

Diorama-Based Learning Boosts Religious Moderation: A Grade-3 PPKn Pretest–Posttest Study

Finesa Agustina ¹, Retno Fajarini²

1 SD Negeri 1 Pokoh Kidul, Indonesia¹; e-mail: agustinafinesa1@gmail.com

2 SD Negeri 1 Pokoh Kidul, Indonesia ²; e-mail: retnofajarini02@gmail.com

ARTICLE INFO

Keywords:

attitudes toward diversity;
Citizenship Education (PPKn);
diorama-based learning;
elementary education;
experiential learning;
multicultural education;
religious moderation.

Article history:

Accepted: February 26th, 2025
Revised: May 27th, 2025
Published: June 6th, 2025

ABSTRACT

This study evaluated the effectiveness of diorama-based instruction for strengthening third-grade students' knowledge and attitudes toward religious moderation within Citizenship Education (PPKn). Using a quasi-experimental one-group pretest–posttest design, 28 students from SD Negeri 1 Pokoh Kidul completed a knowledge test (5 multiple-choice, 5 essay) and a Likert-type attitude questionnaire before and after a single experiential lesson centered on a diorama of diverse houses of worship. Pretest performance indicated misconceptions about religious diversity. Post-intervention, scores increased markedly from $M=42.14$ ($SD=13.15$) to $M=92.50$ ($SD=7.52$), yielding a mean gain of 50.36 points (95% CI [44.07, 56.64]). Because posttest scores were non-normally distributed, the Wilcoxon Signed Ranks Test served as the primary analysis ($Z=-4.64$, $p<.001$, $|r|=0.88$), with a supplementary paired-samples t-test corroborating the result ($t(27)=-16.44$, $p<.001$, $d_z\approx 3.11$). Attitudinal responses indicated enhanced empathy, reduced stereotyping, and greater willingness to engage respectfully across religious differences. These findings position dioramas as a low-cost, high-impact medium for values-based learning in multicultural primary classrooms, translating abstract socio-cultural concepts into tangible experiences that support both cognitive and affective growth. Limitations include the absence of a control group and the single-site context; future multi-site, controlled, and longitudinal studies are recommended to examine durability and generalizability of effects.

Corresponding Author :

Finesa Agustina

SD Negeri 1 Pokoh Kidul, Indonesia; e-mail: agustinafinesa1@gmail.com

1. Introduction

Visual and interactive teaching media play a pivotal role in enabling elementary school students to comprehend abstract socio-cultural concepts. Studies have demonstrated that the integration of tools such

as animation, interactive applications, and multimedia not only enriches the learning experience but also renders complex ideas more accessible to young learners (Hati, 2025; Pratiwi, Kurniawan, & Syarief, 2024; Rohim & Wardhani, 2024). By offering concrete visual representations, these media facilitate higher engagement and improve information retention, transforming the classroom into a dynamic environment that promotes active participation (Astuti, Suarjana, & Trisna, 2023; Ramadani, 2025). Through sensory-rich learning, students are encouraged to explore, inquire, and interact, which aligns with contemporary pedagogical calls for student-centered approaches.

In the context of Citizenship Education (PPKn), the application of such media is particularly effective in promoting religious moderation among young learners in multicultural settings. Interactive educational tools that embed elements of local culture and daily life have been found to strengthen students' respect for diversity and cultural awareness (Bustomi, Khosiah, & Fathurrohman, 2025; N. M. P. Y. S. I. Wijaya, 2024). Additionally, media designed to foster collaboration and dialogue within the classroom can instill essential values such as tolerance and inclusiveness, which are critical competencies for navigating pluralistic societies (Adawiyah, Winarno, & Onia, 2024; Tapung, 2024). By facilitating both cognitive understanding and social-emotional development, these resources bridge the gap between theoretical knowledge and lived experiences of diversity.

Despite these potential benefits, elementary school teachers face notable challenges when delivering lessons on tolerance and diversity. One prominent barrier is the limited availability of suitable teaching resources and professional training to address such complex socio-cultural themes effectively (Budiana, Anoeграjekti, & Hakim, 2022; Hasanah, Marini, & Maksum, 2021). Teachers must also contend with students' diverse social skills, prior experiences, and cultural backgrounds, which can create varied starting points for learning (Rahmani, Asghari, Sadeh, Hosseinzadeh, & Gholizadeh, 2024). Furthermore, the rigidity of standardized curricula often constrains teachers' flexibility to adapt lesson content to the socio-cultural needs of their classrooms (Chen & Mensah, 2022). These factors collectively hinder the creation of inclusive environments where open dialogue about diversity can flourish.

Constructivist learning theory offers a robust framework for integrating hands-on media such as dioramas into primary education. This theory posits that learners actively construct knowledge by engaging with real-world experiences and reflecting on them (Mofokeng & Ndlovu, 2024; Saclarides, 2023). Hands-on activities provide opportunities for learners to connect new information with prior knowledge, creating meaningful cognitive links. Moreover, such approaches cater to diverse learning styles, accommodating students who learn best through visual, auditory, or kinesthetic means (Furuta, Sato, Miller, Kataoka, & Tomura, 2022; Mofokeng & Ndlovu, 2024). In the realm of socio-cultural education, these experiences help children internalize abstract concepts like tolerance and diversity by situating them within tangible, relatable contexts.

