

Collaborative Learning Integrated Pancasila Profile Based on Cultural Diversity to Improve Critical Thinking Ability

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ABSTRACT

Critical thinking is the ability to analyze, interpret and evaluate information objectively and rationally needed in the 21st century to face future challenges through innovative approaches in order to take advantage of opportunities in the digital and global era. Critical thinking skills at the elementary school level are still low and need to be improved through collaborative learning according to the implementation of the independent curriculum. The profile of Pancasila students is the skills that Indonesian students must have based on the noble values of Pancasila. This study aims to test the application of collaborative learning integrated with the Pancasila student profile based on cultural diversity with the Project Based Learning learning method to improve critical thinking skills. This study uses quantitative research pre-experiment method of one group pretest-posttest design. The subjects of this study involved 18 grade 4 students who were divided into small groups and calculated using the N-Gain test. The N-Gain test is a measuring technique to determine the effectiveness of a treatment before and after learning. The results of this study found the overall average N-Gain results showed moderate criteria between $0.3 \leq g \leq 0.7$ and quite effective at a percentage between 56-75. Another result of this study is that by doing collaborative learning, students can become peer tutors and innovate to complete projects given by teachers from the development of an independent curriculum integrated with the Pancasila learner profile. Therefore, collaborative learning integrated with the Pancasila learner profile is concluded to improve critical thinking skills.

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1. INTRODUCTION

Improving critical thinking skills in the framework of education in Indonesia is a systematic process to improve learners' ability to understand, analyze, evaluate and integrate information from various sources critically and reflectively. Improving critical thinking skills includes problem solving, logical

analysis, critical judgment, creative thinking and self-reflection. It aims to prepare learners to have intellectual, independent, critical skills and be able to contribute and compete globally in accordance with the supporting factors of national development. Education is one of the supporting factors of national development in accordance with the ideals and goals of the Indonesian nation as stated in the Preamble of the 1945 Constitution, Fourth Alenia, namely to educate the nation's life (Pemerintah Indonesia, 2022).

The era of education in the 21st century is a big challenge for the education system that is currently preparing future generations to face challenges and take advantage of opportunities in the digital and global era (Rawung, Katuuk, Rotty, & Lengkong, 2021). 21st-century education prioritizes learning with innovative approaches such as project-based learning, problem-based learning and collaborative learning (Dewi Umi Qulsum, 2022). This is similar to the concept of an independent curriculum that emphasizes the development of digital skills, such as the application of technology to learning that is relevant in the current era of education (Handayani, Rahmandani, & Muzzaki, 2023). The independent curriculum is a concept of education in Indonesia that emphasizes learner-centered learning integrated with the Pancasila learner profile (Nursalam, Sulaeman, & Latuapo, 2023).

The independent curriculum is an educational framework that gives principals and teachers the freedom to design a curriculum that is tailored to the needs and characteristics of students in educational units to develop education that is more adaptive and responsive to local and global needs. This educational concept was launched by the Ministry of Education and Culture in 2020 as a response to the COVID-19 pandemic and the need for alternative learning methods that are designed to be flexible and tailored to the interests and talents of students (Ardianti & Amalia, 2022). The independent curriculum integrated with the Pancasila learner profile is carried out so that students can have a moral, ethical character and have an awareness of national identity and love for the country. The independent curriculum and the Pancasila learner profile have a close relationship because they have the same goal, namely preparing the younger generation in the global era and emphasizing the development of independent, critical, creative, communicative, and cooperative characteristics of students to collaborate productively (Rai, Sila, Brata, & Sutika, 2022). The purpose of this research is to test the application of collaborative learning integrated with the Pancasila student profile based on cultural diversity with the Project Based Learning learning method to improve critical thinking skills.

With this curriculum development, schools and stakeholders have an active role in improving and developing critical thinking (Ni'mah & Sukartono, 2022). Through critical thinking, students can think logically and interpret their ideas and opinions (Rahmawati, Pujiastuti, & Cahyaningtyas, 2023). Critical thinking skills, especially at the elementary school level, are still low and still need to be improved so that students' critical thinking indicators can be achieved (Kawuryan, Sayuti, & Aman, 2022). The existence of cooperative learning, students can collaborate according to the implementation of the independent curriculum with the integration of the Pancasila learner profile to improve critical thinking skills (Diyanah, Rosyid, & Atok, 2021).

