

Initial Formative Assessment for the Implementation of P5 with a Local Wisdom Theme

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Abstract

The Merdeka Curriculum in Indonesia introduces flexible learning through the Projek Penguatan Profil Pelajar Pancasila (P5), yet its implementation faces challenges, including low student readiness and varying teacher perceptions. The success of this program depends on teachers' understanding, the application of 4C skills (critical thinking, collaboration, communication, and creativity), and the integration of technology. Local wisdom is also a crucial element, as it serves as a resource for character development and cultural identity, fostering more meaningful and relevant learning. An ethnoscience approach, which connects local wisdom with scientific concepts, further contributes to a more contextual and inclusive learning environment. This study aims to examine how early formative assessment can strengthen student readiness for local wisdom-based P5 projects by identifying their needs and potential before the learning process begins. A mixed-methods approach was used to analyze data from seventh- and eighth-grade students at SMPN 1 Paramasan. The findings revealed a need to reinforce students' understanding of the local Dayak Paramasan tribe, as well as their critical thinking and collaboration skills. The results underscore the importance of a structured instructional approach to optimize P5 implementation and ensure students' success.

Keywords: Merdeka Curriculum, P5, local wisdom, formative assessment

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1. Introduction

Education in Indonesia has undergone significant transformation with the introduction of the *Merdeka Curriculum*, which emphasizes freedom and flexibility in learning through the *Projek Penguatan Profil Pelajar Pancasila* (P5). This program aims to strengthen students' character and competencies through a project-based approach. However, its implementation still faces various challenges, such as inadequate readiness and diverse teacher perceptions (Palangda, 2023; Suryadi & Wahyudin, 2024). Nevertheless, studies have shown that P5 can enhance student engagement and motivation, creating a more meaningful learning experience (N. A. Dewi, 2023; Khalifatun et al., 2024). The success of P5 heavily depends on teachers' understanding of the program and the application of 4C skills in the learning process (Anton, 2022; Damayanti & Ghazali, 2023). Additionally, integrating information technology into P5 has the potential to improve learning quality and student satisfaction (Alfina & Hasanah, 2024). Therefore, collaboration among teachers, students, and schools is a key factor in optimizing P5 to address the challenges of modern education.

Local wisdom plays a crucial role in implementing P5 within the *Merdeka Curriculum*, serving not only as a source of cultural values but also as a tool for shaping students' character and identity. The integration of local wisdom into education enables more meaningful and relevant learning, as demonstrated by Miranti et al. in reinforcing character values (Miranti et al., 2021) and enhancing subject matter comprehension (Nugraha, 2023). The *ethnoscience* approach also contributes to more contextual learning by linking local wisdom with scientific concepts (Festiyed et al., 2022), while such integration fosters a more holistic and inclusive learning environment (Annisha, 2024). Furthermore, Sutrisno and Rofi'Ah emphasize that incorporating local wisdom into P5 helps students complete projects based on their cultural heritage, fostering pride in their traditions (Sutrisno, 2023). Thus, utilizing local wisdom in P5 supports character formation aligned with Pancasila values, making it essential for educators to integrate these elements to cultivate a generation with strong character and cultural awareness.

Early formative assessment plays a vital role in preparing students to achieve optimal learning outcomes in the *Merdeka Curriculum* by identifying their needs and potential before the learning process begins. This assessment provides insights into students' levels of understanding and skills, enabling educators to adjust teaching methods and materials for greater relevance (Hamdi et al., 2022; Wulandari et al., 2024). Moreover, early formative assessment can enhance student motivation and engagement by ensuring that learning aligns with their needs (Rahmawati et al., 2023) while also supporting character development through the reinforcement of expected values (Nurgaini & Effendi, 2024). Additionally, this assessment serves as a basis for decision-making, allowing educators to design interventions for students experiencing learning difficulties (Jumriani et al., 2021). Therefore, integrating early formative assessment into teaching strategies is essential for creating holistic and effective learning experiences.

While previous studies have highlighted the importance of early formative assessment in the *Merdeka Curriculum* and the benefits of integrating local wisdom into learning, there remains a clear gap in understanding how these two elements specifically

interact to enhance student readiness for P5 projects. This study, therefore, offers a novel contribution by specifically examining the role of early formative assessment in preparing students for P5 projects with a local wisdom theme. The findings are expected to provide empirical insights into the function of formative assessment in improving the effectiveness of P5 implementation while offering a concrete assessment model that educators can apply. Furthermore, this research contributes to the existing literature on local wisdom-based learning within the Merdeka Curriculum and serves as a foundation for developing educational policies that are more adaptive to local cultural contexts.

2. Method

This study employs a descriptive approach with a mixed-methods design to analyze students' readiness before implementing *Projek Penguatan Profil Pelajar Pancasila* (P5) based on local wisdom. Data were collected through questionnaires, teacher assessment rubrics, and written tests designed to measure students' understanding and preparedness for P5 activities (Wardhani et al., 2024). The variables included in the questionnaire encompass general knowledge, critical thinking skills, cultural understanding, and collaborative skills, drawing from established frameworks and research. The assessment of these variables is adapted from previous studies on educational competencies and learning outcomes (Hamdi et al., 2022; Nurngani & Effendi, 2024; Wulandari et al., 2024). Specifically, the critical thinking and collaborative skills components align with the 4C skills emphasized in modern educational paradigms, which are central to the Merdeka Curriculum's P5 projects. Similarly, cultural understanding and general knowledge are assessed to gauge student readiness to engage with the local wisdom theme.