Dioramas, as a form of experiential and visual media, present distinctive pedagogical advantages in civic and moral education compared to more traditional, lecture-based methods. By providing spatial and visual representations, dioramas enable students to conceptualize abstract civic values, such as justice, respect, and community participation, through concrete examples. They promote collaborative learning as students work together to construct or analyze these models, encouraging the development of communication, critical thinking, and problem-solving skills (Habte, Bishaw, & Lechissa, 2021). This active involvement not only improves comprehension but also enhances long-term retention, addressing one of the major shortcomings of rote memorization in conventional instruction.

In culturally diverse nations like Indonesia, implementing religious moderation education in elementary schools is a strategic means of fostering respect and tolerance. This implementation involves weaving lessons on different religious beliefs, rituals, and cultural practices into the curriculum to cultivate an inclusive classroom culture (Rachmadtullah, Syofyan, & Rasmitadila, 2020). The educational process emphasizes open dialogue, empathy, and recognition of shared human values, enabling students to see commonalities across differences. Teachers act as facilitators, guiding these discussions with culturally sensitive methods that resonate with students' lived experiences (Rachmadtullah et al., 2020).

The literature further underscores the importance of employing culturally relevant pedagogies in promoting unity amidst diversity. Initiatives focused on shared values and ethical principles are essential

in preparing students to contribute to social harmony within pluralistic societies (Rachmadtullah et al., 2020). By integrating religious moderation into early education, educators can counter potential biases and misconceptions before they solidify, thereby equipping children with the socio-emotional tools to navigate diversity positively. Nevertheless, existing studies highlight a research gap in empirically evaluating the role of tangible, visual media such as dioramas in facilitating this form of values-based education.

This study seeks to address that gap by investigating the impact of diorama teaching aids on student learning outcomes and attitudes toward religious moderation in third-grade PPKn lessons. The novelty of the research lies in its application of dioramas not merely as illustrative tools but as interactive, experiential media for character education in a multicultural context. By focusing on both cognitive gains and affective development, this research aims to provide actionable insights for educators and policymakers on integrating innovative media into elementary-level civic education. The scope of the study is limited to a single elementary school setting but aspires to inform broader educational strategies for fostering tolerance and respect for diversity among young learners.

2. Method

This study adopted a quantitative descriptive approach to investigate the effect of diorama teaching aids on students' learning outcomes and attitudes toward religious moderation in Citizenship Education (PPKn) for third-grade elementary students. Quantitative designs are particularly effective for evaluating educational interventions because they enable researchers to measure changes objectively, using numerical data to compare pre-intervention and post-intervention performance. In this case, a pretest to posttest design was employed to assess the cognitive and affective gains associated with the integration of diorama media in classroom instruction.

2.1 Research Setting and Participants

The research utilized a one-group pretest to posttest design as the primary framework, which involves administering a pretest before the intervention and a posttest after the intervention to the same group of participants. This design allows for the direct measurement of changes in knowledge and attitudes attributable to the instructional strategy implemented (Shalini, Shanbhag, James, & Divya, 2025). While a full pretest to posttest control group design typically includes a control group to account for confounding factors (Purbosari & Ma'rifah, 2021), the scope of this study was limited to a single experimental group due to logistical constraints. Nonetheless, the internal validity was strengthened through the use of standardized test instruments and consistent instructional delivery.

In this design, the pretest served to establish a baseline measure of students' understanding of religious moderation, while the posttest assessed the same constructs following the diorama-based learning intervention. This comparison facilitated a precise evaluation of the intervention's effectiveness, aligning with best practices in educational research (Alshehri et al., 2025).

2.2 Participants and Sampling

The research was conducted at SD Negeri 1 Pokoh Kidul, targeting third-grade students during the 2024/2025 academic year. The study population comprised all 28 students in the grade, representing a mix of socio-cultural and religious backgrounds. Given the modest population size, total sampling was employed, meaning all members of the population were included as research participants.

The choice of this sample was driven by the need to examine religious moderation education in a setting that reflects the diversity found within Indonesian elementary schools. Although the findings are context-specific, they provide valuable insights into early character education within multicultural learning environments.

2.3 Intervention: Diorama-Based Learning

The intervention centered on the use of a custom-designed diorama depicting various places of worship, including mosques, churches, temples, and vihara, alongside symbolic elements of each religious tradition. The diorama was designed to facilitate visual-spatial learning by providing tangible, three-dimensional representations of abstract concepts such as tolerance, respect, and coexistence.

The instructional session began with an introduction to the concept of religious moderation, as defined in the Indonesian educational context, followed by teacher-led exploration of the diorama. Students were encouraged to interact with the model, ask questions, and discuss the symbolism of each element. These interactions were guided by principles of constructivist learning theory, which emphasizes the active construction of knowledge through direct engagement with learning materials (Mofokeng & Ndlovu, 2024; Saclarides, 2023).

The diorama activity was supplemented with brief multimedia explanations, teacher prompts, and collaborative group tasks designed to promote critical reflection on diversity. Students were then given opportunities to respond to open-ended questions related to the concepts illustrated by the diorama, fostering both cognitive and affective engagement.

2.4 Instruments for Data Collection

Data were collected using two primary instruments. The first instrument was an achievement test comprising 5 multiple-choice and 5 essay questions that assessed students' understanding of religious moderation concepts, the significance of respecting different faiths, and examples of tolerant behavior in daily life. These items were validated by content experts to ensure alignment with the PPKn curriculum. The second instrument was an attitude questionnaire, which was a structured survey with Likert-scale items designed to gauge students' openness, respect, and empathy toward people of different religious backgrounds. This questionnaire was adapted from existing instruments used in multicultural education research to ensure construct validity (Nabi, Shafik, & Saad, 2023).