The Pancasila learner profile encompasses six dimensions that students must develop: belief and devotion to God Almighty with noble character, independence, mutual cooperation, global diversity, critical reasoning, and creativity (Kementerian Pendidikan Dan Kebudayaan Republik Indonesia, 2020). Integrating these dimensions into learning aims to build students' critical thinking skills. Critical thinking involves focusing on statements, analyzing opinions, and asking and answering questions with explanations (Kumala, Dwi Yasa, & Dandy Samudra, 2022). It requires active participation from learners, shaping their self-concept (Misla & Mawardi, 2020). Collaborative learning fosters critical thinking through interactive, inspiring, and enjoyable processes, encouraging students to engage according to their interests and talents (Wahyuddin, Ernawati, Satriani, & Nursakiah, 2022). Critical thinking enables students to analyze information or problems and draw conclusions (Chee, Tunku, Rahman, Phaik, & Cheah, 2009). Moreover, scientific analysis of information or problems necessitates critical thinking (Chiras, 2015). Teachers play a crucial role in creating an active, innovative, and enjoyable learning atmosphere that promotes optimal critical thinking. However, students' critical thinking skills can be hindered by several factors. According to Ardiansyah (2020), these factors include parents' educational

level, the social environment and peer influence, and the level of logical intelligence (Solihah, Hadi, Qomaria, Tamam, & Rakhmawan, 2023).

In the current educational era, every school has implemented an independent curriculum integrated with the Pancasila learner profile. However, the implementation of elements from the Pancasila learner profile in students has not been fully optimized. This is because the independent curriculum in education units has three stages: independent learning, independent change, and independent sharing. In the 2022/2023 academic year, the education unit's status was that of an independent learning implementer. For the 2023/2024 academic year, it needs to progress to independent change or independent sharing (BSKAP, 2023).

Observations and experiences of researchers in grade 4 at SD Bisma Dua Surabaya show that the school has recently moved from independent learning to independent change. This school still needs to develop its implementation of the independent curriculum and integrate the Pancasila learner profile better. Currently, students tend to be passive and lack confidence in expressing their opinions, limiting their engagement. The learning system in this school lacks innovation, with teaching methods being monotonous and teacher-centered, often relying on lectures. This approach results in less effective achievement of learning objectives, especially regarding cultural diversity. The dense material is not being fully developed, impacting the effective delivery of character education. Additionally, assignments are often unmodified questions from books, making learning less interesting and engaging for students.

Attractive learning by following technological developments will allow students to visualize learning concepts and can facilitate students in cognitive development (Sartono, Sekarwangi, & Herwin, 2022). Collaborative learning integrated with the Pancasila learner profile will help learners to complete tasks, motivate and improve communication skills that are more meaningful (Jaya & Mortini, 2023). Collaborative learning is a learning process carried out by 2 or more learners to work together to find solutions or answers to problems given by the teacher. There are 4 important elements in collaborative learning, namely 1. giving each other positive feedback or reciprocity, 2. good interaction, 3. group and individual responsibility, 4. group evaluation (Ramdani, Susilo, Suhadi, & Sueb, 2022). This collaborative learning will be applied to grade 4 students with cultural diversity-based learning materials. Cultural diversity-based learning involves students having the ability and knowledge of other ethnicities and cultures so that they also have intercultural literacy skills (Lindsay, 2020). Cultural literacy needs to be mastered by students so that they are not disturbed by irresponsible groups or people in the future, because the Indonesian State is rich in different cultures, races and customs, but still one (Safitri & Ramadan, 2022).

To improve students' critical thinking skills, teachers must possess strong instructional skills to foster the 4Cs: Creativity, Critical thinking, Collaboration, and Communication (Susilowati & Suyatno, 2021). Previous studies indicate that students often only remember, memorize, and understand concepts, resulting in low levels of critical thinking. According to Ennis (1991), there are 12 indicators of critical thinking skills. These include providing simple explanations by focusing questions, analyzing arguments, and asking and answering questions. Building basic skills involves assessing the reliability of learning sources and considering observation reports. Summarizing entails evaluating the results of deductions and inductions and making informed judgments. Confidence in critical thinking is demonstrated through defining terms and identifying assumptions. Finally, action-oriented skills involve determining actions and effectively interacting and communicating.