The questionnaire consists of several items designed to explore these aspects. These questions are structured to measure: 1) general knowledge, through questions related to basic facts about the Dayak Paramasan tribe and their local wisdom in environmental conservation; 2) critical thinking skills, through scenarios that ask students to analyze problems and propose solutions related to local environmental issues; 3) cultural understanding, through questions that test students' knowledge of local traditions, values, and cultural practices; and 4) collaborative skills, through questions that assess their ability to work in a team, communicate effectively, and contribute to achieving common goals within a project. Respondents are asked whether they have ever heard of the Dayak Paramasan tribe and what they know about the relationship between local culture and environmental conservation. Additional questions probe how respondents seek information on unfamiliar topics and invite them to describe an example of how local wisdom can contribute to environmental preservation. The questionnaire also addresses the importance of understanding and appreciating other cultures, and asks for an example of a unique or significant cultural practice from the Dayak Paramasan tribe. Furthermore, it explores how respondents typically collaborate in group settings and whether they feel comfortable sharing their ideas with others, along with an explanation of their reasons.

The research participants consisted of seventh- and eighth-grade students at SMPN 1 Paramasan (Phase D) who participated in P5 with a local wisdom theme. This school was chosen specifically because of its geographical location within the Paramasan Dayak community, which makes it a highly relevant context for exploring local wisdom related to environmental conservation. The school's proximity to the Dayak Paramasan tribe allows for direct integration of cultural elements into the P5 project. Therefore, studying

students from this particular school provides a unique and authentic dataset to assess their readiness and understanding of local wisdom. The choice to focus on this single school was deliberate to ensure a deep and contextual analysis of the variables, providing a more in-depth understanding of the challenges and opportunities in implementing a local wisdom-based P5 curriculum.

Quantitative data were analyzed using descriptive statistical techniques, while qualitative data were examined through thematic analysis to identify patterns in students' readiness. The statistical technique employed involved summing all responses obtained from the participants and comparing the total scores with an interpretation table to determine the corresponding category or level (Wardhani et al., 2024).

3. Result and Discussion

A. Questionnaire Results

This questionnaire aims to assess students' general knowledge, critical thinking skills, cultural understanding, and collaboration skills before the implementation of *Projek Penguatan Profil Pelajar Pancasila* (P5). The results for seventh-grade students are presented in Figure 1.

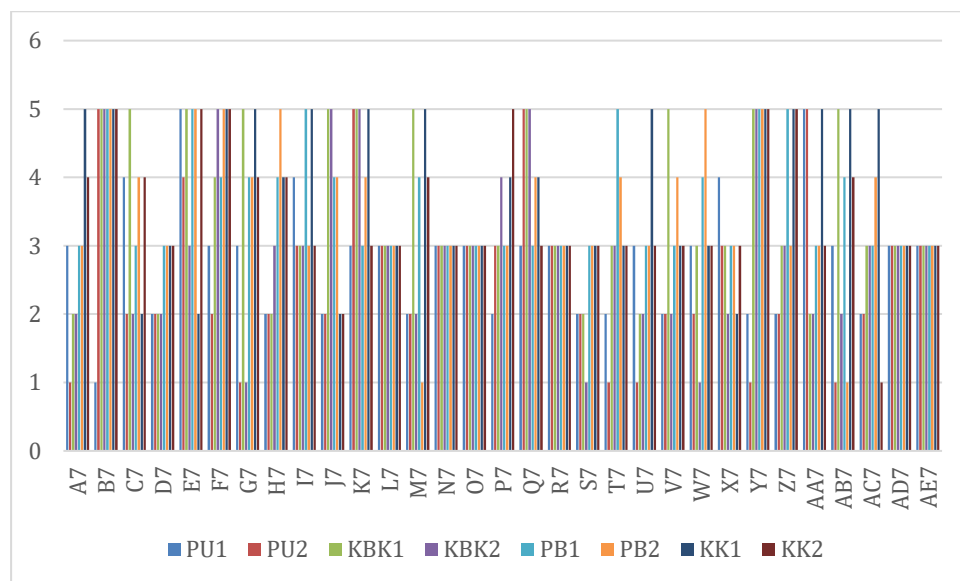


Figure 1. Questionnaire Results on Knowledge and Skills of Seventh-Grade Students at SMPN 1 Paramasan Before P5 Implementation

Description:

PU1 : Have you ever heard about the Dayak Paramasan tribe?

PU2 : What do you know about the relationship between local culture and environmental conservation?

KBK1 : How do you search for information on a topic you are unfamiliar with?

KBK2 : Explain one example of how local wisdom can help in environmental preservation.

PB1 : Why is it important to understand and appreciate other cultures?

PB2 = Provide an example of a cultural practice from the Dayak Paramasan tribe that you find unique or significant.

