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Peer collaboration in P5: students' perspective of project-based learning in multicultural school setting

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Abstract: In response to the imperative of nurturing citizens capable of thriving in a multicultural society, the Indonesian Government has launched the 'strengthening the profile of Pancasila students' project (P5). This study employed a mixed-method design, utilising online surveys featuring closed and open-ended questions for data collection. Out of the 805 participants invited to complete the survey, 487 willingly participated. The data were analysed using descriptive statistics and thematic content analysis. The findings highlight that P5, as an innovation in project-based learning, can serve not only to enhance problem-solving skills but also to promote mutual understanding among students. This aligns with Indonesia's educational objectives, particularly those about the realisation of the Pancasila student profile, with a specific focus on fostering critical thinking and embracing global diversity. This research offers valuable insights into students' perspectives on collaborating with their peers. Schools implementing P5 should consider innovative approaches to its implementation.

Keywords: project-based learning; PjBL; Pancasila profile; multicultural education; P5.

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1 Introduction

Global educators must equip the next generation with life skills to keep up with the world's rapid changes. Related to this issue, UNESCO (2021) recommends using learner-centred approaches rather than teacher-centred ones, such as project-based and case-based learning. Project-based learning (PjBL) is a pedagogical strategy that places students as the centre of learning, actively involving them in constructing knowledge and conducting inquiry (Kokotsaki et al., 2016; Oguz-Unver and Arabacioglu, 2014). Through problem activities, PjBL equips students with knowledge and skills that enhance their lives, including communication, teamwork, and problem-solving abilities. Students demonstrate their comprehension while completing their projects as they work with peers, engage with the material, and relate their learning to the real world (Larmer, 2020). The collaborative nature of project work offers significant advantages in the learning process.

Owing to its many benefits, the PjBL model has gained immense popularity in several countries, including Indonesia. The Indonesian government has adopted PjBL as a

learning approach for co-curricular activity to strengthen the Pancasila student profile, known as the Pancasila student profile strengthening project or P5 (Ministry of Education, 2022a). The Pancasila student profile encompasses a set of character traits and competencies expected to be achieved by students, based on the noble values of Pancasila (the foundation of Indonesia's ideology). These character traits are piety towards the Almighty, noble ethics, global diversity, independence, cooperation, critical thinking, and creativity. Global diversity is one of the emphasised character traits within the P5 framework. Through this dimension, students are expected to preserve Indonesia's noble culture, local identity, and heritage while remaining open-minded when interacting with other cultures (Ministry of Education, 2022b).

Peer collaboration in projects trains students to build communication skills, such as responses in different situations, showing acceptance, understanding, appreciation, gratitude, and honour (Pinchumphonsang and Chanchalor, 2020). The acquisition of these skills is highly essential in shaping the cultural identity of students, enabling them to possess cultural sensitivity and the ability to embrace, comprehend, and appreciate various forms of diversity (Gay, 2010; Nieto, 1996). Cases of racism against Papuan students and Chinese ethnicity (Harsa and Rofil, 2021; Rochadi, 2021) as well as the high incidence of violence against children (DataIndonesia.id, 2023), constitute fundamental issues that need to be overcome through education. School community plays a pivotal role to manage it (Al-Loughani and Al-Shammari, 2022). One of the approaches is conducting activities that require students to work collaboratively with their peers. PjBL is one of the approaches.

Previous studies emphasise that PjBL can be implemented in elementary until post-secondary. It has many positive outcomes for individual students to create a collaborative atmosphere not always present in traditional classrooms. Students working in peer groups show higher ratings for learning, self-efficacy, and satisfaction after completing a PjBL unit/lesson (Hernandez-Ramos and De La Paz, 2009). In multicultural school settings, PjBL can be adopted to promote the awareness of values of tolerance, equity, and cultural understanding. This is done by exposing students to group work having various cultural backgrounds members. Blue et al. (2018) argued that exposing students to multicultural environments can sharpen their sensitivity to diversity.

