

Optimizing Pancasila Education Through Modern Teaching Materials: A Need Analysis for Effective Learning

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ABSTRACT

Pancasila Education plays a vital role in shaping student character in line with national values. However, its implementation in schools often remains suboptimal and does not reflect the evolving characteristics and needs of today's learners. This study investigates the necessity for innovative, technology-integrated teaching materials to enhance the effectiveness of Pancasila Education. This qualitative research employed a case study approach. Data were collected through observations, interviews, questionnaires, and document analysis, involving teachers and students as key participants. The findings reveal a strong need among teachers for innovative and student-centred teaching materials, particularly those that leverage digital technologies to make learning more relevant and engaging. Although many schools are equipped with adequate technological infrastructure, teachers often face challenges in designing and integrating technology-based instructional tools into Pancasila Education. These challenges stem primarily from a lack of training and limited access to appropriate digital teaching resources. To optimize Pancasila Education, it is essential to develop teaching materials aligned with both technological advancements and students' learning characteristics. Teacher capacity-building programs focusing on digital pedagogy and instructional design are recommended. These efforts will not only improve the learning experience but also ensure that Pancasila values are effectively internalized by students in a way that resonates with the digital era.

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1. INTRODUCTION

Pancasila education is an important foundation for forming a young generation with character (Tabrani, Walidin, Idris, & Huda, 2024) nationalism, and tolerance (Borihantanachot, Mangkhang, Phuweenaphan, & Nantasri, 2024; Santos, Carlos, & Moreira, 2023). In addition, Pancasila Education also encourages students' active involvement in society and at school (Nalipay, Huang, Jong, Chai, & King, 2024) and creates a generation that can live harmoniously in the midst of diversity (Winarni, 2020). In

addition, Pancasila Education can function as a filter to filter positive things that arise due to globalization (Indriyani, Komalasari, Malihah, & Fitriyani, 2023; Triyanto, & Fadhilah, N, 2018). Thus, education from primary to tertiary levels is key in instilling Pancasila values in students (Nurizka, Irawan, Sakti, & Hidayat, 2020). However, what is happening now is that the teaching paradigm of teachers learning Pancasila education is still not effective. In line with the expression of Ruyadi & Dahliyana, (2022) that the practice of learning Pancasila Education is often not in accordance with Pancasila.

This shows the importance and need to deeply analyze the teaching materials needed by teachers in the learning process to ensure that the material delivered is acceptable and interesting for students. On the other hand, this globalization era raises challenges and problems faced by teachers in creating teaching materials that are also increasingly complex, especially in adapting teaching materials to the characteristics and needs of different students. Sekarsari et al., (2023) revealed that along with technological developments, teaching materials as teaching aids also continue to develop rapidly. Therefore, in order to make learning in Pancasila education more interesting, relevant and effective in shaping students' personalities according to the values of Pancasila, teachers must understand the characteristics of students and adapt to the times. In line with the expression of (Ferary, 2021; Oktaviani, Aulia, Murdiono, & Suharno, 2024). The effectiveness of Pancasila Education learning is often faced with challenges to the quality and availability of teaching materials that are not in accordance with the nature of the current student era. As a result, learning Pancasila Education is not interesting for students.

The findings align with the results of a student interest in learning questionnaire conducted in six primary schools in the Godean district. The indicators measured include enjoyment, engagement, willingness to learn, and focused attention in the learning process (Ainley, 2017; Slameto, 2015). The questionnaire, distributed between May and August, focused on student interest in the Pancasila Education subject. The results were as follows: SD Negeri Semarang 4 – 35.4%, SD Negeri Sidoarum – 42.8%, SD Negeri Godean 1 – 45.1%, SD Negeri Krapiyak – 34.4%, SD Negeri Pengkol – 39.2%, and SD Negeri Tinom – 37.9%. These figures clearly indicate a persistent issue—students' interest in learning Pancasila Education remains relatively low. This lack of interest is likely to hinder improvements in both student learning outcomes and their comprehension of Pancasila-related content.

