

Experiencing Citizenship: How Immersive Pedagogies Transform Student Interest and Academic Achievement in Pancasila Education

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ABSTRACT

Civic education in the twenty-first century faces substantial pedagogical challenges, particularly the dominance of teacher-centered instruction that constrains active student participation. In Indonesia, Pancasila Education is frequently delivered through conventional lecture-based methods, resulting in diminished learning motivation and suboptimal academic achievement among elementary school students. This empirical study examines the effect of combining Role-Playing and Experimental methods on the learning interest and academic outcomes of sixth-grade students at Elementary School 239 Inpres Nipa, Maros Regency, Indonesia. Employing a quantitative pre-experimental design with a One-Group Pretest-Posttest format, the research involved 20 sixth-grade students recruited through total (saturated) sampling. Data were collected via cognitive achievement tests, a Likert-scale learning interest questionnaire, structured observation sheets, and documentary records. The gathered data were analyzed descriptively and through analysis-of-variance (ANOVA) procedures using SPSS version 26. Findings revealed significant improvements post-intervention: the mean student learning outcome score rose from 45.00 to 82.50, while the mean learning interest score increased from 49.80 to 81.13. ANOVA results confirmed a highly statistically significant main effect ($F = 309.932$, $p = 0.000 < 0.05$). The integrated application of Role-Playing and Experimental methods fosters an interactive, experiential learning environment that strengthens students' deep comprehension of Pancasila values and active engagement in civic education. Ultimately, these methods constitute a viable instructional alternative for supporting the implementation of the Merdeka Curriculum in primary elementary schools.

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1. INTRODUCTION

Civic education in the twenty-first century confronts a profound existential challenge, driven by the rapid forces of globalization and digitalization (Dahlia et al.,

2026; Khairiyah, 2025; Lumapuy et al., 2026). In the contemporary landscape, education can no longer be reduced to the mere transfer of cognitive information; instead, it must function as a strategic instrument for shaping moral identity, ethical resilience, and the social competencies of younger generations (Tikader & Mandal, 2025). In the Indonesian context, this strategic mandate is explicitly entrusted to Pancasila Education. This subject is structurally designed to cultivate citizens who are not only intellectually capable but also socially responsible and anchored by strong character (Astiwi et al., 2020). However, empirical observations frequently reveal a pedagogical anomaly, wherein instruction in fundamental national values is delivered through mechanistic, passive approaches that are fundamentally detached from students lived experiences.

From a theoretical standpoint, effective learning is a process of experiential internalization and active cognitive reconstruction that inherently requires the deep engagement of the learner (Zajda, 2021). Such engagement depends heavily on robust learning interest, which functions as a critical psychological catalyst enabling students to absorb, process, and apply complex knowledge. Crucially, learning interest is not a static or fixed attribute; rather, it is a dynamic psychological construct shaped continuously by the quality of the learning environment and the instructional methodology employed (Alifa et al., 2024; El-Sabagh, 2021). When these instructional methodologies fail to engage, student interest declines, leading to a breakdown in the internalization of vital civic principles.

The practical consequences of this methodological failure are acutely visible at the micro-level of classroom instruction. Preliminary observations conducted in the sixth-grade classroom at Elementary School 239 Inpres Nipa, Maros Regency, revealed a genuine pedagogical crisis that reflects wider systemic challenges in civic education. Instruction in Pancasila Education was heavily dominated by conventional, one-directional lecturing, which failed to stimulate student participation. As a direct result, students exhibited severe cognitive apathy, low enthusiasm, and pronounced boredom during the learning process. This lack of engagement ultimately manifested in poor academic performance, contributing to collective academic outcomes that fell significantly below the established Learning Achievement Criteria.

This pedagogical crisis underscores a critical research gap in existing literature, particularly concerning the methodological stagnation evident in the teaching of social and civic studies. While contemporary educational research has extensively explored active learning strategies, their applications remain siloed within specific disciplines. For instance, prior research has examined the efficacy of the role-playing method primarily for enhancing language skills (Lubis & Nasution, 2024), while the experimental method has been predominantly analyzed within the domain of the natural sciences (Hendawati & Kurniati, 2017). Consequently, there remains a distinct lack of empirical literature examining the integration of these two distinct paradigms within civic and moral education.