Previous researchers also did research on the implementation of PjBL in P5. Sukarno (2023), for example, explored the key success of PjBL in P5. He found that there were three keys determining the success of P5, namely, teacher collaboration, differentiated learning, and strategic partnerships. The study conducted by Fahri et al. (2023) found that PjBL could be implemented through the stages of introduction, contextualisation, action, reflection, and follow-up. Another similar research Prenika and Taroreh (2023) showed that the students were aware of the importance of preserving regional songs and were more critical. Even though these studies have explored the implementation of PjBL in P5, they did not delve into how students from different cultural backgrounds perceive the implementation of PjBL in P5. Based on this gap, the survey was conducted to determine the opinions and experiences of students participating in PjBL in multicultural schools in Indonesia.

This study aimed to explore the students' perspectives and experiences about collaboration with their peers when they joined P5 in multicultural schools. To achieve this objective, we conducted a survey in which we posed open-ended and closed-ended questions about the students' perceptions of P5 learning involvement. The results of the study contribute not only to Indonesia but also to other countries sharing similarities in

cultural diversity. For the Indonesian government, this study gives invaluable information to make a reflection on the implementation of P5. The findings also encourage teachers to innovate in the way they manage PjBL, especially to allow students the opportunity to collaborate with peers from different cultural backgrounds. For other nations, the findings can enrich their understanding of Indonesia's efforts to promote students' cultural identity which can contribute to world peace. The study can also serve as an example and inspiration in developing multicultural education in similar cultural settings.

2 Theoretical framework

2.1 Project-based learning

PjBL is a learning methodology based on social construction theory. The theory's proponents, including Piaget, Kilpatrick, and Dewey, argue that learning occurs through social interaction within group settings, supporting collaboration and communication in problem-solving activities (Bender, 2012). Previous arguments have emphasised Dewey and Kilpatrick's essential roles in the educational revolution. According to Vygotsky, a social constructivist thinker, when students participate in educational projects, they have the opportunity to connect with peers, share ideas, and pose questions, boosting skill development and the learning of new knowledge. This style of learning develops critical life skills in students (Nassir, 2014), allowing them to take responsibility for their own learning and acquire new skills that stimulate creativity and bridge the gap between knowledge and skills (Bivens et al., 2009). Nurturing such life skills as teamwork, communication, problem-solving, independence, and creativity is an essential component of transformative education, allowing students to participate effectively in democratic communities.

PjBL is an educational approach that involves assigning open-ended tasks to students and includes six core components: focusing questions, learning goals, engagement in scientific practices, collaboration, planning with learning technologies, and the creation of real-world products (Krajcik and Shin, 2014). Students must develop abilities in planning, monitoring, and control in order to comprehend, direct, and successfully perform these tasks. When done correctly, PjBL has positive results for children. According to research, students show enhanced attention, enthusiasm, and comprehension of information (Hixson et al., 2012). Furthermore, PjBL can improve critical thinking and problem-solving skills (Kolb et al., 2001) and aid in the mastery of difficult topics (Markham, 2011).

While PjBL has many advantages for students, it also fosters a collaborative environment that is not usually present in traditional classrooms. Working in groups with peers during PjBL units/classes increases appreciation for learning, self-efficacy, and completion satisfaction (Hernandez-Ramos and De La Paz, 2009). PjBL creates an atmosphere in which students feel more at ease providing and receiving constructive comments on their work. It also promotes cognitive and social growth, as well as topic knowledge, by involving students in real-world projects. These key characteristics are critical for educating individuals to be self- sufficient and resilient in the face of real-world situations.

2.2 Collaboration in PjBL in P5

The fundamental aspect of PjBL is collaboration, because all participants must contribute to the joint outcomes. Helle et al. (2006) suggested that the strength of PjBL is not only the ability to integrate information from diverse disciplines but also the ability to bridge theory and practice. Students are able to see and feel the realities connected with a variety of concepts and interactions during the collaborative project work process, which serves to facilitate conceptual transformation and construct mental models filled with experience knowledge. In a PjBL context, building a common mental model filled with experiential knowledge occurs when students are given the chance to explore, reflect, and absorb knowledge while engaged in project activities.

