

The Impact of Culturally Responsive Teaching on Elementary Students' Critical Thinking Skills

Uswatun Hasanah¹, Atma Annisa², Aulia Restu Insani³, Qoriana Nur Iffah⁴

¹²³ Raden Intan State Islamic University

⁴University of Jember

Correspondence Email: atmansanisa@gmail.com

ARTICLE INFO

Keywords:

Culturally Responsive
Teaching (CRT), Critical
Thinking Skills, Pancasila
Education

Article history:

Received 2026-02-06

Revised 2026-04-25

Accepted 2026-05-01

ABSTRACT

This study was motivated by the low critical thinking skills of students in Pancasila Education at MIN 5 Bandar Lampung. Preliminary observations indicated that students tended to rely on memorization, experienced difficulties in analyzing problems, and struggled to answer questions requiring higher-order thinking skills. These challenges were associated with the limited use of learning models that actively engage students in meaningful learning experiences. Therefore, this study aimed to examine the effect of the Culturally Responsive Teaching (CRT) learning model on the critical thinking skills of fourth-grade students. This study employed a quantitative approach using a Quasi-Experimental design with a Nonequivalent Control Group Design. The population consisted of all fourth-grade students at MIN 5 Bandar Lampung during the 2025/2026 academic year. The sample included Class IV A as the experimental group and Class IV D as the control group. Data on students' critical thinking skills were collected through a validated essay test instrument and analyzed using an independent samples t-test at a significance level of 0.05. The results revealed a significant difference between the experimental and control groups. The hypothesis test produced a significance value (Sig. 2-tailed) of 0.001, which was lower than 0.05 ($p < 0.05$). These findings indicate that students who learned through the CRT model demonstrated higher critical thinking skills than those who received conventional instruction. In conclusion, the Culturally Responsive Teaching (CRT) learning model has a significant positive effect on students' critical thinking skills in Pancasila Education. The findings suggest that integrating students' cultural backgrounds and experiences into the learning process can effectively promote critical thinking and create more meaningful learning experiences in elementary education.

This is an open access article under the CC BY-NC-SA license.



Copyright © 2026 by Author.

Published by LPPI Musa Publishing, Yayasan Mujtahidin Sajimah Selong

INTRODUCTION

Education is a fundamental process in developing individuals who are knowledgeable, cultured, and capable of contributing positively to society. Through educational activities, individuals not only acquire knowledge but also develop their potential, spiritual strength, self-control, intelligence, noble character, and skills needed in social, national, and state life. Therefore, educational content and learning processes must continuously adapt to the characteristics, needs, and developments of an increasingly diverse society (Ifrianti, 2022).

In the 21st century, education is expected to equip students with essential competencies needed to face global challenges. These competencies include critical thinking, communication, creativity, and collaboration. Among these skills, critical thinking occupies a central position because it enables students to analyze information, evaluate evidence, make reasoned judgments, and solve problems effectively. Critical thinking is considered one of the primary goals of education because it prepares students to meet academic demands and workplace challenges in the future (Fitri, 2023).

Critical thinking is defined as a self-regulatory process that leads individuals to make rational decisions. This process involves several cognitive abilities, including interpretation, analysis, evaluation, and inference. The conclusions generated through critical thinking are based on evidence, concepts, methodologies, criteria, and contextual considerations that support decision-making (Kurniawan, 2021). In the educational context, critical thinking skills are essential because they help students evaluate arguments, identify assumptions, and formulate conclusions based on valid evidence. Consequently, the development of critical thinking skills should become a major focus in learning activities.

The importance of critical thinking is highly relevant to the implementation of the Independent Curriculum, particularly in Pancasila Education. As a compulsory subject, Pancasila Education plays a strategic role in developing students' understanding of national values, citizenship, rights, and responsibilities. Furthermore, the subject provides opportunities for students to critically analyze social, cultural, and political issues that occur within society. Therefore, innovative learning approaches are required to strengthen students' critical thinking abilities while simultaneously internalizing the values of Pancasila (Lubis, 2020).