Ruyadi et al. (2023) also emphasize that the general public in Indonesia continues to exhibit limited understanding and skills in applying Pancasila values in daily life. In today's rapidly evolving technological era, it is essential to provide learning materials that are not only relevant and engaging but also accessible (Hamzah, Zakaria, Ariffin, & Rubani, 2024). Advancements in science and technology are intended to support and enhance the learning process (Marcon & Sehnem, 2024). Teachers must therefore integrate technology into their teaching strategies to remain aligned with contemporary educational demands. Additionally, there is a pressing need to modernize the concept of citizenship to reflect the realities of the digital era. While global citizenship fosters awareness of worldwide issues, it also brings concerns regarding the erosion of national character and identity (Ruyadi & Dahliyana, 2022; Sunarso, Hidayah, Firmansyah, & Arpanudin, 2024). Consequently, there is an urgent need for instructional materials that can both effectively integrate Pancasila values and appeal to students through the use of technology and innovative teaching methods (Febriansyah, Herlina, Nyeneng, & Abdurrahman, 2021; Nurhayati, Suwartono, Saripudin, & Juwita, 2022).

Previous research by Phillips et al. (2023) identified platforms and instructional materials that support teachers in promoting citizenship practices in the classroom, along with pedagogical approaches that enhance students' civic awareness and competencies. Widana et al. (2023) found that teachers' ability to develop assessments based on local wisdom falls within the "sufficient" category. Meanwhile, Liantori and Sujarwo (2023) highlighted that educator motivation and involvement are the most significant factors influencing students' low participation in Pancasila Education. Similarly, Robiasih et al. (2021) examined character development needs and identified several key traits that require strengthening, including faith. Suyato (2023) also emphasized the crucial role of teachers in selecting, adapting, and applying the curriculum to ensure effective learning.

The novelty of this study lies in its deeper exploration of the needs for Pancasila Education teaching materials at the primary school level in the context of modern educational demands. This research aims to make a practical contribution to classroom teaching by developing teaching materials that are relevant, engaging, and aligned with both current developments and Ki Hadjar Dewantara's educational philosophy—particularly his concepts of the “nature of the child” and the “nature of the times.”

Ki Hadjar Dewantara emphasized that learning should align with the natural character of the child, providing opportunities for independent thinking and problem-solving. Learning must also consider students' general capacities to support their creativity, while still being guided by teachers (*pamong*) to prevent potential missteps, in accordance with the principle of *Tut Wuri Handayani* (Suparlan, 2016). At the same time, Dewantara stressed the importance of adapting education to the dynamics of the era, to ensure that learning remains meaningful and relevant. Arifin and Setiawan (2020) asserted that teachers who fail to balance the nature of the child with the demands of the times risk becoming obsolete.

This study seeks to analyze the needs for teaching materials that can enhance learning outcomes in Pancasila Education. By aligning instructional content with students' developmental needs and contemporary realities, this research aims to support teachers in preparing more effective, student-centered materials. Ultimately, such an approach not only improves academic outcomes but also ensures that the core values of Pancasila are more deeply rooted in the younger generation—despite the challenges posed by the modern era.

2. METHODS

2.1 Design

This study employed a qualitative research method (J. W. Creswell & Creswell, 2017; Manora, 2019) using a case study approach (Denzin & Lincoln, 2018). Data were collected through in-depth, semi-structured interviews and open-ended questions with elementary school teachers in the Godean subdistrict. These participants provided rich, varied insights into the specific needs for Pancasila Education teaching materials aimed at enhancing learning effectiveness in the 21st century. The findings will serve as a foundation for developing innovative and applicable teaching resources to support the delivery of Pancasila Education in elementary schools.

2.2 Subject

This research was conducted in Yogyakarta, Indonesia. A total of 6 elementary school teachers taught class 4. Purposive sampling was used to select participants according to predetermined criteria. Participants were explained systematically and in detail about the procedures, objectives, impacts and benefits of this research. Participants are also given information regarding the flow of data recording, such as audio recording during interviews and observations. Below is a table of participants representing the population in this study:

Table 1. Research participants

No	School Background	Number
1	Semarang 4	1
2	Krapyak	1
3	Sidoarum	1
4	Godean 1	1
5	Tinom	1
6	Pengkol	1
	Number	6

2.3 Instrument

The research instruments used in this research were questionnaires and interview sheets. The questionnaire used in this research consisted of 50 questions with 5 indicators. These indicators are

suitability to the curriculum, relevance to students' level of understanding, ability to facilitate active learning, flexibility for differentiation, and in accordance with the characteristics and nature of students' times. The five indicators were developed by the researcher himself, where each 10 questions represent 1 indicator. Apart from that, interviews were conducted to find out in depth to find out the need for teaching materials in the current era.