To bridge this scholarly divide, this study proposes a novel synthesis of pedagogical traditions that transcend traditional disciplinary boundaries. Few studies have attempted

to integrate the experimental method, which is deeply rooted in the empirical–positivist tradition, with the role-playing method, which stems from the social–constructivist tradition, within the specific domain of Pancasila education. Combining immersive role-based simulation with simple social experimentation to empirically demonstrate moral values therefore constitutes a meaningful methodological novelty. By blending constructivist emotional engagement with positivist empirical verification, this hybrid approach offers a robust framework for revitalizing civic pedagogy (Choudhary & Bakshi, 2025; Kim, 2023; Younas & Imran, 2025).

Accordingly, this study aims to address the identified pedagogical impasse through a structured, multi-objective empirical investigation. Specifically, the study is designed to fulfill three primary objectives: (1) analyzing the direct effect of the role-playing method on learning interest in Pancasila education; (2) examining the independent effect of the role-playing method on cognitive learning outcomes; and (3) evaluating the combined, synergistic effect of the role-playing and experimental methods on the holistic transformation—encompassing both affective interest and cognitive outcomes—of sixth-grade students at Elementary School 239 Inpres Nipa. Ultimately, this study argues that the abstract values of Pancasila cannot simply be taught through rote memorization; rather, they must be actively experienced and validated through an immersive, empirically grounded pedagogical design.

2. METHOD

This study adopted a quantitative, explanatory approach using a pre-experimental design. Given that the ecology of the classroom did not permit true randomization of subjects, a One-Group Pretest-Posttest Design was employed. Participants completed a pretest prior to the intervention and a posttest following its implementation, while classroom observation was conducted throughout the learning process to capture students' developmental progress in greater depth. This design was selected to determine changes in learning interest and learning outcomes following the application of Role-Playing and Experimental methods in Pancasila Education.

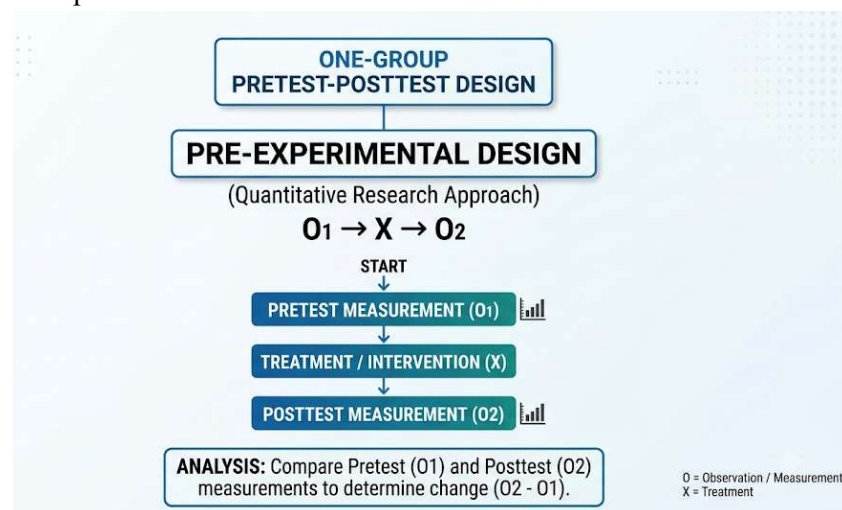


Figure 1. One-Group Pretest-Posttest Design

The population comprised all sixth-grade students at Elementary School 239 Inpres Nipa, Maros Regency, during the 2025/2026 academic year. Because the population was of micro-scale size ($N = 20$), a saturated (total) sampling technique was applied, whereby the entire population was included as the research sample. The sample consisted of 11 male students (55%) and 9 female students (45%). Saturated sampling was adopted to eliminate sampling error and ensure that the resulting generalizations accurately represent the actual conditions of the classroom ecology without distortion from external variance.

Several data-collection instruments, aligned with the study's two principal variables—learning interest and learning outcomes, were employed.