Pancasila Education under the Independent Curriculum is designed to support deeper learning, provide flexibility in learning experiences, and facilitate the development of competencies according to students' interests and potential. Through this subject, students are expected to develop a comprehensive understanding of citizenship and actively participate in social and national life (Azizan & Lubis, 2024). To achieve these objectives, teachers need to implement learning models that encourage active engagement, meaningful learning experiences, and critical reflection.

One learning approach that has the potential to support these goals is the Culturally Responsive Teaching (CRT) model. According to Ladson-Billings, as cited by Azizan, CRT is a learning approach that responds to cultural diversity by valuing students' cultural experiences as important learning resources (Azizan & Setiawan, 2024). Similarly, Idrus and Sohidi emphasize that CRT integrates students' cultural backgrounds and life experiences into the teaching and learning process, enabling students to connect academic content with their own social realities. As a result, learning becomes more relevant, meaningful, and engaging for students (Udmah, 2024).

The test results data that students completed during the pre-research period are as follows:

Table 1 Critical Thinking Test Data in Pre-Research

Class	Student Value (X)	Number of Students	Percentage < 80%	Percentage > 80%
	X < 80	X > 80		

IV A	23	12	35	65,71%	34,28%
IV D	25	15	40	62,5%	37,5%

Based on the pre-research data, it can be concluded that the critical thinking skills of fourth-grade students at MIN 5 Bandar Lampung remain relatively low. The majority of students in each class scored below the minimum expected standard, indicating that learning practices have not yet optimally facilitated the development of critical thinking abilities. This condition highlights the need for innovative learning approaches that actively engage students and encourage them to analyze, evaluate, and solve problems based on meaningful learning experiences.

One learning approach that has the potential to address this issue is the Culturally Responsive Teaching (CRT) model. This is supported by the findings of Naufanda, who stated that CRT seeks to integrate students' cultural values and experiences into the learning process. In increasingly diverse educational settings, this model is important because it ensures that all students feel valued, respected, and actively involved in learning activities. By incorporating students' cultural backgrounds into classroom instruction, CRT creates a learning environment that is both inclusive and relevant to students' everyday lives. Such relevance can encourage students to participate more actively in discussions, express their ideas confidently, and develop higher-order thinking skills. Therefore, the implementation of the CRT model is particularly relevant in Pancasila Education, where understanding cultural diversity and social values plays a significant role in developing responsible citizens and fostering critical thinking skills (Fitriah, 2024).

METHOD

This research uses a quantitative approach, which is a structured scientific study of phenomena and their relationships. (Sahir, 2021) The design used is a quasi-experimental design with a Nonequivalent Control Group Design approach.

Table 2 Design Nonequivalent Control Group Design

Kelas	Pre-test	Treatment	Post-test
Eksperiment	O ₁	X ₁	O ₂
Control	O ₃	X ₂	O ₄

This research was conducted at MIN 5 Bandar Lampung during the odd semester of the 2025/2026 academic year. The school is located at Jalan Pulau Tegal No. 21, Sukarame, Bandar Lampung, Lampung. The population of this study consisted of all fourth-grade students at MIN 5 Bandar Lampung. The sample was selected using the Simple Random Sampling technique, resulting in two classes being chosen as research samples. One class was designated as the experimental class and received instruction using the Culturally Responsive Teaching (CRT) learning model, while the other class served as the control class and received conventional learning without the implementation of the Culturally Responsive Teaching (CRT) model..

Table 3 Experimental Class and Control Class

Kategori	Kelas
Eksperiment	IV A
Control	IV D

The instrument used was a descriptive test consisting of 20 questions to measure students' critical thinking skills. This instrument has been validated by experts and pilot-tested. The testing in this study used SPSS version 30 for Windows.