2.4 Validity

Instrument validity in this study was established using the *critical friend* technique, which involved discussions with experts, supervisors, teachers, and peers who possess relevant expertise in the field. Feedback was specifically sought from lecturers with a background in Pancasila Education, and their suggestions were reviewed to identify and implement necessary revisions. This process ensured that the research instrument accurately measured the intended aspects in alignment with the study's objectives.

To establish reliability, data source triangulation was employed. This involved comparing and cross-verifying information obtained from multiple sources, including interviews, observations, and documentation, to ensure the consistency and credibility of the findings.

2.5 Data analysis

Data analysis in this study followed the Miles and Huberman model, which involves data collection, data reduction, data display, and conclusion drawing. Relevant information was filtered to align with the research focus during the data reduction phase. The data were then presented in various formats—such as tables, narratives, and diagrams—to facilitate interpretation and enhance clarity. Conclusions were drawn by identifying patterns and themes that emerged from the analysis, ensuring the findings are both valid and reliable. Finally, verification of the conclusions was conducted to confirm their accuracy and consistency (Creswell, 2018).

2.6 Data collection

Data collection in this study involved a combination of observations, in-depth interviews, questionnaires, and documentation—applying triangulation to ensure data validity. The process was conducted over approximately five months. During this period, the researchers systematically recorded all relevant observations and interview responses to obtain comprehensive and diverse data.

2.7 Data Reduction

Given the substantial volume of data collected in the field, it is essential to document the information carefully and systematically. As noted by Creswell (2018), the longer researchers remain in the field, the more complex and multifaceted the data can become. Therefore, timely data analysis through data reduction is crucial. This process involves summarizing, organizing, and selecting the most relevant information, allowing researchers to focus on the data that are most significant to the study's objectives.

2.8 Data Presentation

According to Creswell (2018), data presentation in qualitative research can take various forms, including flowcharts, diagrams, category correlations, and concise descriptions. The purpose of this stage is to present data through narrative writing in a way that clearly communicates findings. Effective data presentation enhances understanding of the events or phenomena studied and supports the planning of appropriate follow-up actions based on that understanding.

2.9 Conclusion and Data Verification

The initial findings of this study are suggestive and not conclusive. This means that findings may change over time, especially if strong evidence is not found during subsequent phases of data collection. It is important to remember that although these preliminary conclusions are based on preliminary studies of data that have been collected, they should not be considered definitive findings. Consequently, further data collection will be essential to verify the conclusions reached. These

preliminary conclusions would not be credible without reliable and consistent evidence. Therefore, this research will continue to strive to ensure the accuracy and reliability of the findings

3. FINDINGS AND DISCUSSION

Based on interviews with elementary school teachers in the Godean sub-district, the study examined the need for Pancasila Education teaching materials using specific indicators developed by the researchers. These indicators were designed to assess both the availability and the necessity of teaching resources for Pancasila Education in alignment with 21st-century learning demands. The development of these indicators serves as a strategic effort to enhance the teaching and learning process in elementary schools across the Godean sub-district.

In total, five indicators were formulated to guide this analysis. Each was designed to reflect current educational needs and practices, ensuring that the development of teaching materials remains relevant, effective, and responsive to contemporary classroom challenges. The following are the indicators used to determine the availability and need for Pancasila Education teaching materials.

Table 2. Indicators for Analysis of Teaching Material Needs

No	Indicators
1	Conformity to the curriculum.
2	Relevance to students' level of understanding
3	Ability to facilitate active learning.
4	Flexibility for differentiation.
5	Adapting to the characteristics and nature of students.

3.1 Conformity to the Curriculum

Interviews with teachers revealed that they only use open materials provided by the government, such as student worksheets and printed books. Some teachers have tried to design their own worksheets, but they still contain text and questions without interesting visual variations. Teachers assess that the teaching materials currently used are not fully relevant to the Merdeka Curriculum because they are still. One of the main obstacles in the innovation of teaching materials for Pancasila Education is the limited knowledge of teachers regarding the development of teaching materials in accordance with the latest curriculum. Teachers express difficulties in designing more interesting and interactive teaching materials for this subject. In addition, Pancasila Education is still classified as a memorization-based subject, which makes students less interested in the learning process.