PjBL is essentially a method of learning by doing and is a sort of experiential learning (Spalek, 2014). Kolb et al. (2001) defines experiential learning as the process by which knowledge is formed via the transformation of experience. Kolb's experiential learning cycle has become a well-accepted model for describing the function of reflection on experience in learning. According to the Kolb model, simply experiencing something is insufficient to ensure learning. Individuals who want to learn from their experiences must consciously reflect on such experiences (Heo et al., 2010). As a result, self-reflection and group reflection are required to create concepts such as insight. Only then may new ideas be used and tested in new contexts, leading to new experiences and, ideally, repeating the cycle.

2.3 Previous studies

When used appropriately, PjBL produces good results for students. According to research, students' interest and excitement for learning grow, as does their grasp of the topic (Hixson et al., 2012; Ching et al., 2019). PjBL can also help students enhance their critical thinking and problem-solving skills (Hursen, 2021), as well as help them conceptualise challenging subject (Markham, 2011). These abilities help students perform well on a range of examinations, including typical post-tests following PjBL treatments, AP exams, and standardised testing (Barron et al., 1998). Students also learn 21st-century skills, which they can apply outside of the classroom (Hixson et al., 2012).

The favourable benefits of PjBL are not limited to a single student group. PjBL has been applied at all grade levels, including elementary middle school (Hernandez-Ramos and De La Paz, 2009), and high school (Hernandez-Ramos and De La Paz, 2009) to post-secondary students (Helle et al., 2006). Furthermore, both high and low-ability children have been proven to gain academically (Holmes and Hwang, 2016), and the implementation of PjBL can even help teachers close success gaps for students in poor socio-economic level situations (Halvorsen et al., 2012). PjBL has also been used successfully with ESL and Special Education children (Foulger and Jimenez-Silva, 2007; Tipton, 2021). While PjBL has many great benefits for individual students, it also fosters a collaborative environment that is not usually present in traditional classrooms. After completing PjBL units/lessons, students who work in groups with peers demonstrate increased appreciation for their learning, self-efficacy, and satisfaction (Hernandez-Ramos and De La Paz, 2009). PjBL fosters an environment in which students feel more at ease providing and receiving constructive comments on their work (Lou and MacGregor, 2004). Participating in real-world initiatives promotes cognitive and social development as well as topic knowledge. These fundamental components are required for

developing self-sufficient and conscious individuals for real-world challenges (Lhan, 2014).

2.4 PjBL to promote student inclusiveness in Indonesia

The Pancasila student profile strengthening project provides students with opportunities to learn in informal settings, with flexible learning structures, being directly involved in their surroundings, and interactive learning activities to strengthen various skills and competencies (Ministry of Education, 2022b). According to the Ministry of Education, Culture, and Technology's plan, which fosters the president's vision and objective of developing an independent, personal, and sovereign advanced Indonesia state. As a result, Pancasila students are developed who are required to have creative reasoning, independence, critical thinking, fearlessness, faithfulness, global celebrity, and to always maintain mutual collaboration. As is known that Pancasila is the philosophical view of the nation and the basis of the state which is illustrated in the precepts it contains. Pancasila animates national and state life for all Indonesian people, especially for students who are Pancasila who must maintain and continue their great values because the noble values contained can adjust to different time and space, making Pancasila used as the basis for cultivating character in the soul of Indonesian students.

The Pancasila student profile is intended to meet educational goals in Indonesia, where Pancasila students are lifelong learners who are competent, well-behaved, and have character in accordance with Pancasila values. The goal is to preserve the nation's identity, goals, and philosophy while preparing for the industrial revolution's obstacles. Out of the six dimensions of the Pancasila students profile, global diversity becomes the emphasis of this research. Owing to the concept of Vygotsky's constructivist theory, students learn through social interaction within group settings (Bender, 2012). PjBL requires students to collaborate with their peers, share ideas, and pose questions. In this process of collaboration, students interact with peers frequently. This nurtures positive attitudes such as mutual understanding, empathy, respect, and tolerance. These attitudes contribute to the promotion of the realisation of democratic communities, where all people regardless of their cultural background have the same rights.