RESULTS AND DISCUSSION

The results of the pretest and posttest validity tests in this study yielded 20 valid pretest and posttest questions. This can be seen in the following table:

Table 4 Results of the Pretest Question Validity Test

Question No.	r-count	r-table	Information
Question No. 1	0.486	0.312	Valid
Question No. 2	0.521	0.312	Valid
Question No. 3	0.555	0.312	Valid
Question No. 4	0.542	0.312	Valid
Question No. 5	0.075	0.312	Invalid
Question No. 6	0.387	0.312	Valid
Question No. 7	0.447	0.312	Valid
Question No. 8	0.264	0.312	Invalid
Question No. 9	0.414	0.312	Valid
Question No. 10	0.373	0.312	Valid
Question No. 11	0.208	0.312	Invalid
Question No. 12	0.179	0.312	Invalid
Question No. 13	0.317	0.312	Valid
Question No. 14	0.557	0.312	Valid
Question No. 15	0.454	0.312	Valid
Question No. 16	0.138	0.312	Invalid
Question No. 17	0.407	0.312	Valid
Question No. 18	0.479	0.312	Valid
Question No. 19	0.481	0.312	Valid
Question No. 20	0.564	0.312	Valid
Question No. 21	0.500	0.312	Valid
Question No. 22	0.521	0.312	Valid
Question No. 23	0.612	0.312	Valid
Question No. 24	0.536	0.312	Valid
Question No. 25	0.591	0.312	Valid

Table 5. Results of the Posttest Item Validity Test

Question Number	r-count	r-table	Information
Question No. 1	0.569	0.312	Valid
Question No. 2	0.784	0.312	Valid
Question No. 3	0.694	0.312	Valid
Question No. 4	0.613	0.312	Valid
Question No. 5	0.577	0.312	Valid
Question No. 6	0.323	0.312	Valid

Question No. 7	0.404	0.312	Valid
Question No. 8	0.255	0.312	Invalid
Question No. 9	0.477	0.312	Valid
Question No. 10	0.623	0.312	Valid
Soal No 11	0.489	0.312	Valid
Soal No 12	0.339	0.312	Valid
Soal No 13	0.599	0.312	Valid
Soal No 14	0.655	0.312	Valid
Soal No 15	0.624	0.312	Valid
Soal No 16	0.200	0.312	Invalid
Soal No 17	0.147	0.312	Invalid
Soal No 18	0.209	0.312	Invalid
Soal No 19	0.498	0.312	Valid
Soal No 20	0.092	0.312	Invalid
Soal No 21	0.784	0.312	Valid
Soal No 22	0.702	0.312	Valid
Soal No 23	0.600	0.312	Valid
Soal No 24	0.601	0.312	Valid
Soal No 25	0.445	0.312	Valid

Meanwhile, the results of the reliability test in this study are as follows:

Table 6 Results of the Reliability Test of Pretest and Posttest Questions

Instrument	Question Number	Cronbach's Alpha	Min Reliabel
Pretest	20	.837	0.70
Posttest	20	.896	0.70

The reliability test value for the pretest was 0.837 and for the posttest was 0.896, which is greater than 0.70, indicating that the data is reliable. Data analysis was conducted quantitatively using a t-test.(t-test).This test was conducted to compare the average critical thinking skills between the experimental and control classes after treatment. The hypothesis testing procedure was carried out by setting a significance value at p-value <0.05, to ensure the objectivity and validity of the research results. The research data can be seen in the following table:

Table 7 Normality Test Results

Tests of Normality				
	Class	Shapiro-Wilk		
		Statistic	df	Sig.
Result	Pretest D (control)	.979	40	.671
	Posttest D (control)	.959	40	.151
	Pretest A (Eksperiment)	.947	35	.089
	Posttest A (Eksperiment)	.959	35	.209

Normality analysis of pretest and posttest data for the experimental and control groups was conducted using the Shapiro-Wilk test through SPSS software, by setting a significance level of 0.05. The test results showed that all significance values obtained for pretest and posttest data in both classes (control: 0.671 and 0.151, experimental 0.089 and 0.209) were greater than 0.05. Therefore, it can be concluded that the distribution of all data is normal.

