, Metacognitive (FROM) Strategy: A Multi-level Question Assessment Approach

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Abstract

This study examined the effectiveness of the FROM (Factual, Reasoning, Operations, Metacognitive) Strategy in enhancing the academic performance of Grade 8 students in Araling Panlipunan. The traditional teaching method often hinders students' participation in class discussions because it lacks activities that keep them engaged, making it difficult for them to comprehend complex ideas. The study aimed to determine the effectiveness of the FROM Strategy as a multi-level question assessment approach in accelerating the academic performance of Grade 8 students in Araling Panlipunan. A descriptive-experimental design was employed involving 90 Grade 8 students at Western Abra National High School. One section served as the control group, one as the experimental group, and one as the baseline group. A researcher-developed 50-item pretest/posttest, validated by Araling Panlipunan specialists with a validity index of 3.61, was used. Data were analyzed using means, dependent-samples t-tests, and independent-samples t-tests. Before the intervention, the control and experimental groups had low performance, with overall pretest means of 65.33 and 65.71, both Did Not Meet Expectations. After implementation, the control group obtained an overall posttest mean of 87.43, Very Satisfactory, while the experimental group obtained 90.48, Outstanding. The FROM group showed significant pretest-posttest improvement, $t = 34.57$, $p < 0.001$. Overall posttest comparison also favored the FROM group, mean difference = 3.05, $t = 3.69$, $p = 0.000$. The study revealed that incorporating multiple levels of strategies using the FROM Strategy helps improve students' academic performance and supports comprehension, critical thinking, and self-regulated learning.

Keywords: *FROM Strategy, Araling Panlipunan, Critical Thinking, Pretest-Posttest, Academic Performance*

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1. Introduction

Background and rationale: Cognitive teaching focuses on improving students' thinking skills and understanding of ideas instead of just memorizing facts. In Araling Panlipunan, many Grade 8 students struggle to analyze ideas and apply what they learn to real-life situations. The study addressed this need through the FROM Strategy, a multi-level questioning method that guides students from factual recall to reasoning, operations, and metacognitive reflection.

Review of related literature: The study was grounded in Bloom's Taxonomy of Cognitive Domains, Constructivist Learning Theory by Jean Piaget and Lev Vygotsky, and Metacognitive Theory by John Flavell. The thesis also cited studies on higher-order questioning, reflective questioning, multi-level questioning, simulations, role-playing, and metacognitive strategies as support for the FROM Strategy.

Statement of the problem: The study sought to determine the level of performance in Araling Panlipunan before and after implementation of the FROM Strategy; the significant difference between students' performance before and after implementation of the FROM Strategy and Non-FROM method; and the significant difference between the posttest performance of students exposed to FROM and those taught using the Non-FROM method.

Objectives and/or research hypotheses: The hypotheses stated that there is a significant difference between students' performance before and after the implementation of the FROM Strategy and the Conventional Method of Teaching, and that there is a significant difference between the posttest performance of students exposed to the FROM Strategy and those taught using the Conventional Method.

2. Materials and Methods

Research Design: The research design employed in this study was a descriptive-experimental design, used to determine the effectiveness of the FROM Strategy through pretest and posttest results comparing the control and experimental groups.

Participants: The study was conducted at Western Abra National High School. A total of 90 Grade 8 students from three sections participated in the main study. Two sections of Grade 10 students were used for pilot testing and were excluded from the main study.

Instruments: The research instrument was a researcher-developed pretest/posttest. The Araling Panlipunan major experts validated the pretest and posttest comprising 60 items, and 50 items were retained. The instrument obtained a validity index of 3.61, considered acceptable for the study.

Procedure: The research instrument was constructed and validated, then tested for reliability with Grade 10 students. Permission was sought from the school head, and students signed assent forms. A pretest was administered to Grade 8 sections, the FROM Strategy was implemented in the experimental group, posttests were administered, and all data were recorded, processed, and analyzed.

Data Analysis: Mean was used to find the average scores of students in the pretest and posttest. The t-test for dependent samples was used to determine significant differences between pretest

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and posttest scores. The t-test for independent samples was used to determine the significant difference between the posttest performance of the control and experimental groups.