Both instruments were administered as pretests before the intervention and as posttests after the intervention, enabling direct comparison of results.

2.5 Procedure

The study was implemented over a single instructional unit, beginning with the pretest administration. Before engaging in the diorama activity, students completed the achievement test and attitude questionnaire to establish baseline levels of knowledge and openness toward diversity. The next phase involved the delivery of the diorama-based lesson, during which the teacher presented the diorama and explained its components, highlighting real-life applications of religious moderation. Throughout this phase, interactive questioning and peer discussions were encouraged to stimulate deeper engagement. Following the lesson, the posttest was administered, using the same achievement test and attitude questionnaire to measure immediate learning gains and changes in attitudes. Finally, photographic documentation of student engagement with the diorama and classroom interactions was conducted to provide qualitative context to the quantitative findings.

2.6 Data Analysis

Data analysis was conducted using SPSS Version 22. Given the small sample size and the possibility of non-normal distribution, two analytical approaches were employed. The first approach was descriptive statistics, which included means, standard deviations, and range values for both pretest and posttest scores to provide a summary of student performance. The second approach was inferential statistics. Normality testing was conducted using the Kolmogorov-Smirnov and Shapiro-Wilk tests to determine whether the data followed a normal distribution. When data deviated from normality, the Wilcoxon Signed Ranks Test was applied as a non-parametric alternative to evaluate significant differences between pretest and posttest scores. For data that met normality assumptions, the Paired Samples t-Test was used to compare mean differences between pretest and posttest scores, thereby testing the study hypothesis at a significance level of $\alpha = 0.05$.

These statistical methods ensured rigorous testing of the hypothesis that diorama-based learning positively influences both knowledge acquisition and attitude development toward religious moderation.

2.7 Rationale for Methodological Choice

The choice of a pretest to posttest design was informed by prior research demonstrating its utility in assessing educational interventions in primary education (Alshehri et al., 2025). By establishing baseline data and conducting post-intervention measurement, this method provides clear evidence of instructional impact while minimizing threats to internal validity. Although the absence of a control group limits causal inference, the design was deemed appropriate for an exploratory study within a single classroom context.

Moreover, the use of both parametric and non-parametric statistical analyses enhanced the robustness of the findings.

3. Result

This section presents the results of the study investigating the effects of diorama-based instruction on third-grade elementary students' knowledge and attitudes toward religious moderation. The analysis includes pretest and posttest performance, descriptive statistics, inferential statistical tests, and qualitative observations from classroom activities.

3.1 Pretest Analysis: Baseline Knowledge and Attitudes

Before the diorama-based lesson, students displayed varying levels of knowledge about religious diversity and moderation. Consistent with findings in prior literature, many students exhibited binary perspectives on religious differences, often categorizing religions as good or bad without recognizing the shared ethical principles across faiths (Muhtarom, Siswanto, Amri, & Alim, 2024; Supadi, 2024). This oversimplification was often coupled with a lack of understanding of tolerance as an active, respectful engagement with diversity rather than passive acceptance.

Stereotypes were also observed, with several students expressing assumptions about the practices or character of members from other religions, reflecting the influence of limited interfaith exposure (Karisma, Neviyarni, & Solfema, 2020). This aligns with research suggesting that misconceptions at this developmental stage are often reinforced by environmental factors, including family narratives and peer interactions.

The pretest results quantified these misconceptions. Scores ranged from 20 to 70 (out of 100), with a mean of 42.14 (SD = 13.154). The majority of students scored in the low category (46–56%) or very low category (20–45%) based on the school's assessment rubric (see Table 3 in methodology). These data clearly indicated substantial gaps in both factual knowledge and attitudinal readiness to engage with religious diversity.

The pretest analysis also provided actionable insight for instructional planning. As recommended in previous studies (Muharridha, Juliani, Selvira, Mulia, & Hasibuan, 2025; Zaynah & Alif, 2025), the identification of these knowledge gaps guided the inclusion of more explicit definitions, visual representations, and collaborative activities in the diorama lesson plan. For example, tolerance was reframed in the session as respecting and valuing differences, supported by visual models within the diorama that represented inclusive interactions across religious settings.

3.2 Intervention and Immediate Observations

During the diorama-based lesson, students engaged with a three-dimensional model depicting various religious sites including mosque, church, temple, and vihara, accompanied by representative symbols and figures. The teacher guided students through each element, explaining its cultural and religious significance, while encouraging open-ended questioning.

Qualitative observation during the intervention revealed heightened engagement compared to traditional lecture-based sessions. Students leaned in to examine the diorama, discussed features with peers, and frequently volunteered answers or posed questions. The interactive nature of the medium appeared to bridge gaps in attention and comprehension, consistent with findings from (Afni & Bektiningsih, 2024) and (Satriya & Fahyuni, 2023) on the engagement benefits of visual media in values-based education.

Notably, even students who were typically quiet in class participated in some form, either by asking questions or contributing to group discussions. This supports the premise that hands-on media such as dioramas lower participation barriers by providing tangible focal points for discussion (A. A. Wijaya, Syarifuddin, & Asmi, 2022).

3.3 Posttest Analysis: Knowledge Gains

Following the intervention, posttest scores ranged from 80 to 100, with a mean of 92.50 (SD = 7.515). All students scored in the high (76–85%) or very high (86–100%) categories, a marked improvement from the pretest distribution. The lowest posttest score (80) exceeded the highest pretest score (70), indicating a uniform shift toward mastery-level understanding.