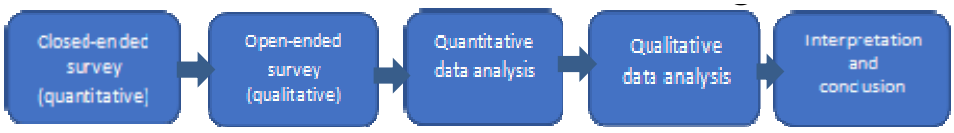
3 Method

3.1 Research design and context

Anchored by positivism and interpretivism paradigms, this research uses mixed design (mixed method) in collecting and analysing data (Creswell and Plano Clark, 2007). The selection of this mixed method is based on the research objective of obtaining a picture of the perceptions and experiences of the students in collaborating with peers when joining P5. To find out their perceptions and experiences, we used surveys of open and closed questions. The mixed method allows us to combine the exploration nature of the research with the collection of double data and triangulation (Creswell, 2013). Figure 1 shows the multiple processes of quantitative and qualitative data collection and data analysis. In this study, quantitative data were collected from a survey collected from Google Forms to students with close-ended questions. Qualitative data were collected from the students' responses to open-ended questions in the form of phrases and sentences. Prior to giving

these questions, we conducted observations in the two schools. The results of observation helped the researchers interpret the responses to both the closed and open-ended questions.

Figure 1 Mixed method design (see online version for colours)



This research was conducted in two high schools in Surakarta, Indonesia, namely School A and School B. We chose the two schools for three reasons namely, the students' various cultural backgrounds, the curriculum, and the popularity. The first, School A is a public school with students from diverse religious, socio-economic, and ethnic backgrounds. School B is an Islamic-affiliated high school with a majority of Muslim students but with diverse ethnic and socio-economic backgrounds. Second, during the implementation of this research, both schools adopted curriculum *Merdeka Belajar* (freedom of learning) in which PjBL is adopted as a mandatory instructional approach in P5. The last, both schools are the favourite in Surakarta, Central Java.

3.2 Participants

The participants in this study were 487 students from the 1st and 2nd grades of high school who were involved in the Pancasila strengthening project (P5), with 192 students from School A and 292 students from School B. We recruited participants who were students in both schools using the following procedures. Firstly, we obtained permission from the school principals of both schools in the city by submitting a formal request letter. Obtaining permission from the school principals was easy for us as both schools were affiliated with the institution where we worked. Once we obtained permission from the school principals, we met with the vice principals in charge of the curriculum and student affairs. We then met with the students to discuss the survey questionnaire. We explained that participation was voluntary and anonymous. They were allowed to use initials instead of their full names and had the option to withdraw from the study if they felt uncomfortable. The demographic profile of the participants in this study in Table 1.

3.3 Method of data collection and analysis

Data for this research was collected through open-ended and closed-ended questions distributed to the participants via Google Forms. Utilising an online questionnaire allowed us to gather mixed data simultaneously without taking up too much of the participants' time. 487 students participated in answering questions related to their perceptions and experiences in PjBL activities. School A had 370 students in the 1st grade, while School B had 435 students. We provided written announcements to the classroom teachers, who then distributed the letters to the students in their respective classes. The letter requested their participation in the questionnaire and emphasised that it was anonymous, with no repercussions for their responses. The participants answered the

questionnaire anonymously but provided details about their professional profiles, which were summarised in Table 1.

Table 1 Demographic participants of the research

Background	*School A*	*School B*	*Total school*
Gender			
Male	85 (44.04%)	144 (48.98%)	229 (47.02%)
Female	101 (52.33%)	146 (49.66%)	247 (50.72%)
Others	7 (3.63%)	4 (1.46%)	11 (2.26%)
Age			
15	86 (44.56%)	198 (67.35%)	284 (58.32%)
16	78 (40.41%)	36 (12.24%)	131 (26.90%)
17	18 (9.33%)	53 (18.03%)	54 (11.09%)
18	9 (4.66%)	4 (1.36%)	13 (2.67%)
19	2 (1.04%)	3 (1.02%)	5 (1.03%)
Religion			
Islam	139 (72.02%)	276 (93.88%)	415 (85.22%)
Christian	43 (22.28%)	14 (4.76%)	57 (11.70%)
Catholic	9 (4.66%)	3 (1.02%)	12 (2.46%)
Buddha	2 (1.04%)	1 (0.34%)	3 (0.63%)
Ethnicity			
Javanese	156 (80.83%)	280 (95.24%)	436 (89.53%)
Chinese	26 (13.47%)	-	26 (5.34%)
Arab	8 (4.15%)	9 (3.06%)	17 (3.49%)
Others	3 (1.55%)	5 (1.70%)	8 (1.64%)