1. **Cognitive achievement test.** A multiple-choice test, developed according to the learning indicators of Pancasila Education, was administered as a pretest and posttest to assess changes in students' understanding before and after the intervention. The instrument comprised ten multiple-choice items with four response options, supplemented by short-answer and true/false items to strengthen measurement of comprehension.
2. **Learning interesting questionnaires.** A 15-item Likert-scale questionnaire was administered before (pre-questionnaire) and after (post-questionnaire) the intervention to measure change in students' learning interest. Indicators included enjoyment of learning, attentiveness during the learning process, active involvement in learning activities, and interest in the instructional material. Responses were scored on a five-point scale ranging from strongly agreed to strongly disagreement.
3. **Structured observation sheets.** Observation sheets were used to assess implementation fidelity (teachers' adherence to the prescribed instructional sequence) as well as students' kinetic and verbal activity across five sessions. Teacher observation addressed the ability to explain learning objectives, relate material to students' experiences, organize groups, direct role-play activities, and guide students throughout the lesson. Student observation focused on activity level, engagement in role-play, ability to articulate opinions, and overall participation. The researcher served as the instructor, while an independent observer monitored the entire learning process.
4. **Documentation.** Attendance records, photographs of learning activities, and implementation notes were collected as supporting data to corroborate the observational findings and to provide a concrete depiction of classroom dynamics during the intervention.

The pedagogical intervention was implemented intensively across six face-to-face sessions following a tightly structured sequence. The first session was devoted to administering the pretest and pre-questionnaire to establish students' baseline knowledge and learning interest. Sessions two through five constituted the treatment phase, during which the Role-Playing and Experimental methods were applied to Pancasila Education. In the Role-Playing method, students were organized into groups and assigned scenarios relevant to the instructional material. In the Experimental method, students conducted simple observational and experimental activities to develop

a more concrete and active understanding of the material. The sixth session was devoted to administering the posttest and post-questionnaire to assess change in interest and outcomes following the intervention. The cycle concluded with a debriefing and reflection session intended to support students' cognitive realignment as they integrated new information and experiences into a coherent understanding.

Data was analyzed quantitatively using SPSS version 26 for Windows through several stages: descriptive statistics, assumption testing, and hypothesis testing.

1. **Descriptive statistics** were used to characterize the pretest, posttest, and questionnaire data, including means, percentages, minimum and maximum scores, and mastery categories (very low, low, moderate, high, very high).
2. **Assumption testing.** Prior to hypothesis testing, normality was assessed using the Shapiro–Wilk test (appropriate given a sample size below 50), with data considered normally distributed when the significance value exceeded 0.05. Homogeneity of variance was assessed using Levene's Test, with data considered homogeneous when the significance value exceeded 0.05.
3. **Hypothesis testing.** Given that the study involved more than one dependent variable (learning interest and learning outcomes), Multivariate Analysis of Variance (MANOVA) was used to assess the simultaneous effect of the independent variable on both dependent variables. Decisions were based on the significance value of the Between-Subjects Effects test at $\alpha = 0.05$; a significance value below 0.05 indicated a statistically significant effect of the instructional methods on students' learning interest and learning outcomes.

3. RESULTS AND DISCUSSION

Results

Classroom Ecology Transformation: Teacher and Student Observation

Prior to analyzing the outcomes related to learning interest and achievement, changes in teacher and student classroom activity during implementation of the Role-Playing and Experimental methods were examined. Observation results indicated a progressive improvement in teachers' instructional management across sessions. In Session II, the teacher observation score reached 68% (Fair), reflecting ongoing adaptation to organizing groups and directing role-play and experimental activities. This increased to 84% (Good) in Session III and 95% (Very Good) in Session IV, indicating growing proficiency in delivering interactive and effective instruction.

A similar improvement was observed in student activity. In Session II, student activity reached 62% (Fairly Good), reflecting initial adjustment to active learning methods. This rose to 77% (Good) in Session III and 85% (Very Good) in Session IV, with students demonstrating increasing engagement in role-play, discussion, and simple experimentation. These results indicate that the Role-Playing and Experimental methods enhanced student engagement and fostered a more engaging and meaningful learning experience in Pancasila Education.