3. Results

Table 1. Level of Performance of the Students Before the Implementation of the FROM Strategy

Learning Competencies	Control Mean	Control Level	Experimental Mean	Experimental Level
C1: Panlipunan (STI, COVID-19)	64.47	DNME	64.00	DNME
C2: Pampolitika (Terorismo)	63.73	DNME	62.52	DNME
C3: Pangkabuhayan (Global Financial Crisis)	64.27	DNME	64.71	DNME
C4: Pangkalikasan (Climate Change)	67.87	DNME	66.23	DNME
Overall	65.33	DNME	65.71	DNME

Table 2. Posttest Performance After the Implementation of the FROM Strategy

Learning Competencies	Control Mean	Control Level	Experimental Mean	Experimental Level
C1: Panlipunan (STI, COVID-19)	84.37	S	89.19	VS
C2: Pampolitika (Terorismo)	87.93	VS	86.71	VS
C3: Pangkabuhayan (Global Financial Crisis)	85.93	VS	89.61	VS
C4: Pangkalikasan (Climate Change)	91.30	O	91.94	O
Overall	87.43	VS	90.48	O

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Table 3a. Comparison of Pretest and Posttest Performance of Students Taught Using the Non-FROM Method

Learning Competencies	Pretest	Posttest	Hedges' g	T-Value	T-Prob Value
C1: Panlipunan (STI, COVID-19)	64.47	84.37	6.65	16.61	<0.001
C2: Pampolitika (Terorismo)	63.73	87.93	5.72	23.47	<0.001
C3: Pangkabuhayan (Global Financial Crisis)	64.27	85.93	7.56	15.89	<0.001
C4: Pangkalikasan (Climate Change)	67.87	91.30	7.55	17.23	<0.001
Overall	65.33	87.43	4.59	26.73	<0.001

Table 3b. Comparison of Pretest and Posttest Performance of Students Exposed to the FROM Strategy

Learning Competencies	Pretest	Posttest	Hedges' g	T-Value	T-Prob Value
C1: Panlipunan (STI, COVID-19)	64.00	89.19	6.81	21.22	<0.001
C2: Pampolitika (Terorismo)	62.52	86.71	7.40	18.75	<0.001
C3: Pangkabuhayan (Global Financial Crisis)	64.71	89.61	7.65	18.68	<0.001
C4: Pangkalikasan (Climate Change)	66.23	91.94	8.79	16.77	<0.001
Overall	65.71	90.48	4.11	34.57	<0.001

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Table 4. Comparison of Posttest Performance of Students Exposed to FROM and Non-FROM

Learning Competencies	Experimental Mean	Control Mean	Mean Difference	T-Value	T-Prob Value
C1: Panlipunan (STI, COVID-19)	89.19	84.37	4.82	4.22	0.000
C2: Pampolitika (Terorismo)	86.71	87.93	1.22	0.82	0.416
C3: Pangkabuhayan (Global Financial Crisis)	89.61	85.93	3.68	3.18	0.002
C4: Pangkalikasan (Climate Change)	91.94	91.30	0.64	1.65	0.105
Overall	90.48	87.43	3.05	3.69	0.000

4. Discussion

The results showed that both groups improved from pretest to posttest; however, the experimental group exposed to the FROM Strategy obtained a higher overall posttest mean than the control group. The thesis interpreted this as evidence that the FROM Strategy is more effective in promoting comprehension, critical thinking, and self-regulated learning. The significant differences in Panlipunan and Pangkabuhayan indicated the advantage of the FROM Strategy in competencies requiring deeper understanding, while Pampolitika and Pangkalikasan showed no significant difference between methods. The study identified that some topics may be equally supported by the Non-FROM method because of topic familiarity and content relevance. The thesis recommended teacher training, additional learning materials, collaborative work, and practice of metacognitive strategies.

5. Conclusion

Students in both control and experimental groups showed poor performance before the implementation of the FROM Strategy. Students' academic performance improved after implementation, with the experimental group obtaining higher mean scores and an Outstanding overall descriptive level. Students' performance significantly improved from pretest to posttest in both groups, but the FROM Strategy indicated greater performance. The experimental group surpassed the control group in overall posttest performance, proving that the FROM Strategy is more efficient than the Non-FROM method in developing students' mastery of the four learning competencies.

References

Bloom, B. S., Engelhart, M. D., Furst, E. J., Hill, W. H., & Krathwohl, D. R. (1956). Taxonomy of educational objectives: The classification of educational goals. Longman.