Table 8 Test Results Homogeneity

Test of Homogeneity of Variance					
		Levene Statistic	df1	df2	Sig.
Value	Based on Mean	.599	1	73	.441
	Based on Median	.589	1	73	.445
	Based on Median and with adjusted df	.589	1	72.831	.445
	Based on trimmed mean	.597	1	73	.442

The results of the homogeneity test above show a significance value of 0.441, where $0.441 > 0.05$. Therefore, it can be concluded that the data is homogeneous.

Table 9 Hypothesis Test Results

Independent Samples Test							
t-test for Equality of Means							
		Significance	Mean Difference	Std. Difference	Error 95% Interval	Confidence of the Difference	
		Sig. (2-tailed)			Lower	Upper	
Nilai	Equal variances assumed	.001	-6.744	1.614	-9.962	-3.527	
	Equal variances not assumed	.001	-6.744	1.615	-9.964	-3.525	

The results of the independent sample t-test revealed a significance value (Sig. 2-tailed) of 0.001, which is lower than the predetermined significance level of 0.05. These findings indicate that there is a statistically significant difference in critical thinking skills between students who were taught using the Culturally Responsive Teaching (CRT) learning model and those who received conventional instruction. Therefore, the null hypothesis (H_0) is rejected, while the alternative hypothesis (H_1) is accepted. This result demonstrates that the implementation of the CRT learning model has a significant

positive effect on improving the critical thinking skills of fourth-grade students at MIN 5 Bandar Lampung.

The study was conducted over five meetings in both the experimental and control classes. During the first meeting, students completed a pretest to assess their initial critical thinking abilities before the treatment was implemented. The second, third, and fourth meetings were devoted to the learning process, during which the experimental class received instruction through the CRT learning model, while the control class experienced conventional teaching methods. In the fifth meeting, a posttest was administered to measure the students' critical thinking skills after the learning intervention.

The positive impact of the CRT learning model can be explained by its emphasis on connecting learning materials with students' cultural backgrounds and daily experiences. During the learning process, students were encouraged to relate the concepts presented in Pancasila Education to real-life situations within their families, communities, and local cultures. This approach enabled students to actively construct knowledge rather than merely receive information from the teacher. As a result, students became more engaged in classroom discussions, demonstrated greater confidence in expressing opinions, and showed improved ability to analyze social issues from different perspectives.

Furthermore, CRT creates a learning environment that values cultural diversity and promotes inclusive participation. Students were provided with opportunities to share their experiences, compare different cultural practices, and discuss social values embedded within their communities. Such activities encouraged students to evaluate information critically, identify similarities and differences among viewpoints, and formulate logical conclusions. These processes are closely related to the core components of critical thinking, including interpretation, analysis, evaluation, and inference.

The findings of this study are consistent with previous research suggesting that culturally responsive learning can enhance student engagement and higher-order thinking skills. By integrating cultural contexts into instruction, students perceive learning as more meaningful and relevant to their lives. Consequently, they become more motivated to participate actively in learning activities and are better able to develop critical thinking skills through reflection and discussion.

During the implementation of the CRT model, several strengths were observed. The model increased students' learning motivation, encouraged active participation, strengthened collaboration among group members, and created a safe and inclusive learning atmosphere. Students showed enthusiasm when discussing cultural diversity and were eager to share personal experiences related to the learning materials. These conditions supported the development of critical thinking by providing opportunities for students to exchange ideas, question assumptions, and justify their opinions.

However, several challenges were also encountered during the implementation process. Although the cultural diversity videos successfully attracted students' attention, their understanding of cultural concepts was sometimes limited to the information explicitly presented in the videos. Consequently, additional guidance from the teacher was required to help students explore deeper cultural values, norms, and perspectives. Moreover, unequal participation among group members was occasionally observed during collaborative activities, indicating that some students were more active than others. Another challenge emerged during the critical reflection stage, where limited instructional time reduced opportunities for students to engage in deeper reflection and articulate their understanding comprehensively.