KK1 = How do you usually collaborate in a group?

KK2 = Do you feel comfortable sharing your ideas with others?

Based on Figure 1, the knowledge of seventh-grade students at SMPN 1 Paramasan regarding the Dayak Paramasan tribe and local wisdom remains low, with variations in their ability to seek information and collaborate. These findings highlight the need to strengthen students' understanding of local culture and develop their critical thinking and collaborative skills. The results serve as a foundation for designing more effective learning strategies to enhance students' knowledge and skills related to the subject matter. A summary of the questionnaire results is presented in Table 1.

Table 1. Summary of Questionnaire Results Before P5 Implementation for Seventh-Grade Students at SMPN 1 Paramasan

No	Student Initials	Total Score	Description
1.	A7	23	Sufficient knowledge/skills
2.	B7	36	Good knowledge/skills
3.	C7	26	Sufficient knowledge/skills
4.	D7	20	Low knowledge/skills
5.	E7	34	Good knowledge/skills
6.	F7	33	Good knowledge/skills
7.	G7	27	Sufficient knowledge/skills
8.	H7	26	Sufficient knowledge/skills
9.	I7	29	Sufficient knowledge/skills
10.	J7	26	Sufficient knowledge/skills
11.	K7	33	Good knowledge/skills
12.	L7	24	Sufficient knowledge/skills
13.	M7	25	Sufficient knowledge/skills
14.	N7	24	Sufficient knowledge/skills
15.	O7	24	Sufficient knowledge/skills
16.	P7	27	Sufficient knowledge/skills
17.	Q7	32	Good knowledge/skills
18.	R7	24	Sufficient knowledge/skills
19.	S7	19	Low knowledge/skills
20.	T7	24	Sufficient knowledge/skills
21.	U7	22	Sufficient knowledge/skills
22.	V7	24	Sufficient knowledge/skills
23.	W7	24	Sufficient knowledge/skills
24.	X7	23	Sufficient knowledge/skills
25.	Y7	33	Good knowledge/skills
26.	Z7	28	Sufficient knowledge/skills
27.	AA7	28	Sufficient knowledge/skills
28.	AB7	25	Sufficient knowledge/skills
29.	AC7	23	Sufficient knowledge/skills
30.	AD7	24	Sufficient knowledge/skills
31.	AE7	24	Sufficient knowledge/skills
Average		25,47	Sufficient knowledge/skills

Table 1 indicates that the overall level of knowledge and skills of seventh-grade students at SMPN 1 Paramasan falls into the "sufficient" category. This suggests potential for further improvement, particularly in specific aspects. The variation in scores reflects individual differences in subject mastery. These results serve as a basis for designing more targeted instructional interventions, focusing on strengthening weaker areas and further developing existing potential. Factors such as student characteristics, teaching methods, and available facilities should be further considered to gain a comprehensive understanding of these questionnaire results. The questionnaire results on the knowledge and skills of eighth-grade students before the P5 implementation are presented in Figure 2.

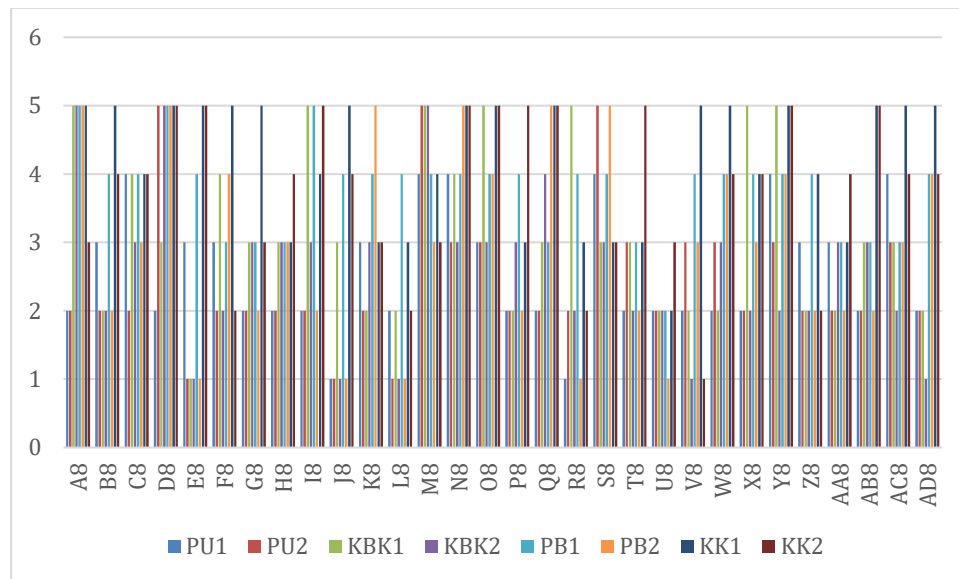


Figure 2. Questionnaire Results on Knowledge and Skills of Eighth-Grade Students at SMPN 1 Paramasan Before P5 Implementation

Description:

PU1 : Have you ever heard about the Dayak Paramasan tribe?

PU2 : What do you know about the relationship between local culture and environmental conservation?