Chen, Y. L. (2018). The effectiveness of simulations and role-playing in enhancing student engagement and understanding. Learning and Instruction, 55, 1–10. https://doi.org/10.1016/j.learninstruc.2018.02.003.

Costa, A. L., & Kallick, B. (2008). Learning and leading with habits of mind: 16 essential characteristics for success. ASCD.

Dignath, C. (2025). Explicit instruction in metacognitive strategies and self-regulated learning across disciplines: Effects on academic performance. Journal of Educational Psychology, 117(2), 245–263. https://doi.org/10.1037/edu0000765.

Flavell, J. H. (1979). Metacognition and cognitive monitoring: A new area of cognitive–developmental inquiry. American Psychologist, 34(10), 906–911.

Garcia, M. B., & Cruz, A. P. (2019). Reflective questioning and the development of metacognitive skills among learners. Asia Pacific Journal of Education, 39(3), 345–357. https://doi.org/10.1080/02188791.2019.1621234.

Hattie, J. (2023). Visible learning: Meta-analyses on achievement. Routledge.

Johnson, P. A. (2017). Metacognitive questioning and student learning: Promoting reflective and independent learners. Assessment in Education: Principles, Policy & Practice, 24(3), 305–320. https://doi.org/10.1080/0969594X.2016.1218321.

Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work. Educational Psychologist, 41(2), 75–86.

Lee, K. (2020). From factual to analytical questioning: Effects on students' problem-solving skills. Educational Psychology Review, 32(2), 521–545. https://doi.org/10.1007/s10648-019-09485-3.

Martinez, L. R. (2019). Integrating project-based learning and higher-order questioning to improve academic performance. Journal of Educational Psychology, 111(4), 789–802. https://doi.org/10.1037/edu0000312.

Nguyen, T. H. (2019). Multi-level questioning in Southeast Asian history classrooms: Effects on student participation and performance. International Journal of Educational Research, 98, 123–135. https://doi.org/10.1016/j.ijer.2019.08.005.

OECD. (2025). Learning strategies for social sciences: Evidence from international assessments. OECD Publishing. https://doi.org/10.1787/9789264444356-en.

Panadero, E. (2026). Metacognitive scaffolding and self-regulated learning: Enhancing student achievement in social science education. Contemporary Educational Psychology, 71, 102154. https://doi.org/10.1016/j.cedpsych.2026.102154.

Piaget, J. (1972). The psychology of the child. Basic Books.

Republic of the Philippines. (1982). Education Act of 1982 (Batas Pambansa Blg. 232).

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

Rivera, D. S. (2020). The impact of reasoning questions on students' critical thinking and problem-solving skills. International Journal of Instruction, 13(4), 123–138. https://doi.org/10.29333/iji.2020.1348a.

Rosenshine, B. (2025). Principles of instruction: Research-based strategies for effective teaching. Educational Leadership, 82(5), 32–39.

Santos, R. M. (2021). Sequencing factual and reflective questions to improve students' critical thinking. Philippine Journal of Education, 95(1), 45–60.

Schraw, G. (2026). Metacognition and strategic learning: Impacts on academic performance. Learning and Instruction, 78, 101687. https://doi.org/10.1016/j.learninstruc.2025.101687.

Smith, J. M. (2018). Using higher-order thinking questions to enhance student achievement. Journal of Educational Research, 111(2), 150–160. https://doi.org/10.1080/00220671.2017.1396450.

Stockard, J. (2026). Explicit teaching methods and student achievement: Evidence from content-heavy subjects. Review of Educational Research, 96(1), 112–139. https://doi.org/10.3102/00346543221123456.

Tan, C. (2021). Multi-level questioning strategies in Filipino classrooms: Effects on student performance. International Journal of Instruction, 14(3), 789–804. https://doi.org/10.29333/iji.2021.14345a.

Vygotsky, L. S. (1978). Mind in society: The development of higher psychological processes. Harvard University Press.

Zimmerman, B. J. (2022). Self-regulated learning and academic achievement: The role of metacognitive practice. Educational Psychologist, 57(4), 233–248.

Zimmerman, B. J. (2026). Reflective and self-regulated learning: Strategies for improved student outcomes. Journal of Educational Research, 119(3), 345–362. https://doi.org/10.1080/00220671.2026.11745678.