Before conducting hypothesis testing, prerequisite analyses were performed to ensure the validity of the statistical procedures. The Shapiro-Wilk normality test indicated that the data were normally distributed, while the homogeneity test confirmed that the variances of the two groups were homogeneous. These results satisfied the assumptions required for conducting the independent sample t-test. The hypothesis testing results showed a p-value of 0.001, which is smaller than the significance level of 0.05. Therefore, it can be concluded that the Culturally Responsive Teaching (CRT) learning model significantly improves the critical thinking skills of fourth-grade students in Pancasila Education.

This finding suggests that integrating students' cultural experiences into learning activities can serve as an effective strategy for fostering critical thinking and promoting meaningful learning experiences in elementary education.

CONCLUSION

Culturally Responsive Teaching (CRT) learning model has a significant positive effect on students' critical thinking skills in Pancasila Education. Students who were taught using the CRT learning model demonstrated better critical thinking performance compared to those who received instruction through the Discovery Learning model. This finding is supported by the hypothesis testing results, which yielded a significance value (Sig.) of 0.001, lower than the significance level of 0.05 ($0.001 < 0.05$). Therefore, the null hypothesis (H_0) is rejected, and the alternative hypothesis (H_1) is accepted. These results indicate that the implementation of the CRT learning model is effective in enhancing the critical thinking skills of fourth-grade students at MIN 5 Bandar Lampung.

BIBLIOGRAPHY

- Azizan, N., & Lubis, M. A. (2024). *Model Pembelajaran Culturally Responsive Teaching: Teori dan Praktiknya dalam Pembelajaran Pendidikan Kewarganegaraan di Perguruan Tinggi*. Yogyakarta: Samudra Biru.
- Azizan, N., & Setiawan, D. (2024). *Model Pembelajaran Culturally Responsive Teaching di Sekolah Dasar*. Indramayu: PT Adab Indonesia.
- Ifrianti, S. (2022). *Konsep dan Pengembangan Kurikulum*. Yogyakarta: Pustaka Pranala.
- Lubis, M. A. (2020). *Pembelajaran Pendidikan Pancasila Dan Kewarganegaraan (Ppkn)*. Jakarta: Prenadamedia Group.
- Sahir, S. H. (2021). *Metodologi Penelitian*. Yogyakarta: KBM Indonesia.
- Firdausi, B. W., Warsono, & Yermiandhoko, Y. (2021). Peningkatan Kemampuan Berpikir Kritis Pada Siswa Sekolah Dasar. *Jurnal Mudarissuna*, 11 (2).
- Fitri, Y. W., Ifrianti, S., & Fiteriani, I. (2023). Pengaruh Model Pembelajaran TGT (Teams Games Tournament) Dengan Media Kokami Terhadap Kemampuan Berpikir Kritis Siswa. *Awwaliyah: Jurnal PGMI*, 6 (2).
- Fitriah, L. (2024). Pembelajaran Berbasis Pendekatan Culturally Responsive Teaching Di Sekolah Dasar. *Journal of Language Literature and Arts*, 4 (6).
- Kurniawan, N. A., Hidayah, N., & Rahman, D. H. (2021). Analisis Kemampuan Berpikir Kritis Siswa SMK. *Jurnal Pendidikan: Teori, Penelitian, dan Pengembangan*, 6 (3).
- Naufanda, M. F., Dwijayanti, I., & Izzah, K. H. (2024). Penerapan CRT untuk Meningkatkan Kemampuan Berpikir Kritis pada Mata Pelajaran IPAS Kelas IV SDN Gayamsari 02 Semarang. *Jurnal Penelitian Multidisiplin Ilmu*, 3 (2).
- Udmah, S., Wuryandini, E., & Mahyasari, P. (2024). Analisis Desain Pembelajaran Culturally Responsive dalam Konteks Penguatan Literasi Humanistik di Sekolah Dasar. *Jurnal Studi Guru dan Pembelajaran*, 7 (2).