KBK1 : How do you search for information on a topic you are unfamiliar with?

KBK2 : Provide an example of how local wisdom can help in environmental conservation.

PB1 : Why is it important to understand and appreciate other cultures?

PB2 : Give an example of a cultural practice from the Dayak Paramasan tribe that you find unique or important.

KK1 : How do you usually collaborate in a group?

KK2 : Do you feel comfortable sharing your ideas with others? Explain your answer.

Figure 2 indicates that the knowledge of eighth-grade students at SMPN 1 Paramasan regarding the Dayak Paramasan tribe, local wisdom, and its relationship with the environment still needs improvement. Students' ability to seek information and relate it to the local context also varies. While most students feel comfortable collaborating, their understanding of the importance of collaboration in the learning context needs further exploration. These findings highlight the need to design more effective learning strategies to enhance students' knowledge, skills, and attitudes regarding cultural and environmental diversity. A summary of the questionnaire results is presented in Table 2.

Table 2. Summary of Questionnaire Results Before P5 Implementation for Eighth-Grade Students at SMPN 1 Paramasan

No	Student Initials	Total Score	Description
1.	A8	32	Good knowledge/skills
2.	B8	24	Sufficient knowledge/skills
3.	C8	28	Sufficient knowledge/skills
4.	D8	35	Good knowledge/skills
5.	E8	21	Sufficient knowledge/skills
6.	F8	25	Sufficient knowledge/skills
7.	G8	23	Sufficient knowledge/skills
8.	H8	23	Sufficient knowledge/skills
9.	I8	28	Sufficient knowledge/skills
10.	J8	20	Low knowledge/skills
11.	K8	25	Sufficient knowledge/skills
12.	L8	16	Low knowledge/skills
13.	M8	33	Good knowledge/skills
14.	N8	33	Good knowledge/skills
15.	O8	32	Good knowledge/skills
16.	P8	23	Sufficient knowledge/skills
17.	Q8	29	Sufficient knowledge/skills
18.	R8	20	Low knowledge/skills
19.	S8	30	Sufficient knowledge/skills
20.	T8	23	Sufficient knowledge/skills
21.	U8	16	Low knowledge/skills
22.	V8	21	Sufficient knowledge/skills
23.	W8	27	Sufficient knowledge/skills
24.	X8	26	Sufficient knowledge/skills
25.	Y8	32	Good knowledge/skills
26.	Z8	21	Sufficient knowledge/skills
27.	AA8	22	Sufficient knowledge/skills
28.	AB8	25	Sufficient knowledge/skills
29.	AC8	27	Sufficient knowledge/skills
30.	AD8	24	Sufficient knowledge/skills
Average		25,47	Sufficient knowledge/skills

Table 2 demonstrates significant heterogeneity in the level of subject mastery among eighth-grade students. While most students have shown an adequate understanding, there are also groups with exceptionally high and very low comprehension levels. This variation indicates the need for a more differentiated instructional approach to accommodate diverse learning needs. These findings provide a strong foundation for educators to design more effective and efficient teaching strategies.

The initial questionnaire results reveal significant variations in the knowledge and skills of students at SMPN 1 Paramasan regarding local culture. Although the majority exhibit a sufficient understanding, improvements are still needed, particularly in connecting local culture with environmental issues. These findings align with previous studies emphasizing the importance of questionnaire-based assessments in identifying areas for improvement in learning (Alquraan, 2012; Ilinichna et al., 2021; Rifat et al., 2019). Furthermore, a more differentiated instructional approach is necessary to accommodate the diverse levels of student understanding, as suggested by research on integrating local wisdom to enhance critical thinking and collaborative skills (Pasira, 2022; Qodim, 2023; Zulaikha, 2023). The implementation of continuous assessment is

also crucial to adapting teaching strategies to students' learning needs (Tomlinson & Moon, 2014). Therefore, the findings of this study serve as a foundation for designing more effective learning strategies through the integration of local culture and the development of critical thinking and collaborative skills, ultimately helping students achieve more optimal learning outcomes (Pasira, 2022; Tung & Al-Issa, 2021; Tyrou & Mylonas, 2023).

B. Teacher Assessment Rubric Results

This rubric is designed to assist teachers in objectively assessing students' skills and participation while providing constructive feedback for their further development. The results of the teacher's assessment through observations of seventh-grade students prior to the P5 activity can be seen in Figure 3.