This is in line with the opinion of Wuryandani & Herwin (2021), who state that learning Pancasila and Citizenship Education tends to be less interesting because the material taught is still textual and emphasizes the cognitive aspect by rote rather than deep understanding. The findings of this interview are reinforced by the results of a questionnaire that has been distributed to six elementary schools in Godean District. The results show that both teachers and students feel the need for innovation in Pancasila Education teaching materials to make it more interesting, relevant, and in accordance with the needs.

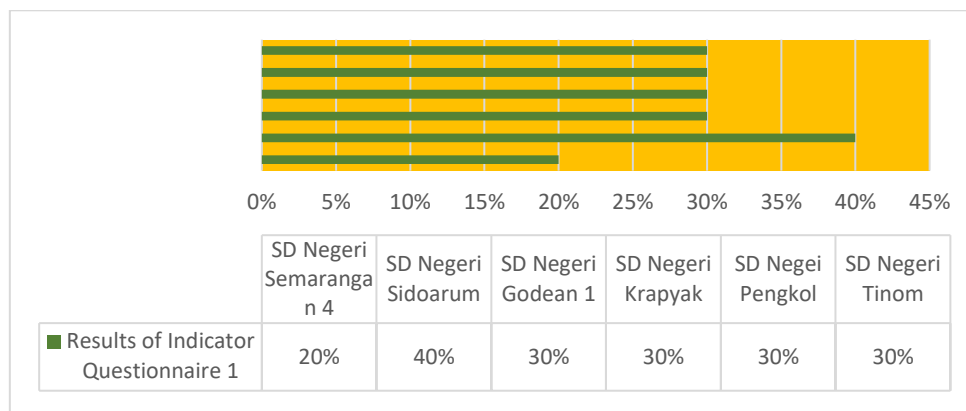


Figure. 1 Indicator questionnaire results in 1

The questionnaire was distributed to Grade IV teachers in elementary schools across the Godean District. This grade level was selected based on a mutual agreement with participating teachers, who identified Grade IV as a mid-point in primary education—making it a suitable focus for analyzing the need for Pancasila Education teaching materials.

Findings from the first indicator reveal that teachers consider the current teaching materials misaligned with the Merdeka Curriculum. While the materials are partially useful, teachers noted that they lack key content that is essential for students' understanding. Teachers unanimously agreed that well-developed teaching materials play a critical role in helping students grasp the subject matter. Moreover, all respondents emphasized the need to revise and align the existing materials with the principles of the Merdeka Curriculum.

Teachers also expressed concerns that current teaching materials are not relevant to present-day educational developments. Additionally, they observed that students struggle to connect Pancasila Education with other subjects, indicating a lack of interdisciplinary integration. According to the teachers, effective teaching materials should not only be aligned with the curriculum but also be tailored to the developmental characteristics of elementary school students.

This aligns with the perspective of Wijayanti et al. (2024), who state that the Merdeka Curriculum empowers teachers to design learning experiences that are responsive to students' needs, the local context, and the learning environment. It encourages flexibility in instructional strategies to accommodate students' varied learning styles, interests, and backgrounds. Therefore, the development of relevant and curriculum-aligned teaching materials for Pancasila Education is essential to achieving meaningful learning in the classroom.



Figure 2. Teacher interviews

3.2 Relevance to the Level of Understanding of Students

Interviews with teachers show that the current teaching materials are less relevant, so elementary students have difficulty understanding concepts such as Pancasila and its history. The lack of variety of materials requires teachers to provide additional explanations. To overcome this, educators emphasize the importance of linking materials to students' daily lives, which is in line with the concept of Meaningful Learning. This approach recognizes students as unique biopsychosocial beings, who are actively involved in learning by connecting new concepts with prior knowledge and experiences. Meaningful Learning allows students to modify and integrate knowledge, leading to deeper understanding and practical application beyond the classroom. In line with Assubel's expression (Agra et al., 2019) teachers should relate the material to the daily life of students, as well as relate it to the previous knowledge of students, so that meaningful learning is created.

In the context of Pancasila Education lessons, teachers need teaching materials that are able to provide many concrete and relevant examples. Teachers can do this by associating Pancasila values with situations that students often encounter in their daily lives. Teachers can relate teaching materials to examples of the values of togetherness, mutual cooperation, or social justice that students can apply in the home and school environment. Teaching materials should help students learn according to the way they think so that they can adapt well to the material used in the teaching materials. The teacher stated that the teaching materials used today resulted in students still having difficulties in understanding the concepts. The results of the questionnaire show that the teaching materials used by teachers today are considered not relevant to the level of student ability. The following are the results of the questionnaire on indicator 2.