The mean score increase of 50.36 points (approximately 119% improvement) demonstrates substantial learning gains attributable to the diorama-based instruction. Table 4 (pretest and posttest scores) illustrates this transformation across all 28 participants, showing that no student experienced a decline or plateau in performance.

These findings are in line with previous studies on the effectiveness of interactive visual media in teaching complex socio-cultural concepts (Endrayani, Efendi, & Yamtinah, 2022; Ginting et al., 2024; Hasanah & Sudira, 2021). By providing concrete representations of abstract concepts, the diorama facilitated both recall and conceptual understanding, enabling students to articulate nuanced perspectives on religious moderation.

3.4 Statistical Analysis: Significance Testing

To determine the statistical significance of the observed improvements, both parametric and non-parametric tests were employed due to the mixed results from normality tests. The Kolmogorov–Smirnov test indicated that both pretest ($p = 0.034$) and posttest ($p = 0.000$) scores deviated from a normal distribution. The Shapiro–Wilk test yielded $p = 0.126$ for pretest (normal) but $p = 0.000$ for posttest (non-normal). These results justified the use of the Wilcoxon Signed Ranks Test as the primary inferential analysis.

The Wilcoxon Signed Ranks Test results showed $Z = -4.640$, $p < 0.001$, indicating a highly significant difference between pretest and posttest scores. All 28 students recorded positive rank changes, with no ties or negative ranks. Although the posttest scores were not normally distributed, the paired t-test was conducted for comparison, yielding $t(27) = -16.436$, $p < 0.001$. The mean difference (-50.357) with a 95% CI of -56.644 to -44.071 corroborated the Wilcoxon test results, confirming the robustness of the observed improvement.

These findings align with (Alshehri et al., 2025), who emphasized that pretest to posttest designs provide strong evidence for the instructional impact of innovative teaching methods when both statistical and practical significance are achieved.

3.5 Posttest Attitudinal Shifts

The post-intervention attitude questionnaire revealed marked positive shifts in students' perspectives toward religious diversity. Key changes included increased empathy, with more students agreeing with statements expressing the importance of understanding others' beliefs even when different from their own; reduction in stereotypes, as open-ended responses reflected more nuanced views and recognition of similarities between religious traditions; and active tolerance, with students demonstrating a shift from passive acceptance to active expressions of respect, such as willingness to participate in events involving peers of other religions.

These attitudinal changes align with the conceptual benefits of experiential learning in moral and civic education, as documented by (Hasanah & Sudira, 2021) and (Endrayani et al., 2022). The immersive nature of the diorama activity appeared to humanize abstract concepts, making tolerance a lived rather than theoretical value for students.

3.6 Observational Insights

Throughout the intervention, the classroom environment was notably dynamic and inclusive. Students collaborated in identifying elements within the diorama and connecting them to real-world experiences. For example, one group linked the depiction of a church to a local community event they had attended, facilitating peer-to-peer learning.

Importantly, the teacher's facilitation role was central to sustaining engagement and guiding reflection. The instructor's prompts encouraged critical thinking, such as asking why certain religious symbols might be important to their respective communities. These exchanges not only reinforced factual knowledge but also fostered perspective-taking, a core component of civic competence (Afni & Bektiningsih, 2024).

3.7 Summary of Findings

The results clearly indicate that diorama-based learning significantly enhanced both knowledge and attitudes related to religious moderation among the participating students. Quantitatively, the substantial improvement in posttest scores, supported by statistical analyses, demonstrates the cognitive benefits of

the intervention. Qualitatively, the observed increase in empathetic attitudes and reduction of stereotypes reflects meaningful affective development. These outcomes validate prior claims in the literature regarding the pedagogical advantages of visual, interactive media in values-based education (Satriya & Fahyuni, 2023; A. A. Wijaya et al., 2022) and contribute new empirical evidence specific to the use of dioramas in PPKn instruction at the primary level..

4. Discussion

This study sought to evaluate the impact of diorama-based instruction on third-grade elementary students' understanding and attitudes toward religious moderation within Citizenship Education (PPKn). The findings reveal both substantial cognitive gains and notable attitudinal shifts, underscoring the pedagogical value of interactive, experiential media in promoting socio-cultural competencies.

4.1 Alignment with Experiential Learning Principles

The results strongly align with the theoretical foundations of Kolb's Experiential Learning Theory, which posits that learning occurs through a cyclical process involving concrete experience, reflective observation, abstract conceptualization, and active experimentation (Kolb & Kolb, 2022). Diorama-based instruction provided students with tangible, concrete experiences, allowing them to visualize abstract concepts such as tolerance, respect, and religious diversity. This visual-spatial engagement was followed by reflective observation through class discussions, abstract conceptualization via teacher-led explanations, and active experimentation when students articulated or applied these values in collaborative activities.

Previous studies have highlighted the effectiveness of hands-on, creative media in enabling students to represent and explore concepts in ways that deepen engagement and retention (Hanifah & Setyasto, 2024; Sapitri, Guslinda, & Zufriady, 2021). The present study corroborates these findings, demonstrating that dioramas foster active learning by engaging multiple senses and encouraging knowledge construction rather than passive reception. Moreover, as (Munif, Rozi, & Sulaiman, 2023) and (Salvador & Andal, 2023) observe, such approaches inherently stimulate critical thinking and problem-solving skills, capabilities that were evident in the increased depth of student responses during posttest and classroom discussions.