Intellectual development comes from the ability to think critically, leading to systematic thinking, high curiosity, and independent thought (Delawati, 2019). Project-based learning (PBL), especially when combined with collaborative learning, significantly supports students' critical thinking and cognitive skills (Qomaria & Wulandari, 2022; Issa & Khataibeh, 2021). PBL is more effective and yields better learning outcomes compared to traditional methods (Loes, 2022). Collaborative learning shifts focus from teacher-centered to learner-centered education, boosting students' confidence and responsibility (Zhou, Chen, & Chen, 2019). Integrating cultural diversity into PBL can enhance students' understanding and character development (Barrette & Paesani, 2018; Mella, Wulandari, & Wiarta, 2022). Additionally,

incorporating the Pancasila student profile helps form well-rounded individuals, with teachers using assessment tools to reflect students' achievements and behaviors (Rusnaini et al., 2021; Sabon, Istiyono, & Widiastuti, 2022).

Critical thinking skills through the integration of the independent curriculum and the Pancasila learner profile aim to equip students with the ability to understand, analyze and critically evaluate information on Pancasila values in order to form a generation that is not only academically intelligent but also has the ability to think independently, critically and morally. Based on this, supported by previous research on collaborative learning, project-based learning models, cultural diversity-based learning and the integration of the Pancasila learner profile which still has gaps, this study tries to combine these aspects to trigger cognitive conflict, exploration, provide conclusions, classify and plan students. Cognitive conflict is the beginning of the application of students' thinking skills in order to analyze and solve problems. Exploration is an opportunity for learners to analyze, classify and solve a problem. Drawing conclusions is an activity that is almost the same as exploration but learners are required to dare to reveal information or the essence of problem solving. Clarification and resolution is a confirmation of the truth of the conclusions made by students by the teacher. This action is carried out so that the achievement of students' reasoning goals is more optimal and has an awareness of participating who has high reasoning and has intellectual skills (Astiwi, Antara, & Agustiana, 2020).

2. METHODS

This study uses a quantitative research pre-experiment method of one group pretest-posttest design. The aim is to test the application of collaborative learning integrated with the Pancasila student profile based on cultural diversity, whether it has an influence on improving students' critical thinking skills. The population of this study involved 18 4th-grade students of SD Bisma Dua Surabaya. The sample was taken using nonprobability sampling technique quota sampling design. This method was chosen because the population was not large, so the application was carried out by the number of students who would be divided into small groups and would be given treatment in the form of collaborative learning integrated with the Pancasila student profile based on cultural diversity to find out whether it had an effect on improving critical thinking skills. Determine the effect of the treatment obtained through this table research design :

Table 2. Draft Research Design

Pretest Results	Treatment	Posttest Results
O ₁	X	O ₂
Description :		
O ₁		: Pre-treatment assessment results
X		: Treatments from collaborative learning.
O ₂		: The results of the post-treatment assessment

This data collection technique is done by giving a written test in the form of multiple choice. This research instrument includes several aspects such as interpreting, analyzing, concluding, evaluating, explaining and self-regulating. Before this instrument is applied, it is first validated by 2 expert validators and then tested for validity and reliability in grade 5 to determine the level of effectiveness.

The aspects of critical thinking in this study include attitude assessment, work assessment and presentation skills assessment which are included in pretest-posttest questions, student worksheets and project results. Data analysis techniques were used to determine the increase in critical thinking results, as seen from the results of the pretest-posttest test and the N-Gain test.

$$\text{Normal Gain} = \frac{\text{Posttest Score} - \text{Pretest Score}}{\text{Ideal Score} - \text{Pretest Score}}$$

Table 3. N-Gain Criteria

N-Gain Score	Criteria
$g \leq 0,3$	Low
$0,3 < g \leq 0,7$	Medium
$g > 0,7$	High

This collaborative learning activity integrated with the Pancasila learner profile includes material on cultural diversity in Indonesia which focuses on dances, clothing, musical instruments and traditional houses. Learners are given material deepening and projects that must be completed in groups. To determine the effect of collaborative learning, it is done through learner collaboration by observing an assessment rubric that includes several aspects such as the ability to work together between learners in completing projects, the ability to discuss projects appropriately, exchanging opinions with other groups in completing projects as measured by a Likert scale. The results of this collaboration are measured by :

$$\% = \frac{n}{N} \times 100$$

Description :

n : Score obtained

N : Sum of all scores

% : Percentage of collaboration and critical thinking skills

The results will be analyzed according to the criteria for critical thinking skills, according to this table:

Table 4. Critical Thinking Skills Criteria

Value	Value Interval	Criteria
A	$80,0 < \leq 100,0$	Very good
B	$60,0 < \leq 80,0$	Good
C	$40,0 < \leq 60,0$	Simply
D	$20,0 < \leq 40,0$	Less
E	$0,0 < \leq 20,0$	Very Less

To determine the effect of collaborative learning and critical thinking, it can be analyzed through data hypothesis testing using the t-test. The t-test is a method to assess the effectiveness of the treatment indicated by the difference before or after the treatment.