The quantitative data collected from close-ended was analysed using descriptive quantitative to determine the number and percentage of the data. The data from the open-ended questions were analysed using thematic content analysis (Boeije, 2010). All responses were initially read to gain an overall understanding of the data and to identify patterns, similarities, and contradictions among the participants' answers. After this initial phase, we collectively coded the data into categories, such as their thoughts on unfamiliar classmates and their experiences in collaborating with peers to complete projects. This research also relied on open-ended questions to further reflect on the participants' answers, contrasting and reinforcing them. The results of observations conducted by one of the researchers, as detailed in the previous section, allowed us to contextualise the participants' responses and reduce any ambiguity inherent in open-ended answers. One of us conducted observations at the school for two months, regularly attending and observing lessons taught by several teachers. With their experience of the researched school, we could engage in more in-depth coding and determine themes related to the students' perspectives. The questions posed are presented below.

1 Do you like to be a part of the P5 program?

2 What do you think about your project group mates before you start working together?

3 Did all of your friends, in your opinion, participate in the P5 activities?

4 Did you encounter any difficulties when working with friends? How did you handle the difficulties?

5 What has been your most memorable experience working with friends?

4 Results

4.1 Students' motivation in joining P5

Before we exhibit the results of the analysis, we provide an illustration of the implementation of learning projects implemented in both schools. P5 is a compulsory co-curricular activity conducted by schools that apply *Kurikulum Merdeka Belajar* (freedom to learn curriculum). In this activity, students have the opportunity to study key themes or issues such as climate change, anti-radicalism, mental health, culture, entrepreneurship, technology, and democratic life. P5 is cross-disciplinary learning to observe and think about solutions to problems in the surrounding environment. P5 uses a PjBL approach that differs from PjBL in intra-curricular courses in the classroom. The flow and process that each student experiences in solving problems on the project is the primary thing.

The project is carried out once in three months and involves all teachers in one parallel class. The procedure for carrying out this activity is as follows. First, the school forms a committee and determines the theme of the project. Then the committee gives an overview to the participants. Students start working in groups consisting of about 6–7 people. The grouping of students is determined by the school with the aim of training them to collaborate well with peers. Each group was given two weeks to complete the project. After the project is completed, the students present it in front of the committee. At the time we applied for permission (March 2023), School A chose a cultural theme, while School B chose an entrepreneurial theme. At School A, students in groups were asked to observe cultural sites in Surakarta and then to analyse the problems that arose about the exposure of the site and find ways to promote it and make it known to the public. At School B, students were asked to observe the micro-enterprises in the region of Surakarta, analyse the problems of the development of the enterprise, and find solutions to resolve them. In the beginning, students work in groups with friends they do not know, they will have both negative and positive biases. This appearance of prejudice can be caused by cultural differences and the presence of social distances between different ethnic groups. The results of the study showed that students felt uncomfortable with their new friends. The survey results show what they think of the following results in Table 2.

Table 2 Responses to question 1 of whether they like to be participants in P5 program

Choices	*School A*	*School B*	*Total*
Agree	132 (68.39%)	231 (78.57%)	363 (74.54%)
Disagree	32 (16.38%)	54 (18.37%)	86 (17.66%)
Others	29 (15.03%)	9 (3.06%)	38 (7.80%)
Total	193 (100.00%)	294 (100.00%)	487 (100.00%)

Further to find out if they liked the learning, the researchers asked the students to fill it in an online form and obtained the results as in Table 3. Students who did not choose the answers provided responded with reasons related to the timing of implementation, the chosen theme, and disinterest in relations with friendship, time allocation, and unclear instructions presented in Table 3.

Table 3 Responses to the choice of 'others'

Aspect	*Responses*
Project theme	I do not like this topic because it is unclear.
Peer relationship	• Less like because sometimes we can get people who rarely do tasks and tend to be confused with project orders.
	• I do not like it so much because it is not suitable for the group.
Time allotment	It may not, but it may not be long and long.
Unclear instruction	Liked, but an explanation from a long teacher

The results of this study showed that the majority of students liked the projects held by the school. But some of them are confused whether they like it or not by saying certain reasons. This format of choice of answers helps researchers digest the dilemma within which the students felt to reveal their feelings.