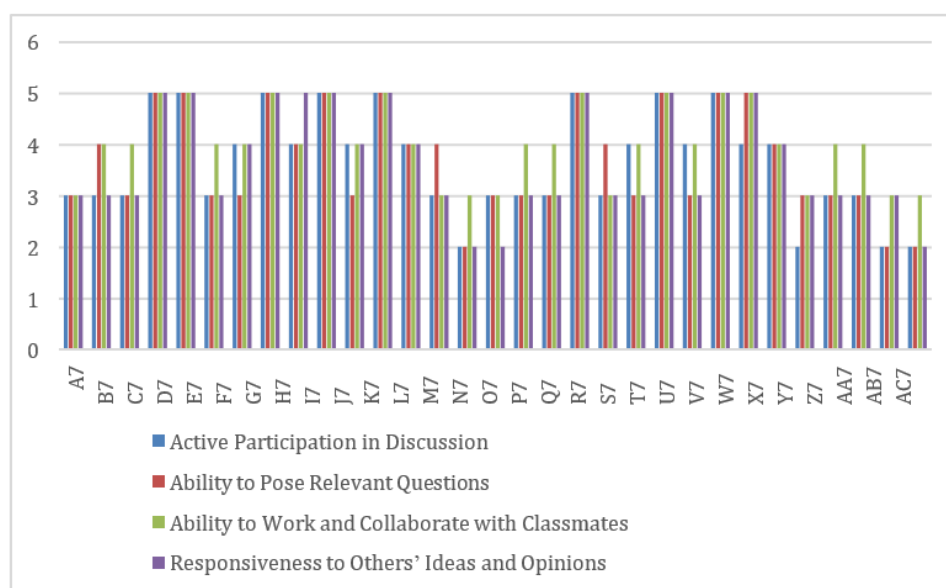


Figure 3. Teacher's Observation Results Before the P5 Activity on Seventh-Grade Students

Figure 3 illustrates students' active participation skills in discussions, the ability to ask relevant questions, teamwork and collaboration skills with classmates, and responsiveness to others' ideas and opinions among the heterogeneous group of seventh-grade students. A summary of the teacher's assessment results of seventh-grade students before the implementation of the P5 activity can be seen in Table 3.

Table 3. Summary of Teacher's Observation Results Before the P5 Activity on Seventh-Grade Students

No	Student Initials	Total Score	Description
1.	A7	12	Good
2.	B7	14	Good
3.	C7	13	Good
4.	D7	20	Very Good
5.	E7	20	Very Good
6.	F7	13	Good
7.	G7	15	Good
8.	H7	20	Very Good
9.	I7	17	Very Good

10.	J7	20	Very Good
11.	K7	15	Good
12.	L7	20	Very Good
13.	M7	16	Very Good
14.	N7	13	Good
15.	O7	9	Fairly Good
16.	P7	11	Good
17.	Q7	13	Good
18.	R7	13	Good
19.	S7	20	Very Good
20.	T7	13	Good
21.	U7	14	Good
22.	V7	20	Very Good
23.	W7	14	Good
24.	X7	20	Very Good
25.	Y7	19	Very Good
26.	Z7	16	Very Good
27.	AA7	11	Good
28.	AB7	13	Good
29.	AC7	13	Good
30.	AD7	10	Fairly Good
31.	AE7	9	Fairly Good
Average		15,03	Good

Table 3 shows that the initial observation results indicate an average overall score of 15.03 for the seventh-grade class, reflecting good levels of active participation in discussions, the ability to ask relevant questions, teamwork and collaboration skills with classmates, and responsiveness to others' ideas and opinions.

The score distribution reveals heterogeneity in students' abilities, with the majority falling into the "good" category. However, some students demonstrate high potential with "very good" scores, while others require additional attention as their scores fall into the "fairly good" category. This suggests that, in general, the class has a solid foundation of skills, but efforts are needed to accommodate individual differences in the learning process. The results of the teacher's assessment through observations of eighth-grade students before the P5 activity can be seen in Figure 4.

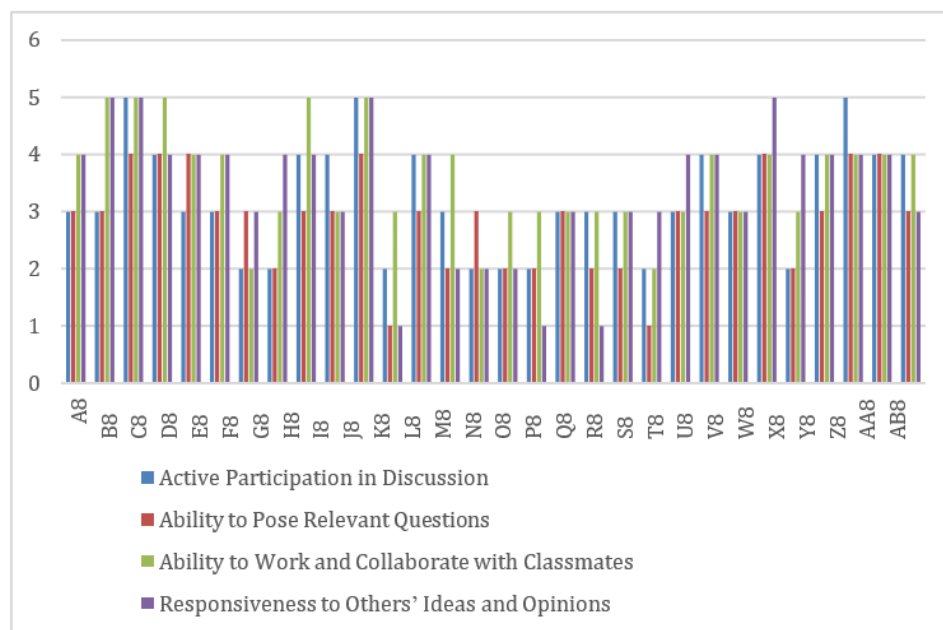


Figure 4. Teacher's Observation Results Before the P5 Activity on Eighth-Grade Students

Figure 4 illustrates students' active participation skills in discussions, the ability to ask relevant questions, teamwork and collaboration skills with classmates, and responsiveness to others' ideas and opinions among the heterogeneous group of eighth-grade students. A summary of the teacher's assessment results of eighth-grade students before the implementation of the P5 activity can be seen in Table 4.