3. FINDINGS AND DISCUSSION

3.1 Findings

This study aims to test the application of collaborative learning integrated with the Pancasila student profile based on cultural diversity in order to determine the effect on improving students' critical thinking skills. Skills and abilities to collaborate and think critically need to be owned by every learner to support learning achievement. In addition, learning integrated with the Pancasila learner profile is needed because it is used as a guideline for character education. The Pancasila learner profile is a skill that every student in Indonesia must have based on the noble values of pancasila. The Pancasila learner profile has 6 dimensions described, including:

1. Believing, devoted to God Almighty and having noble character.

This profile can be explained that ethical students understand the teachings of their religion and beliefs, so that they can also implement them into their daily lives. 5 key elements of having faith, devotion to God Almighty and noble character, namely a. having religious morals, b. having

personal morals, c. having morals among humans, d. having morals towards nature, e. having morals in the life of the country.

2. Global diversity

This profile can be explained that students in Indonesia must have a sense of protecting noble culture, locality and identity and always have an open mindset with other countries' cultures. This is done in order to foster a sense of tolerance and noble culture among others so that intercultural communication skills can develop and have a sense of responsibility for diversity.

3. Critical reasoning

This profile can be explained that learners must have the ability to think objectively in order to connect various information, analyze information, evaluate information and make conclusions.

4. Working together

This profile can be explained that students in Indonesia have competence in working together to carry out various activities by collaborating with each other. This is done so that the activities carried out can run smoothly and achieve certain goals.

5. Independent

This profile can be explained that learners must have a sense of responsibility for the process and learning of learners. This independence can include awareness of the environment and the ability to self-regulate.

6. Creative

This profile can be explained that students are expected to have the ability to create an interesting work and have benefits for the next life.

3.2 Assessment Indicators and Learning Syntax

In research at SD Bisma Dua Surabaya involving grade 4 students, there are 6 indicators of the Pancasila student profile and the assessment criteria include:

Table 5. Pancasila Learner Profile Indicators and Assessment Criteria

Pancasila Learner Profile Indicator	Criteria
Have faith, devotion to God Almighty and noble character.	1. Learners pray at the beginning of the lesson. 2. Learners pray at the end of the lesson. 3. Learners pray well and orderly.
Global diversity	1. Learners can apply an attitude of respect for diversity 2. Learners understand mutual respect for diversity 3. Learners can preserve culture by understanding and learning cultural materials.
Critical reasoning	1. Actively participate 2. Followed the lesson well. 3. Complete LKPD and critical reasoning test questions well.
Mutual cooperation	1. Doing the task well 2. Carry out tasks honestly and on time 3. Doing group work well
Independent	1. Dare to express opinions 2. Dare to ask questions 3. Able to complete tasks independently.
Creative	1. Learners can complete the task appropriately 2. Learners can innovate 3. Learners can be creative

Through 6 dimensions of the Pancasila learner profile associated with learning in the independent curriculum and its implementation often uses collaborative learning and project-based learning. In this study, combining the Pancasila learner profile, collaborative learning and project-based learning models with the basis or material of cultural diversity. Cultural diversity material at the elementary school level is considered to have a broad scope of material and it is hoped that each learning objective can be achieved so that it can be implemented in everyday life, especially on the topic of tolerance. Indonesia has 38 provinces with more than 17,000 islands. This results in Indonesia being rich in culture, race, religion, tribe, dance, food, clothing, musical instruments, traditional houses and so on which must be harmonized, developed and preserved in order to have a high sense of tolerance and not be recognized by other countries.

The syntax before collaborative learning is that students must carry out individual pretests first, which are then given treatment in the form of collaborative learning based on cultural diversity in order to improve critical thinking skills. Learners are divided into small groups that are adjusted to the abilities possessed by each individual. The syntax of collaborative learning with this project-based learning model includes:

1. Joint planning

Teachers and learners work together to plan the learning project by defining the project objectives, identifying the steps needed to achieve the learning objectives and planning the time allocation and resources required.