4.2 Feeling uncomfortable with unfamiliar peers

In the context of this study, students in several parallel classes followed the P5 project together. The project is carried out in groups, with the grouping of members arranged by the P5 committee. This grouping is done to train to socialise with peers.

Table 4 Students' perceptions of unfamiliar peers

Choices	*School A*		*School B*		*Total*	
	Score	*(%)*	*Score*	*(%)*	*Total*	*(%)*
Yes	53	27.46%	78	26.53%	131	26.90%
No	117	60.62%	166	56.46%	283	58.11%
Others	23	11.92%	50	17.01%	73	14.99%
	193	100.00%	294	100.00%	487	100.00%

Table 5 The detailed responses of other

Aspect	*School A*	*School B*
Academic dimension	Someone helps someone who forgets.	Someone forgot their responsibilities.
Non-academic dimensions	1 There's one who does not help much. 2 No, there is 1 person who is not contributing at all when making the product. 3 Yes, but the dominance of women.	1 Not everything helps, there are 1–2 people that do not even help at all. However, the implementation process of the project continues to go well. 2 Honestly, some help (active), some help little (passive), and some do not help at all (burden to other peers).

Additional responses from the participants refer to the socio-emotional category, where the students feel that not everyone actively participates in the project. We the participation responses into two major themes: academic and non-academic. The tabulation of the data analysis results is presented in Table 5.

4.3 Creativity in solving problems with group members

In the process of project creation, the students are free to arrange the implementation schedule, and the projects they create, or with peers to complete the project. In the process, they engage in discussions that of course can trigger debate within the group. In this section, the researchers asked questions about the challenges faced by the learners and the solutions they sought to overcome. Here are the results of the survey analysis. When asked about how they do to solve the problem of the participation of less student participants during the implementation of the project is as follows.

Table 6 Responses to coping with the problems

Aspects	*School A*	*School B*
Structural dimensions	Voting can be addressed by discussing things together in more detail, as well as making the most agreed decisions of the group members.	Talk about each one's tasks.
	There is a discussion about the product idea that will be used as the project material. How to complete it accommodates all the ideas of the group.	There is a determination of the theme resolved by taking a vote to all members for some of the ideas proposed.
Social dimensions	Listen carefully to the problems they may face in collaboration	Ask a teacher to help persuade an inactive friend
		Pick up according to the initial agreement.
		The problem members of the group do not want to cooperate. Talk directly to the concerned.

4.4 Building positive relationship

The most impressive experience in carrying out project activities is divided into two parts, which are related to the academic dimension and the non-academic dimension. Of the questionnaires filled by the participants, 90% were related to their feelings about collaborating with other friends, and 10% of them related to structural management. Here are the results of the online survey completed by the participants. Academic dimension,

1 when making a product introduction to others

2 examining the design's quality as a whole

3 speaking with cultural experts

4 selecting the tools needed to make a thing

5 making goods to be old.

4.5 Social dimension

1 When we work together – do the process together.

2 Can be close to friends who were previously not close, can work with a team, can know the character of people.

3 Working in a group with friends.

4 Disputes and riots during the project.

5 Helps to complete tasks, teamwork.

6 Have trouble with a group of friends because of different opinions.

7 When working with a group of friends and managing it together.

8 Celebrate your birthday while working on a project.

9 When we interview and sell together, share ideas, and understand each other.

10 My friend, Tionghoa, is very good. Her parents allowed us to use their car to go to Sriwedari [a cultural tourist destination in Surakarta].

5 Discussion

Research results show that the P5 project encourages the motivation of students to participate actively in activities, reduce social bias, and build positive relationships with peers, and creativity in finding good solutions in addressing social problems. Participant responses to question 1, for example, showed that 363 students (74.54%) of the participants liked this activity. Answers to three questions about friends' participation in the group support this finding. These findings support the findings carried out by Hixson et al. (2012) and Ching et al. (2019) that collaborative learning increases the interest and excitement of learners.