Cognitive Gains: Analysis of Learning Outcomes

Descriptive statistical analysis revealed a marked improvement in students' learning outcomes following implementation of the Role-Playing and Experimental methods. The mean pretest score was 45.00, indicating that students' baseline ability was in the low category. Following the intervention, the mean posttest score increased significantly to 82.50, indicating that the methods supported a deeper understanding of Pancasila Education content through active, direct learning experience.

Minimum scores rose from 30 to 60, and maximum scores rose from 70 to 100. The distribution of achievement categories also shifted markedly. At pretest, most students (13 students, 65%) fell within the low category, with an additional four students (20%) in the very low category. Following the intervention, most students shifted to the high category (11 students, 55%) and the very high category (8 students, 40%). These findings indicate that the Role-Playing and Experimental methods not only raised the mean achievement score but also produced a more uniform and optimal level of understanding among the sixth-grade students at Elementary School 239 Inpres Nipa.

Table 1. Cognitive Gains: Analysis of Learning Outcomes

Variable	Statistic	Pretest	Posttest
Learning outcomes	Mean	45.00	82.50
Learning outcomes	Minimum	30	60
Learning outcomes	Maximum	70	100

Affective Metamorphosis: Analysis of Learning Interest

Descriptive analysis revealed a substantial increase in students' learning interest following the intervention. The mean pre-questionnaire score was 49.80 (SD = 7.229), increasing to 81.13 (SD = 3.331) on the post-questionnaire, indicating heightened enthusiasm and interest in Pancasila Education following the intervention.

Minimum scores increased from 39 to 69, and maximum scores increased from 76 to 87. The reduction in standard deviation indicates that learning interest became more uniformly distributed across students following the intervention, demonstrating that the Role-Playing and Experimental methods fostered a more engaging, interactive, and enjoyable learning experience for the sixth-grade students at Elementary School 239 Inpres Nipa.

Table 2. Affective Metamorphosis: Analysis of Learning Interest

Variable	Statistic	Pre-questionnaire	Post-questionnaire
Learning interest	Mean	49.80	81.13
Learning interest	SD	7.229	3.331
Learning interest	Minimum	39	69
Learning interest	Maximum	76	87

Inferential Hypothesis Testing

Prior to hypothesis testing, normality and homogeneity assumptions were assessed. The Shapiro–Wilk test indicated that the pretest and posttest learning outcome data were normally distributed, with significance values of 0.062 and 0.121, respectively.

Similarly, the pre- and post-questionnaire data on learning interest yielded significance values of 0.138 and 0.090, respectively. As all values exceeded 0.05, the data for both variables were confirmed to be normally distributed. Levene's Test confirmed homogeneity of variance, with a significance value of 1.000 for learning outcomes and 0.071 for learning interest (both > 0.05), satisfying the assumption required for parametric hypothesis testing using ANOVA.

Table 3. Results of Classical Assumption Test and Inferential Hypothesis Test

Types of Tests	Variables / Data	Test Statistics	Significance Value (p-value)	Criteria	Conclusion
Normality Test (Shapiro-Wilk)	Learning Outcomes (Pretest)	—	0,0620	$p > 0,05$	All data is normally distributed.
	Learning Outcomes (Posttest)		0,121		
	Learning Interest (Pretest)		0,138		
	Learning Interest (Posttest)		0,090		
Homogeneity Test (Levene's Test)	Learning Outcomes	—	1,000	$p > 0,05$	The data variance is homogeneous (meets parametric requirements).
	Learning Interest		0,071		
Hypothesis Test (ANOVA)	The Effect of Combination of Role-Playing & Experiment Methods	$F=309,932$	0	$p < 0,05$	H_0 is rejected, H_a is accepted. Significant: The combination of methods has a significant effect on student interest and learning outcomes.

The ANOVA results yielded $F = 309.932$ with a significance value of 0.000. As this value was below the 0.05 threshold, the alternative hypothesis (H_a) was accepted and the null hypothesis (H_0) was rejected, confirming that the combined application of the Role-Playing and Experimental methods exerted a statistically significant effect on the learning interest and learning outcomes of sixth-grade students at Elementary School 239 Inpres Nipa.