2. Open and collaborative approach

The teacher creates an open learning environment and supports collaboration between learners. Teachers encourage discussion and exchange of ideas between learners and provide guidance and support where needed.

3. Division of tasks

Learners divide the tasks in the project based on their individual skills, interests and abilities. Learners work together in groups to complete the project tasks by supporting each other and taking responsibility for each other.

4. Coordination and communication

Learners communicate with the group and the teacher as a guide. Teachers and learners can exchange information, share project progress, and solve problems together in the learning process.

5. Project implementation

Learners actively engage in project implementation by using previously learned skills to complete project tasks. Learners research, develop ideas, collect data and create the final project product.

6. Problem-based approach

Projects in project-based learning are often based on real problems or challenges that are relevant to learners. This allows learners to apply their knowledge and skills in a meaningful context and gain a deeper understanding of the learning material.

7. Joint presentation, reflection, and evaluation

After completing the project, the teacher and learners will conduct a joint presentation and reflection to evaluate the learning process and project outcomes. Teachers and learners should consider what has been learned, obstacles encountered, and lessons learned from the project experience. Evaluation is done formatively and summatively to assess the achievement of learning objectives and the quality of the project outcomes.

From the results of the treatment and projects carried out, the assessment analysis is still carried out per individual by combining the calculation of critical thinking instruments. The instrument includes an assessment of posttest results, attitude assessment integrated with the Pancasila student

profile, assessment of work integrated with the project-based learning model and the ability to present the resulting product or project.

3.3 Validity and Reliability Test of Questions

Before giving treatments to grade 4 students, first test the validity and reliability of the items in grade 5 involving 20 respondents or students with a total of 20 questions in the form of multiple choice or multiple choice to determine the level of effectiveness. The results of the assessment were then analyzed using SPSS version 26.

Table 6. Validity Test Results

Questions	R Count	R Table	Sig.	Alpha	Description
Questions 1	0.751		0.000		Valid
Questions 2	0.632		0.003		Valid
Questions 3	0.595		0.006		Valid
Questions 4	0.517		0.019		Valid
Questions 5	0.520		0.019		Valid
Questions 6	0.542		0.014		Valid
Questions 7	0.601		0.005		Valid
Questions 8	0.572		0.008		Valid
Questions 9	0.493		0.027		Valid
Questions 10	0.447	0.4438	0.048	0.05	Valid
Questions 11	0.565		0.009		Valid
Questions 12	0.512		0.021		Valid
Questions 13	0.588		0.006		Valid
Questions 14	0.467		0.038		Valid
Questions 15	0.542		0.014		Valid
Questions 16	0.509		0.022		Valid
Questions 17	0.628		0.003		Valid
Questions 18	0.489		0.029		Valid
Questions 19	0.718		0.000		Valid
Questions 20	0.663		0.001		Valid
Number of valid items : 20 items					
Number of invalid items : 0 items					

The table contains a validity test of 20 questions or questions, which shows that the data is considered valid. This is based on a comparison of the correlation value r count on each question item which exceeds the r table threshold of 0.4438 at df 20-2 and a significance level of 5% or α 0.05. If r count $>$ r table and $Sig. < \alpha$ 0.05, it can be concluded that it is valid. Therefore, the conclusion of the validity test of this study is that these 20 questions or questions are valid and can be used for research in grade 4.

Table 7. Reliability Test Results

Reliability Statistics	
Cronbach's Alpha	N of Items
.888	20

The table contains the results of the reliability test which shows a Cronbach's Alpha value of 0.888 for 20 items. Cronbach's Alpha is a measure of the reliability or internal consistency of a research instrument. The Cronbach's Alpha value ranges from 0 to 1. If the Cronbach's Alpha value is $>$ 0.70, the research variable can be said to be reliable, so the results obtained from the table above, amounting

to 0.888 are considered to have a good level of reliability and are considered suitable for use in research in grade 4.

3.4 N-Gain Test

The research sample in class 4 involves 18 students of SD Bisma Dua Surabaya. The students will be divided into small groups and will be given treatment in the form of collaborative learning integrated with the Pancasila student profile based on cultural diversity to find out whether it has an effect on improving critical thinking skills. The results of treatment can be seen from the scores obtained from the development of students on the pretest, posttest and critical thinking skills assessments which are then calculated using the N-Gain formula.