Table 4. Summary of Teacher's Observation Results Before the P5 Activity on Eighth-Grade Students

No	Student Initials	Total Score	Description
1.	A8	14	Good
2.	B8	16	Very Good
3.	C8	19	Very Good
4.	D8	17	Very Good
5.	E8	15	Good
6.	F8	14	Good
7.	G8	10	Fairly Good
8.	H8	11	Good
9.	I8	16	Very Good
10.	J8	13	Good
11.	K8	19	Very Good
12.	L8	7	Fairly Good
13.	M8	15	Good
14.	N8	11	Good
15.	O8	9	Fairly Good
16.	P8	9	Fairly Good
17.	Q8	8	Fairly Good
18.	R8	12	Good
19.	S8	9	Fairly Good
20.	T8	11	Good
21.	U8	8	Fairly Good

22.	V8	13	Good
23.	W8	15	Good
24.	X8	12	Good
25.	Y8	17	Very Good
26.	Z8	11	Good
27.	AA8	15	Good
28.	AB8	17	Very Good
29.	AC8	16	Very Good
30.	AD8	14	Good
Average		13,1	Good

Table 4 presents the initial observation results for the eighth-grade class, highlighting variations in active participation in discussions, the ability to ask relevant questions, teamwork and collaboration skills with classmates, and responsiveness to others' ideas and opinions among students.

The average class score, which falls into the "good" category, indicates an overall adequate level of understanding. However, the uneven score distribution, with a significant proportion of students in the "fairly good" category, underscores the importance of learning approaches tailored to individual needs. This suggests that while some students demonstrate strong potential, efforts are needed to enhance overall student comprehension.

The data analysis results indicate that most students achieved good scores, with the average score reflecting an adequate understanding of the material taught. These findings suggest the effectiveness of the instructional methods applied, aligning with previous studies that highlight the role of data analysis in evaluating student performance and identifying factors influencing learning outcomes (Rifat et al., 2019; Sahabuddin et al., 2022).

However, some students still require additional attention, necessitating further analysis using statistical techniques to identify factors contributing to learning outcome disparities. The implementation of interactive and participatory learning models, such as blended learning and group investigation, has the potential to enhance student engagement and learning outcomes (N. R. Dewi, 2023; Zakiyah, 2023). Additionally, integrating character values into the curriculum, such as sustainability awareness, supports students' holistic development (Suryawati, 2023). Thus, this study serves as a foundation for designing more effective and inclusive learning strategies.

C. Observation Results

The purpose of the written test is to assess students' prior knowledge of the local wisdom of the Dayak Paramasan tribe. The results of the written test for seventh-grade students before the P5 activity can be seen in Figure 5.

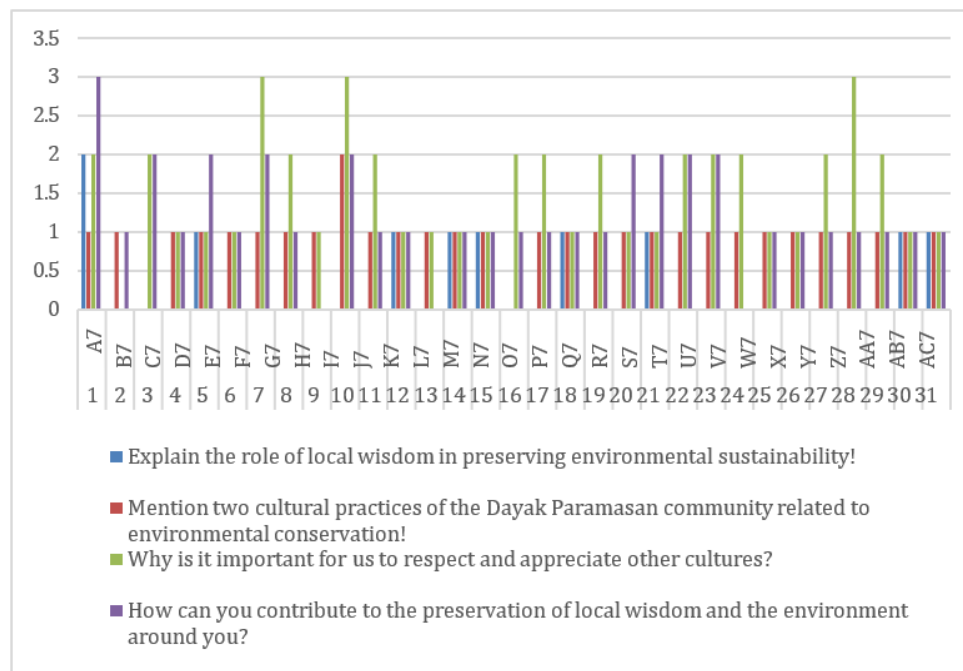


Figure 5. Written Test Responses of Seventh-Grade Students at SMPN 1 Paramasan Before the P5 Activity

Based on Figure 5, some students demonstrated relatively low understanding of local wisdom and environmental conservation, with most response scores falling below 1.5. This indicates that students still face difficulties in comprehending the presented material. Score variations were more apparent in questions related to Dayak Paramasan cultural practices connected to the environment and personal contributions to preserving local wisdom (Questions 2 and 4), where some students achieved higher scores, reflecting a deeper understanding.