Collectively, these findings indicate that learning involving active student engagement through role-play and simple social experimentation enhances comprehension, participation, and interest in Pancasila Education, positioning these methods as effective instructional alternatives for improving the quality of elementary education.

Discussion

The findings of this study offer important insights into the development of civic education instruction in elementary schools. The improvement in learning outcomes from 45.00 to 82.50, accompanied by increased learning interest, suggests that the

observed change reflects not merely a substitution of instructional method but a broader shift toward a more experience-centered pedagogical approach. Experience-based learning was shown to foster a more interactive, enjoyable, and meaningful learning atmosphere, thereby facilitating greater student activity and comprehension (Costello et al., 2022; Taheri & Aguayo, 2022).

Enhancing Learning Interest through the Role-Playing Method

The increase in learning interest can be explained through cognitive psychology and social learning theory. Under conventional lecture-based instruction, students tend to function as passive listeners, which readily leads to boredom and disengagement. The Role-Playing method, by contrast, encourages direct involvement through the adoption of specific roles and perspectives. When students enacted scenarios such as religious tolerance or deliberative consensus (*musyawarah*), they did not merely memorize content but actively understood and experienced its meaning.

This finding aligns with Chen and Syu (2024); Dorożyński and Dorożyńska (2022); Maghsoodi et al. (2025), who reported that role-playing enhances student engagement in learning. Contemporary neuroeducational research similarly suggests that emotional engagement and direct activity strengthen memory retention and comprehension (Pradeep et al., 2024; Shree, 2025). This pattern was evident among students at Elementary School 239 Inpres Nipa, who transitioned from limited enthusiasm to greater activity and motivation once given opportunities to participate and express themselves within the learning process, allowing learning interest to develop organically as instruction became more enjoyable and meaningful.

Moral Objectification through the Experimental Method

A notable contribution of this study is the application of the experimental method within Pancasila Education, a subject in which such methods have traditionally been associated with the natural sciences (Mahendra et al., 2024; Nisa & Efendi, 2023; Rahmawati & Sanoto, 2025). This study demonstrates that experimentation can also be applied to social learning through classroom-based "social experiments." For instance, students conducted a simulation involving the unequal distribution of resources to understand the meaning of social justice, allowing them to directly experience the consequences of fair and unfair treatment.

The experimental method helped students translate the previously abstract value of social justice into something concrete and comprehensible, demonstrated through direct experience and observation of cause-and-effect relationships rather than theoretical instruction alone (Setyanto, 2006). This approach contributed to more consistent posttest performance across students, indicating that the Experimental method supports a more concrete, active, and meaningful understanding of instructional material among all students.

Theoretical and Practical Implications

These findings further corroborate Vygotsky's constructivist theory, which posits that higher-order cognition is constructed through structured social interaction. The combined application of Role-Playing and Experimental methods produced more comprehensive learning outcomes: the Role-Playing method strengthened empathy, communication, and collaboration, while the Experimental method cultivated logical and analytical thinking and an understanding of cause-and-effect relationships.

From a practical standpoint, this study indicates that Pancasila Education is more effective when it extends beyond lecture-based instruction. Teachers should incorporate direct experiential learning so that students not only memorize content but also understand and apply Pancasila values in everyday life. Experiential learning approaches therefore represent a promising instructional alternative for supporting implementation of the Merdeka Curriculum in elementary schools.

4. CONCLUSION

This study demonstrates that the combined application of Role-Playing and social Experimental methods exerted a strongly positive effect on Pancasila Education instruction at Elementary School 239 Inpres Nipa. The intervention significantly enhanced both students' learning interest and learning outcomes, with mean achievement scores rising from 45.00 to 82.50. Students additionally exhibited greater activity, enthusiasm, and a more evenly distributed understanding of the instructional material.

This study is nonetheless limited by its relatively small sample size (20 students) and the absence of a control group. Future research is encouraged to adopt a more robust experimental design with a larger sample and multiple school sites. Overall, the findings suggest that Pancasila values are more readily understood by students when taught through direct experience and instructional activities that foster active classroom participation.

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