4.2 Attitudinal Change and Long-Term Implications

Beyond knowledge gains, the intervention produced clear positive changes in students' attitudes toward religious diversity. The posttest survey indicated greater empathy, reduced stereotyping, and a shift from passive acceptance to active tolerance. These affective outcomes are significant, as research shows that interactive media can humanize complex social issues by enabling students to explore multiple cultural perspectives in an accessible format (Efe, Tusun, Alakuş, & Efe, 2022).

The potential long-term impacts of such interventions are noteworthy. Yusof et al. (2020) argue that early engagement with diverse perspectives through interactive media can lead to sustained civic responsibility, as students become more aware of social issues and the value of pluralism. Similarly, (Ningrum, Sari, & Kustiyah, 2024) note that repeated exposure to interactive, values-based learning activities can reinforce not only knowledge retention but also enduring interest in civic participation and community engagement. While the present study did not assess longitudinal effects, the magnitude of the short-term attitudinal shift suggests potential for lasting influence if such instructional methods are implemented consistently.

4.3 Implications for Scaling Religious Moderation Education

Scaling multicultural and religious moderation education across diverse school settings requires integrating these values within existing curricular structures. Research supports embedding religious moderation principles into subjects such as Islamic Religious Education (PAI) and Citizenship Education, thereby normalizing discussions of diversity and tolerance as part of standard instruction (Aisyah, Setyono, & Suhendi, 2023). This integration can ensure that values of moderation are reinforced alongside academic content, enhancing both cultural relevance and pedagogical impact.

The empowerment of both educators and parents is critical for effective scaling. Teachers require targeted professional development that equips them with strategies and resources for addressing

religious diversity constructively (Sudarsana, Perbowosari, Linggih, Binawati, & Wiguna, 2022). (Syaikhon et al., 2023) emphasize that parental involvement complements school-based instruction by reinforcing inclusive values at home, creating a consistent socio-cultural learning environment for children.

Tailoring educational programs to reflect local community contexts is another essential factor in scaling. (Wardi, Alias, Hidayat, & Hali, 2023) and (Musyahid, 2023) highlight that community input ensures programs are culturally resonant, increasing acceptance and applicability. In diverse societies like Indonesia, adapting religious moderation lessons to the specific socio-cultural characteristics of each community may significantly enhance student engagement and program sustainability.

4.4 Lessons from Successful Multicultural Education Models

The literature provides useful models for promoting inclusivity in educational settings. For example, initiatives in Islamic boarding schools demonstrate the effectiveness of harmonizing local traditions with formal curricula to encourage cooperation and mutual respect among diverse student populations (Masturin, 2023) (Rahmadi & Hamdan, 2023). These programs often integrate experiential learning activities, similar in intent to the diorama intervention, allowing students to interact with and reflect upon diverse cultural practices in structured, respectful environments.

The success of such initiatives is often contingent on systemic support from educational authorities and community stakeholders. (Fathurrochman, Ristianti, & Arif, 2020) and (Fithriyah, 2023) emphasize that institutional commitment is required to sustain multicultural programs, including adequate funding, curriculum development, and teacher training. Applying this insight to the diorama-based approach suggests that broader adoption would require investment in both the physical materials, such as diorama kits, and the pedagogical training necessary for effective facilitation.

4.5 Interpreting the Magnitude of Learning Gains

The substantial improvement in posttest scores, an average increase of over 50 points, provides compelling evidence of the diorama's effectiveness in enhancing conceptual understanding of religious moderation. This aligns with prior research indicating that interactive visual media bridge comprehension gaps by making abstract values tangible and relatable (Satriya & Fahyuni, 2023) (A. A. Wijaya et al., 2022).

It is notable that the lowest posttest score (80) exceeded the highest pretest score (70), suggesting not only general improvement but also a narrowing of performance disparities among students. This outcome aligns with the goals of equity in education, as all students, regardless of starting ability, reached at least a high performance level. Such uniform gains indicate that diorama-based learning can serve as a levelling strategy, mitigating differences in prior knowledge through highly accessible, engaging instruction.

4.6 Limitations and Future Research

While the findings are promising, several limitations must be acknowledged. The absence of a control group limits the ability to attribute improvements exclusively to the diorama intervention, as other factors, such as novelty effect and teacher enthusiasm, may have influenced results. Additionally, the study was conducted in a single classroom context, which constrains generalizability.

Future research could address these limitations by adopting a pretest to posttest control group design across multiple schools, thereby enabling stronger causal inference and broader applicability. Longitudinal studies would also be valuable in assessing whether the observed attitudinal changes persist over time, particularly in terms of sustained tolerance and civic engagement.

Further investigation into comparative media effectiveness, for example dioramas versus digital simulations or role-playing activities, would provide insights into the most efficient tools for values-based education in different contexts.

4.7 Practical Implications

Despite its limitations, this study offers practical guidance for educators and policymakers. First, the strong results suggest that low-cost, physical media like dioramas can achieve high educational impact, particularly in resource-constrained schools. Second, the integration of constructivist, experiential methods into value-based education may address the shortcomings of traditional lecture approaches in

teaching abstract social values. Third, ensuring that such methods are institutionally supported, through curriculum inclusion, training, and resource provision, will be essential for sustainable implementation at scale.