Furthermore, this project is also possible bias to reduce bad bias towards peers. This is demonstrated by the number of responses that say that the main thing that is most effective is working on projects together in a group. Implicitly, this learning encourages learners to be able to understand peers. A good understanding of one another becomes a positive force and resource in society, as well as overcoming prejudices and stereotypes that can hinder social progress (Banks, 2014). This good understanding of peers is the foundation of multicultural education to create an inclusive and equitable learning environment for all students. By promoting cultural understanding, social justice, and global citizenship, multicultural education aims to prepare students to face an increasingly diverse and interconnected world.

The creativity of learners in finding good solutions is another thing found in this study. It provides empirical evidence of Vygotsky's view that when students participate in educational projects, they have the opportunity to connect with peers, share ideas, and pose questions, boosting skill development and the learning of new knowledge. This typical learning develops critical life skills in students (Nassir, 2014), allowing them to take responsibility for their own learning and acquire new skills that stimulate creativity and bridge the gap between knowledge and skills (Bivens et al., 2009). In addition, this study also supports the realisation of the rights of children to be forgotten in the aspect of participation.

Students' responses to problems they face such as time allocation and unclear instructions are a problem for the school in managing the implementation of P5. This problem became an input for the school in managing the P5. To mitigate problems that arise in the implementation of the project, the instructions given to the learners should be clear. In addition, time management should also be considered. There are some conclusions obtained from this study. First, the results of the research sharpen the opinion that P5 which is one of the PjBL innovations can be implemented not only to promote the ability to solve problems but also an attitude of mutual understanding between the learners. It supports the educational objectives in Indonesia that are implemented to realise the profile of students Pancasila primarily critical thinking and with a global character. With this advantage, project learning is highly recommended to be adopted in schools with students who have diverse cultural backgrounds. Thus, the learning project supports the realisation of multicultural education, which sustains the height of democracy.

This study provides a reflection on the perception of students in collaborating with peers. Schools that implement P5 should innovate the implementation of P5 in various ways. One of them is to give clear instructions to all the learners very clearly. In addition, the complaints of the students about a limited time in the implementation of the project should be considered again.

6 Conclusions

From the discussions above, we have drawn several conclusions. Firstly, P5 is an additional-curricular activity carried out in schools using a PjBL approach. This activity is highly favoured by students, as evident from their positive responses to it. However, the responses from students indicating that the provided instructions are unclear suggest that the school needs to pay closer attention to the details in implementing P5. Secondly, most students feel somewhat awkward when collaborating with their peers, but the

majority of them do not hold negative opinions about their classmates. This indicates that students have a positive attitude toward promoting multicultural values. Students generally do not view cultural background differences as significant in their collaboration process, as they have had positive experiences with their peers.

The findings offer significant contributions academically, particularly within the context of multicultural settings. It sheds light on the pivotal role of a multicultural environment in fostering a more inclusive and enriching experience. Exploring the interactions and dynamics within such settings contributes to our understanding of how diversity can be harnessed as a valuable educational resource. Additionally, the research underscores the importance of culturally responsive teaching and the adaptation of pedagogical approaches to accommodate diverse learners effectively. Furthermore, it highlights the development of intercultural competence as a key outcome, equipping individuals with the skills needed to thrive in an increasingly globalised world. These academic contributions are especially pertinent in today's educational landscape, where acknowledging and embracing diversity is paramount for the success and well-rounded development of learners.

The survey was carried out by analysing the participants' responses obtained through online surveys. The advantage of this method is that we can trace the opinions of a large number of participants in a short time. This closed and open-form question model also provides a more real picture of the participants' perceptions in the study. Such methods provide a free space for participants to express ideas and feelings without fear and hesitation. However, although the analysis process is carried out together and through several coding processes, the interpretation of the researchers is not without bias. This is a weakness in this research. Therefore, researchers conducting the same research as this study should use interviewing techniques with participants to conduct clarifications. This will support the accuracy of the data obtained. In addition, combining the survey, and direct interview, with observation gives a deep understanding of social phenomena. Based on this shortcoming, we suggest that the next similar research can be conducted through observation. In addition, the research should also invite teachers and school managers as the participants of the study.

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