Table 8. Descriptive Statistics Results Using the N-Gain Formula

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Ngain_Score	18	0.33	1.00	0.6806	0.22494
Ngain_Percent	18	33.33	100.00	68.0556	22.49364
Valid N (listwise)	18				

The criteria on the N-Gain Score are if the value of $g > 0.7$ is categorized as high, the value of $0.3 \leq g \leq 0.7$ is categorized as medium, the value of $g < 0.3$ is categorized as low while the N-Gain Score with a percentage of < 40 is interpreted as ineffective, the percentage of 40-55 is interpreted as less effective, the percentage of 56-75 is interpreted as quite effective and the percentage of > 76 is interpreted as effective. The table above, contains the results of the N-Gain Score Test with the results of Mean Ngain_score 0.6806 and Ngain_Persen 68.0556, so that the data has a value between $0.3 \leq g \leq 0.7$ and a percentage between 56-75, it can be concluded that the method or treatment carried out in this study is categorized as moderate and quite effective.

3.5 Normality Test and Paired Sample T Test

To determine the effect of collaborative learning and critical thinking, it uses analysis through data hypothesis testing using the t-test, before conducting this hypothesis test, you must first conduct a normality test. In this study involved 18 respondents with a small amount of data < 50 , so using Shapiro Wilk.

Table 9. Normality Test Results

Tests of Normality						
	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest	0.146	18	.200*	0.930	18	0.194
Posttest	0.193	18	0.076	0.919	18	0.126
Critical Thinking Skills	0.132	18	.200*	0.966	18	0.726

The criteria for the normality test, if the Sig. (P Value) < 0.05 , it can be concluded that the data is not normally distributed, but if the Sig value. (P Value) > 0.05 , it can be concluded that the data is normally distributed. The table above, contains the results of the normality test which shows the Pretest value with Sig. 0.194, Posttest value with Sig. 0.126 and Critical Thinking Skills with Sig. 0.726, so that the data has a Sig. value > 0.05 which can be concluded that the value of the table is normally distributed and can be done Paired Sample T Test.

Table 10. Paired Sample T Test Results

Paired Samples Test									
								df	Sig. (2-tailed)
		Lower	Upper						
Pair 1	Pretest - Posttest	-16.667	7.670	1.808	-20.481	-12.853	-9.220	17	0.000
Pair 2	Critical Thinking Skills - Posttest	-7.45278	8.34394	1.96669	-11.60212	-3.30343	-3.790	17	0.001

The criteria for the Paired Sample T Test if the Sig. (2-tailed) < 0.05 , it can be concluded that there is a significant difference between before and after the method or treatment, but if the Sig. (2-tailed) > 0.05 , it can be concluded that there is no significant difference between before and after treatment. The table above, contains the results of the Paired Sample T Test with Sig. (2-tailed) 0.000 and 0.001, so that the data can be concluded that there is a significant difference or influence. H_0 is rejected, so H_1 can be concluded that there is a significant difference in grade 4 students from before and after treatment.

Based on the results of the SPSS version 26 analysis above, it can also be calculated manually with the results of obtaining a minimum value of 50 and a maximum value of 90 for the pretest, a minimum value of 75 and a maximum value of 100 for the posttest. Between the pretest and posttest scores, it can be concluded that there was an increase in the value of each learner after the collaborative learning treatment integrated with the Pancasila learner profile. Through this collaborative learning, each learner and his/her group team work on projects in the form of making clippings and quarter card games which are used as media to support the improvement of their critical thinking skills. Learners collaborate, innovate, be creative, and exchange opinions to complete the project by having discussions between members. The completion of this project ends with a presentation between groups and for the assessment is still carried out individually for each learner.

3.6 Discussion

The application of collaborative learning integrated with the Pancasila student profile based on cultural diversity is considered quite effective in improving students' critical thinking skills. This can be seen from the results of pretest and posttest assessments conducted individually and projects carried out in groups which are considered to have significant results with the results showing moderate criteria between $0.3 \leq g \leq 0.7$ and quite effective in the percentage between 56-75. Another result of this study is also that by doing collaborative learning, students can become peer tutors and can innovate to complete projects given by teachers from the development of an independent curriculum that is integrated with the Pancasila student profile. The theory used in this research is collaborative learning and project-based learning. The application of this collaborative learning uses the Project Based Learning learning model. This collaborative learning focuses on learner cooperation with teacher support and guidance. This project-based learning hones learners' knowledge and skills to complete a real project. Teachers must play an active role in collaborative learning so that critical thinking skills, social skills, ability to work in teams, accuracy in time can develop significantly (Wahyuningrum, 2022). This is in line with previous research, that by doing collaborative integrative learning continuously, the diversity of students in learning can be easily done because students are in collaboration groups so that students can be facilitated, get a pleasant learning atmosphere and all students are involved in completing the project (Firda, Kaniwati, & Sriyati, 2021). In addition, collaborative learning can create a lively and active learning environment or atmosphere (Zuhriyah, 2022). The learning outcomes of students also have a positive impact, so it is necessary to develop their application (Kadek Noviana Sastra Dewi, Gede Astawan, & Gede Margunayasa, 2020). Collaborative learning can foster various