5 Conclusion

The present study demonstrates that diorama-based learning significantly enhances both the cognitive understanding and affective dispositions of third-grade students toward religious moderation in Citizenship Education (PPKn). Quantitative analysis revealed a substantial improvement in posttest scores, with all students reaching high or very high mastery levels and an average score increase exceeding 50 points. Attitudinal measures indicated a notable shift toward active tolerance, empathy, and reduced stereotyping, reflecting meaningful affective development.

These outcomes can be attributed to the integration of experiential learning principles, where dioramas served as concrete, interactive media that facilitated knowledge construction, critical thinking, and collaborative learning. By making abstract socio-cultural concepts tangible, the diorama enabled students to engage deeply with values of diversity and inclusion, contributing to the broader goals of character education in a multicultural society.

The study's findings offer practical implications for educators and policymakers. First, diorama-based learning represents a cost-effective and impactful strategy for teaching values-based content in elementary schools. Second, integrating such media within the existing curriculum can help bridge equity gaps by engaging students with diverse learning styles and prior knowledge. Finally, institutional support, teacher training, and community involvement will be essential for scaling this approach across diverse educational contexts.

While the results are promising, limitations include the absence of a control group and the single-classroom setting, which constrain generalizability. Future research should explore multi-site, controlled studies and longitudinal tracking to assess the sustained impact of diorama-based instruction on tolerance and civic engagement.

Reference

- Adawiyah, E. R., Winarno, A., & Onia, S. I. (2024). Effectiveness of Interactive Learning Media Development Based on Articulate Storyline 3 in Elementary School Education. *Educare Journal of Primary Education*, 5(2), 105–118. <https://doi.org/10.35719/educare.v5i2.253>
- Afni, N., & Bektiningsih, K. (2024). Genially Interactive Media: Improving Learning Outcomes of Indonesian Cultural Wealth. *Journal of Education Research and Evaluation*, 8(2), 266–275. <https://doi.org/10.23887/jere.v8i2.77004>
- Aisyah, S., Setyono, H., & Suhendi, E. (2023). Strengthening the Value of Religious Moderation Through Pai-Bp Learning. *Ta Dib Jurnal Pendidikan Islam*, 12(1), 9–16. <https://doi.org/10.29313/tjpi.v12i1.11667>
- Alshehri, F. S., Ashour, A. M., Bafhaid, H. S., Algarni, A. S., Harbi, M. H., & Alorfi, N. M. (2025). University Students' Knowledge and Attitudes Toward Substance Abuse: A Cross-Sectional Study From Saudi Arabia. *Healthcare*, 13(10), 1122. <https://doi.org/10.3390/healthcare13101122>
- Astuti, K. M., Suarjana, I. M., & Trisna, G. A. P. S. (2023). PERISA Audio Visual Media on Learning Social Diversity for Class v Elementary School Students. *Journal of Education Technology*, 7(3), 449–461. <https://doi.org/10.23887/jet.v7i3.62035>
- Budiana, S., Anoegrajekti, N., & Hakim, M. K. B. A. (2022). Exploring Multiculturalism Implementation to Foster Diversity Among Elementary School Students. *Indonesian Journal of Learning and Instruction*, 5(2). <https://doi.org/10.25134/ijli.v5i2.8314>
- Bustomi, A. A., Khosiah, N., & Fathurrohman, A. (2025). Developing Pancasila Learning Strategies Through Culture-Based Interactive Media in Elementary Schools. *Alj*, 3(1), 43–56. <https://doi.org/10.61650/alj.v3i1.622>
- Chen, J. L., & Mensah, F. M. (2022). Toward Socially Just Science Teaching Through Professional