Nevertheless, the generally low score distribution (ranging from 0 to 1.5) highlights the need for further guidance to strengthen students' understanding of the role of local wisdom in environmental conservation. Some students who achieved higher scores, such as I7, M7, and S7, suggest the presence of stronger comprehension in specific aspects.

These findings underscore the necessity of evaluating the learning process, particularly regarding local wisdom and its connection to environmental conservation, through more interactive and project-based approaches to enhance students' understanding comprehensively. A summary of the written test results can be seen in Table 5.

Table 5. Summary of Written Test Results Before the P5 Activity for Seventh-Grade Students at SMPN 1 Paramasan

No	Student Initials	Total Score	Description
1.	A7	8	Fairly Good
2.	B7	2	Poor
3.	C7	4	Poor
4.	D7	3	Poor
5.	E7	5	Poor
6.	F7	3	Poor
7.	G7	6	Fairly Good

8.	H7	4	Poor
9.	I7	2	Poor
10.	J7	7	Fairly Good
11.	K7	4	Poor
12.	L7	4	Poor
13.	M7	2	Poor
14.	N7	4	Poor
15.	O7	4	Poor
16.	P7	3	Poor
17.	Q7	4	Poor
18.	R7	4	Poor
19.	S7	4	Poor
20.	T7	4	Poor
21.	U7	5	Poor
22.	V7	5	Poor
23.	W7	5	Poor
24.	X7	3	Poor
25.	Y7	3	Poor
26.	Z7	3	Poor
27.	AA7	4	Poor
28.	AB7	5	Poor
29.	AC7	4	Poor
30.	AD7	4	Poor
31.	AE7	4	Poor
Average		4,06	Poor

Based on Table 5, a total of 31 students participated in the written test, with an average score of 4.06, which falls into the Poor category. Only three students—A7 (score of 8), G7 (score of 6), and J7 (score of 7)—achieved a Fairly Good rating, while the remaining 28 students were in the Poor category, scoring between 2 and 5.

These results indicate that most students have not yet developed an adequate understanding of the tested material. The low average score reinforces the need for improvements in learning strategies. Strengthening the material and implementing interactive learning methods are essential to enhancing students' comprehension, ensuring better learning outcomes in future assessments. The results of the written test for eighth-grade students before the P5 activity can be seen in Figure 6.

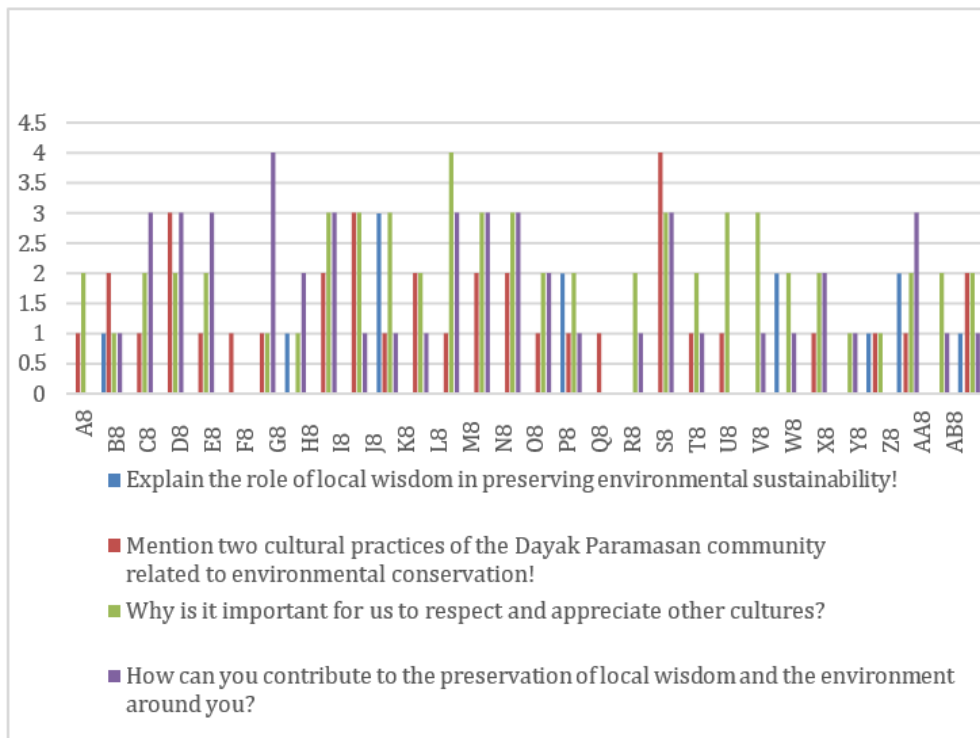


Figure 6. Written Test Responses of Eighth-Grade Students at SMPN 1 Paramasan Before the P5 Activity

Based on Figure 6, most students scored below 3 on all four questions. Question 2 (marked in red), which asked about examples of Dayak Paramasan cultural practices related to environmental conservation, showed greater response variation compared to other questions, with some students achieving scores of 3 or higher, such as students H8 and S8. This indicates that some students have a better understanding of this specific topic.