positive and interactive attitudes in students such as training students to appreciate diversity, understand individual differences, assess each other's ideas, monitor each other's work and exchange information (Utami, Margunayasa, & Kusmariyatni, 2019). In collaborative learning, students learn to work together and discuss in small groups that allow each student to express their ideas, so that they can foster good interpersonal communication skills and can improve critical thinking skills (Mumtaza, Maisarah, & Firdaus, 2023).

According to Ritu Chandra (2015) shows that collaborative learning is not only a classroom method, but also involves a feeling of respect, respect, or full respect for each group member. Collaborative learning is based on cooperation and collaboration by group members, so it involves social interaction involving the community of learners and teachers by sharing experiences and information. In this research, there are 4 groups with cultural diversity material projects with the target of producing public outputs that can be exhibited in the form of products, publications, or presentations. Project Based Learning is a learning model that focuses on the concepts and principles of the discipline, engages learners in meaningful problem-solving activities and other tasks and provides opportunities for learners to work independently in building learning that ends up producing a product or project (Ervitasari Setya Mistrika, 2023). In line with the realization of the Pancasila learner profile, which has global competence and behaves in accordance with Pancasila values, the Pancasila learner profile in the learning process can be character education for students and is relevant to the learning process. In line with previous research, project-based learning models can improve learning outcomes in students to improve learning outcomes interesting, challenging, creative, innovative and fun (Setyawan, Purwanto, & Sari, 2019). The Project Based Learning model is able to improve student learning outcomes and measure the critical thinking creativity of students so that they have the skills and abilities to complete a project (Surono, Kristin, & Anugraheni, 2019). Through critical thinking, students can process information or ideas logically, so this skill is widely considered as an educational and learning goal so that students can develop both from the cognitive and affective domains.

Collaborative Collaborative learning integrated with the Pancasila learner profile has an impact on improving students' critical thinking skills. The effect of collaborative learning contributes to learners to be enthusiastic and support each other in completing tasks. Collaborative learning also provides experience so that students can discuss exchange ideas and work together to achieve goals and understanding of the material in order to foster a sporting attitude between groups. Through the integration of the Pancasila learner profile, it is also expected to help learners build a strong national identity and good character to be responsible for themselves and the surrounding environment in order to form the character of the nation's moral and social successors. In order for the significance of the impact of collaborative learning on improving critical thinking to be further tested, it is recommended that further research use a larger sample and population. In addition, it is also suggested that research can be carried out at a higher class, level or level, because it is possible that in the future this critical thinking knowledge and skills are needed.

4. CONCLUSION

Based on the objectives of the study to examine the application of collaborative learning integrated with the Pancasila learner profile based on cultural diversity with the Project Based Learning learning method to improve critical thinking skills, as well as the results and discussions that have been presented in the previous section, it can be concluded that the application of collaborative learning integrated with the Pancasila learner profile is considered to be able to improve students' critical thinking skills. The results of the data analysis test also show significant results on the learning outcomes and thinking skills of students before and after learning, this is reinforced by the results of the N-Gain test which shows moderate criteria between $0.3 \leq g \leq 0.7$ and quite effective in the percentage between 56-75 and the results of the Paired Sample T test with Sig. (2-tailed) 0.000 and 0.001, so that the data can be concluded that there is a significant difference or influence. H_0 is rejected, so H_1 can be concluded that there is a significant difference in grade 4 students from before and after learning.

Learning with the integration of the Pancasila student profile can be applied to other subjects that can be implemented into character education for students on a larger scale and can collaborate between students or teachers. The application of this learning model can also be done with project-based learning, which can improve student learning outcomes and create interesting, challenging, creative, innovative, and fun learning.

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