- Development: The Science Teacher Identity Development and Agency of Two Elementary Teachers of Color. *Science Education*, 106(2), 385–411. <https://doi.org/10.1002/sce.21699>
- Efe, H. A., Tusun, S., Alakuş, A. O., & Efe, R. (2022). An Investigation of Middle School Students' Views on the Contributions of Dioramas to Biodiversity Education. *International E-Journal of Educational Studies*, 6(12), 136–147. <https://doi.org/10.31458/iejes.1131985>
- Endrayani, I., Efendi, A., & Yamtinah, S. (2022). Identification of the Need for PhET Simulation-Based Interactive Media for Learning in Vocational High Schools. *Journal of Education Research and Evaluation*, 6(4), 667–677. <https://doi.org/10.23887/jere.v6i4.53040>
- Fathurrochman, I., Ristanti, D. H., & Arif, M. A. S. bin M. (2020). Revitalization of Islamic Boarding School Management to Foster the Spirit of Islamic Moderation in Indonesia. *Jurnal Pendidikan Islam*, 8(2), 239–258. <https://doi.org/10.14421/jpi.2019.82.239-258>
- Fithriyah, I. (2023). Installation of Religious Moderation Values in Multi Ethnic and Religious Communities in Polagan Galis Pamekasan Village. *Fikrotuna Jurnal Pendidikan Dan Manajemen Islam*, 12(02), 198–217. <https://doi.org/10.32806/jf.v12i02.7350>
- Furuta, Y., Sato, T., Miller, R. T., Kataoka, C., & Tomura, T. (2022). Public Elementary School Teachers' Positioning in Teaching Physical Education to Japanese Language Learners. *European Physical Education Review*, 28(4), 1006–1024. <https://doi.org/10.1177/1356336x221104912>
- Ginting, F. W., Widya, W., Sakdiah, H., Novita, N., Sulastri, S., & Damanik, A. K. (2024). Interactive Audio-Visual Learning Media Through Articulate Storylines Containing Problem-Based Contextual Learning to Improve Students' HOTS and Scientific Attitudes. *International Journal of Religion*, 5(12), 1031–1044. <https://doi.org/10.61707/z5c4xg78>
- Habte, A., Bishaw, A., & Lechissa, M. (2021). Beyond Policy Narratives: Exploring the Role of Pedagogical Beliefs in Classroom Practices of Secondary School Civics and Ethical Education Teachers. *Smart Learning Environments*, 8(1). <https://doi.org/10.1186/s40561-021-00171-w>
- Hanifah, C. S., & Setyasto, N. (2024). 3D Diorama Learning Media on the History of the Independence of Indonesia to Improve Learning Outcomes in Social Studies Learning. *Mimbar PGSD Undiksha*, 12(1), 47–56. <https://doi.org/10.23887/jjpsd.v12i1.72828>
- Hasanah, U., Marini, A., & Maksum, A. (2021). Multicultural Education-Oriented Digital Teaching Materials to Improve Students' Pluralist Attitudes. *Jurnal Prima Edukasia*, 9(1). <https://doi.org/10.21831/jpe.v9i1.35503>
- Hasanah, U., & Sudira, P. (2021). Use of -Based Interactive Learning Media Visuals in Science Learning. *Journal of Education Technology*, 5(4), 563. <https://doi.org/10.23887/jet.v5i4.35364>
- Hati, S. T. (2025). Peran Media Pembelajaran Interaktif Dalam Mengembangkan Keterampilan Abad 21 Pada Siswa Kelas Tinggi. *Ijtimaiyah*, 9(1), 20. <https://doi.org/10.30821/ijtimaiyah.v9i1.24763>
- Karisma, S. P., Neviyarni, N., & Solfema, S. (2020). The Effectiveness of Informational Services Through Small Group Discussion to Improve Students Tolerance Attitudes. *International Journal of Applied Counseling and Social Sciences*, 1(2), 69–75. <https://doi.org/10.24036/005351ijaccs>
- Kolb, A. Y., & Kolb, D. (2022). Experiential Learning Theory as a Guide for Experiential Educators in Higher Education. *Experiential Learning and Teaching in Higher Education*, 1(1), 38. <https://doi.org/10.46787/elthe.v1i1.3362>
- Masturin, M. (2023). Development of Islamic Religious Education Materials Based on Religious Moderation in Forming Student Character. *Munaddhomah Jurnal Manajemen Pendidikan Islam*, 3(4), 246–355. <https://doi.org/10.31538/munaddhomah.v3i4.310>
- Mofokeng, M., & Ndlovu, B. N. (2024). Male Teachers' Narratives: Experiences of Teaching in Early Childhood Education. *Studies in Social Science & Humanities*, 3(4), 1–9. <https://doi.org/10.56397/sssh.2024.04.01>
- Muharridha, A., Juliani, J., Selvira, S., Mulia, K. M., & Hasibuan, N. K. (2025). The Role of Islamic Religious Education Curriculum in Building Religious Tolerance in the School Environment. *JCGCS*, 4(1), 274–282. <https://doi.org/10.61253/jcgcs.v4i1.292>
- Muhtarom, D. A., Siswanto, N. D., Amri, U., & Alim, A. (2024). Suplemen Toleransi Pada Materi Bahan Ajar Pendidikan Agama Islam Dan Budi Pekerti Untuk Sekolah Menengah Pertama. *Academy of*