On the other hand, Question 1 (blue), which asked about the role of local wisdom in environmental conservation, had generally lower response ranges, with most students scoring below 2. Similarly, Questions 3 (green) and 4 (purple), which focused on appreciation for other cultures and contributions to preserving local wisdom, also had relatively low scores, with most students scoring between 1 and 2.

Overall, the graph reflects that students' understanding of local wisdom and environmental conservation remains limited. While some students demonstrated varying levels of comprehension, the majority still require further guidance to improve their grasp of the material. A summary of the written test responses can be seen in Table 6.

Table 6. Summary of Written Test Results Before the P5 Activity for Eighth-Grade Students at SMPN 1 Paramasan

No	Student Initials	Total Score	Description
1.	A8	3	Poor
2.	B8	5	Poor
3.	C8	6	Fairly Good
4.	D8	8	Fairly Good
5.	E8	6	Fairly Good
6.	F8	1	Poor

7.	G8	6	Fairly Good
8.	H8	4	Poor
9.	I8	8	Fairly Good
10.	J8	7	Fairly Good
11.	K8	8	Fairly Good
12.	L8	5	Poor
13.	M8	8	Fairly Good
14.	N8	8	Fairly Good
15.	O8	8	Fairly Good
16.	P8	5	Poor
17.	Q8	6	Fairly Good
18.	R8	1	Poor
19.	S8	3	Poor
20.	T8	10	Fairly Good
21.	U8	4	Poor
22.	V8	4	Poor
23.	W8	4	Poor
24.	X8	5	Poor
25.	Y8	5	Poor
26.	Z8	2	Poor
27.	AA8	3	Poor
28.	AB8	8	Fairly Good
29.	AC8	3	Poor
30.	AD8	6	Fairly Good
Average		5,33	Poor

Based on Table 6, it can be concluded that, in general, the written test results of eighth-grade students at SMPN 1 Paramasan before the P5 activity indicate a need for improvement in subject mastery. This is evident from the average score of 5.33, which falls below the "Fairly Good" category. Overall, students' comprehension remains below the expected standard. The average score and its variations highlight learning gaps and individual differences, emphasizing the need for targeted attention and effective teaching strategies to enhance understanding.

The initial written test results reveal low student comprehension of Dayak Paramasan local wisdom and environmental conservation, with average scores below the "Fairly Good" category. The gap between learning outcomes and objectives aligns with previous studies indicating students' limited understanding of local wisdom (Anggraini & Nazip, 2022; Munawaroh et al., 2022; Ramadhani et al., 2019). The score variations suggest both potential and challenges, where some students demonstrated better understanding in specific aspects, reinforcing findings that contextual learning experiences can improve comprehension (Anggraini & Nazip, 2022).

These findings are highly relevant to the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) policy on the implementation of the Merdeka Curriculum. This policy emphasizes the importance of P5 as an effort to strengthen the Pancasila Student Profile, which includes dimensions such as being faithful, devoted to God Almighty and having noble character; global diversity; mutual cooperation; being independent; critical thinking; and being creative. The results of this study show that, despite a strong policy framework, its implementation at the school level still faces obstacles, especially concerning students' initial understanding. This gap indicates that

early formative assessment is a crucial instrument that can be used by educators to map student readiness, as mandated by the policy that encourages differentiated and personalized learning.

To address this gap, previous research recommends interactive and project-based learning approaches, along with the integration of environmental topics into the curriculum (Afifah, 2020; Ilhami, 2019; Immaniar et al., 2019; Kharismawati, 2023; Nugraha, 2023; Simarmata, 2023). Therefore, more effective teaching strategies are needed, such as integrating local wisdom into instructional materials to enhance student motivation and environmental awareness. Additionally, engaging and relevant learning media can improve student interest and comprehension. Thus, efforts to enhance students' understanding of local wisdom and environmental conservation must be carried out continuously through more contextual and engaging approaches, in line with the Merdeka Curriculum's goal of creating holistic learning experiences.

4. Conclusion

The findings of this study indicate that seventh- and eighth-grade students at SMPN 1 Paramasan still require reinforcement in several aspects before participating in project-based learning (P5) based on local wisdom. Their foundational knowledge of the Dayak Paramasan tribe and local wisdom, particularly concerning environmental conservation, remains relatively low. Additionally, essential skills such as critical thinking, information-seeking, and collaboration exhibit variation among students. Therefore, a more structured and tailored instructional approach is necessary to enhance their understanding of local culture, critical thinking skills, and collaboration, ensuring their readiness and success in P5.

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