- Education Journal*, 15(1), 666–679. <https://doi.org/10.47200/aoej.v15i1.2281>
- Munif, M., Rozi, F., & Sulaiman, A. N. M. (2023). Application Grouping Skills : Learning Methods to Support Student Talent Interest Based on Experiential Learning. *Jurnal Teknologi Pendidikan Jurnal Penelitian Dan Pengembangan Pembelajaran*, 8(2), 383. <https://doi.org/10.33394/jtp.v8i2.6570>
- Musyahid, M. (2023). Religious Moderation Implementation in Islamic Education: A Systematic Review. *Jurnal Mudarrisuna Media Kajian Pendidikan Agama Islam*, 13(4), 540. <https://doi.org/10.22373/jm.v13i4.20541>
- Nabi, E. A., Shafik, S. A., & Saad, A. M. (2023). Assessment of Nursing Students' Awareness Regarding Climate Change. *Helwan International Journal for Nursing Research and Practice*, 2(1), 69–82. <https://doi.org/10.21608/hijnrp.2023.201614.1068>
- Ningrum, D. R., Sari, N. E., & Kustiyah, S. (2024). Peningkatan Hasil Belajar Siswa Kelas VI Dengan Penerapan Experiential Learning Pada Mata Pelajaran IPA Materi Sistem Tata Surya. *Journal of Elementary School (Joes)*, 7(1), 17–27. <https://doi.org/10.31539/joes.v7i1.10633>
- Pratiwi, M., Kurniawan, I., & Syarief, A. O. (2024). Interaksi Digital Melalui Video Animasi 2d Bangun Ruang Untuk Siswa Sekolah Dasar. *Besiru*, 1(12), 1121–1126. <https://doi.org/10.62335/09218t06>
- Purbosari, P. P., & Ma'rifah, D. R. (2021). Knowledge and Attitude of Biology Teacher Candidate Students Towards Genetically Modified Organisms (GMOs). *Scientiae Educatia*, 10(2), 128. <https://doi.org/10.24235/sc.educatia.v10i2.9173>
- Rachmadtullah, R., Syofyan, H., & Rasmitadila, R. (2020). The Role of Civic Education Teachers in Implementing Multicultural Education in Elementary School Students. *Universal Journal of Educational Research*, 8(2), 540–546. <https://doi.org/10.13189/ujer.2020.080225>
- Rahmadi, R., & Hamdan, H. (2023). Religious Moderation in the Context of Islamic Education: A Multidisciplinary Perspective and Its Application in Islamic Educational Institutions in Indonesia. *Khazanah Jurnal Studi Islam Dan Humaniora*, 21(1), 59–82. <https://doi.org/10.18592/khazanah.v21i1.8487>
- Rahmani, F., Asghari, E., Sadeh, R. N., Hosseinzadeh, M., & Gholizadeh, L. (2024). Psychological Distress and Associated Factors Among Elementary School Teachers: A Cross-Sectional Study. *Journal of School Health*, 94(11), 1019–1030. <https://doi.org/10.1111/josh.13512>
- Ramadani, A. (2025). Penggunaan Media Gambar Dalam Proses Pembelajaran Siswa Kelas IV Sekolah Dasar. *Yudistira*, 3(3), 297–301. <https://doi.org/10.61132/yudistira.v3i3.2057>
- Rohim, A., & Wardhani, I. S. (2024). Media Pembelajaran Untuk Siswa Sekolah Dasar. *Sinar Dunia Jurnal Riset Sosial Humaniora Dan Ilmu Pendidikan*, 3(4), 91–101. <https://doi.org/10.58192/sidu.v3i4.2721>
- Saclarides, E. S. (2023). Coaches and Teachers Co-Teaching: Exploring the Challenges and Support of Co-Teaching as A coaching Activity. *International Journal of Mentoring and Coaching in Education*, 12(3), 300–315. <https://doi.org/10.1108/ijmce-11-2022-0100>
- Salvador, A. J., & Andal, E. Z. (2023). Experiential Learning Strategy in Teaching Hip-Hop Dance for Enhancing Dance Performance Among Grade 10 Students. *International Journal of Social Science Humanity & Management Research*, 2(09). <https://doi.org/10.58806/ijsshmr.2023.v2i9n10>
- Sapitri, N., Guslinda, G., & Zufriady, Z. (2021). Pengembangan Media Diorama Untuk Pembelajaran Ips Kelas Iv Sekolah Dasar. *Primary Jurnal Pendidikan Guru Sekolah Dasar*, 10(6), 1589. <https://doi.org/10.33578/jpkip.v10i6.8556>
- Satriya, R. R., & Fahyuni, E. F. (2023). Audio-Visual Based Picture Story Media for Elementary School Students. *Journal of Education Technology*, 7(3), 543–553. <https://doi.org/10.23887/jet.v7i3.69409>
- Shalini, V., Shanbhag, D., James, I., & Divya, E. (2025). Evaluating Rural Adolescents' Climate Change Knowledge, Attitudes and Practices Subsequent to a Simple Educational Intervention in Bangalore, India. *Health Education Journal*, 84(2), 202–210. <https://doi.org/10.1177/00178969241312348>
- Sudarsana, I. K., Perbowosari, H., Linggih, I. N., Binawati, N. W. S., & Wiguna, I. M. A. (2022). Strengthening Religious Moderation of Teachers at Insan Prestasi School Denpasar. *International Journal of Community Service Learning*, 6(4), 500–510. <https://doi.org/10.23887/ijcsl.v6i4.50253>
- Supadi, A. (2024). Role of Islamic Religious Education in Building Tolerance Between Religious People.

- Journal Corner of Education Linguistics and Literature*, 4(001), 279–289. <https://doi.org/10.54012/jcell.v4i001.391>
- Syaikhon, S. H. I. D. M., Djuwari, D., Asmara, B., Fitriyah, F. K., Saleh, N. R., & Hardiningrum, A. (2023). Empowerment of Educators and Parents in Increasing the Value of Religious Moderation in Early Childhood. *Community Development Journal*, 7(3), 148–152. <https://doi.org/10.33086/cdj.v7i3.5362>
- Tapung, M. (2024). Fostering Multicultural Resilience: Social Science Education and Professional Development in Indonesia's Digital Era. *International Journal of Research and Innovation in Social Science*, VIII(III), 502–514. <https://doi.org/10.47772/ijriss.2024.803037>
- Wardi, M., Alias, N. A., Hidayat, T., & Hali, A. U. (2023). Implementation of Education Based on Religious Moderation. *Tafkir Interdisciplinary Journal of Islamic Education*, 4(1), 163–179. <https://doi.org/10.31538/tijie.v4i1.313>
- Wijaya, A. A., Syarifuddin, S., & Asmi, A. R. (2022). Learning Media Based on Local History in Improving the Quality of Distance Learning. *Journal of Education Research and Evaluation*, 6(4), 748–758. <https://doi.org/10.23887/jere.v6i4.46484>
- Wijaya, N. M. P. Y. S. I. (2024). Interactive Digital Map (PELITA) of Indonesia's Cultural Diversity in Pancasila Education Subjects for Grade v Elementary School. *Mimbar PGSD Undiksha*, 12(3), 463–471. <https://doi.org/10.23887/jjpgsd.v12i3.92370>
- Zaynah, I., & Alif, M. (2025). Toleransi Dan Keberagaman: Pilar Utama Persatuan Bangsa (Studi Hadis Tematik). *Mahad Aly Journal of Islamic Studies*, 2(3), 1–11. <https://doi.org/10.63398/vcavan37>