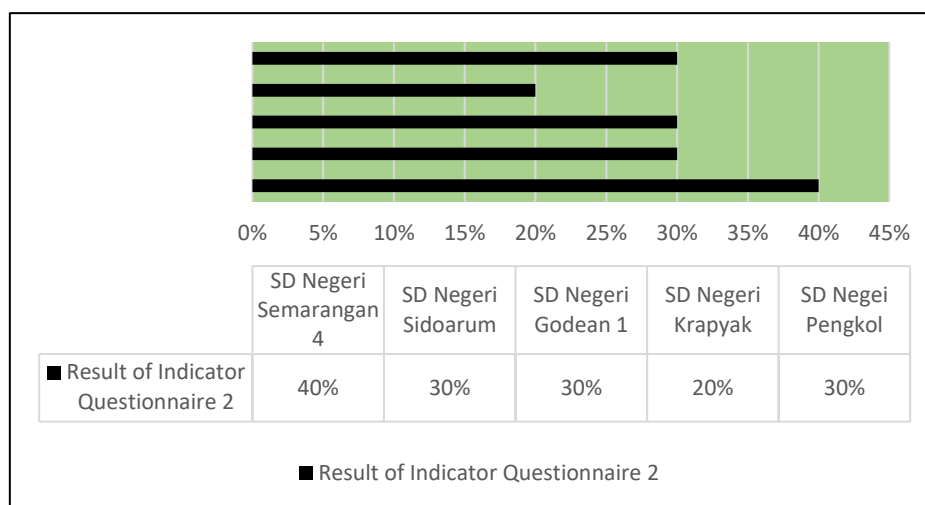


Figure 3. Indicator 2 questionnaire results

Based on the results of the questionnaire for Indicator 2, it is evident that the teaching materials currently used by teachers are considered irrelevant to students' levels of understanding. In today's fast-paced, technology-driven world, it is essential for students to develop critical, creative, and collaborative thinking skills. To support this, teaching materials must include components that promote discussion, idea sharing, and teamwork. This is particularly important in classrooms with diverse learners—students who differ in backgrounds, learning preferences, and skill levels.

Aziz and Andanty (2024) emphasize that teachers serve not only as knowledge transmitters but also as facilitators who foster inclusive and engaging learning environments. This view is supported by Fauziah, Fauziah, and Dzulkurnain (2024), who highlight that teaching materials play a significant role in developing students' skills and promoting inclusivity. Therefore, teaching resources must be

designed to be accessible to all students, ensuring they align with their cognitive development and learning styles.

Effective teaching materials should integrate auditory, visual, and kinesthetic elements to accommodate various learning modalities and make content more comprehensible. It is also crucial that teaching materials encourage student interaction, allowing learners to engage in meaningful discussions and collaborate with peers, thereby improving both communication and teamwork skills.

The relevance of teaching materials to students' cognitive levels is essential for achieving effective learning outcomes. Pancasila Education, as a foundational subject, must be delivered in a way that is not only engaging but also tailored to students' needs. This aligns with the findings of Altamimi and Ogdol (2023), who stress the importance of ensuring teaching materials are both interesting and suitable for students' levels of understanding. Similarly, Robb and Ewert (2024) argue that materials must not only match students' comprehension levels but also be visually and contextually appealing to foster student interest and engagement.

In conclusion, the development of inclusive, relevant, and engaging teaching materials is critical to deepening students' understanding of Pancasila values and encouraging them to apply those values in daily life. Addressing the challenge of aligning teaching materials with students' cognitive abilities requires serious attention and thoughtful planning by educators.

3.3 Ability to Facilitate Active Learning

The researcher also conducted interviews about active learning. Based on the results of the interview, the teacher stated that he only used teaching materials that had been available from the government. As well as package books and LKS. The teaching materials used contain written text questions and minimal use of images, so they have not accommodated active learning. Moreover, teachers said that Pancasila Education learning, which is filled with reading texts, causes boredom and boredom in students to take part in learning. Supposedly, learning is on the side of students, but teachers stated that they have difficulty designing Pancasila Education learning to be interesting. This is because it has been embedded in the minds of students that learning Pancasila Education is boring and filled with memorization. According to Lee et al., (2019) the learning environment can influence positive learning outcomes through innovative learning. The following is presented the results of the indicator 3 questionnaire distributed to grade 4 teachers in 6 elementary schools in Godean district.

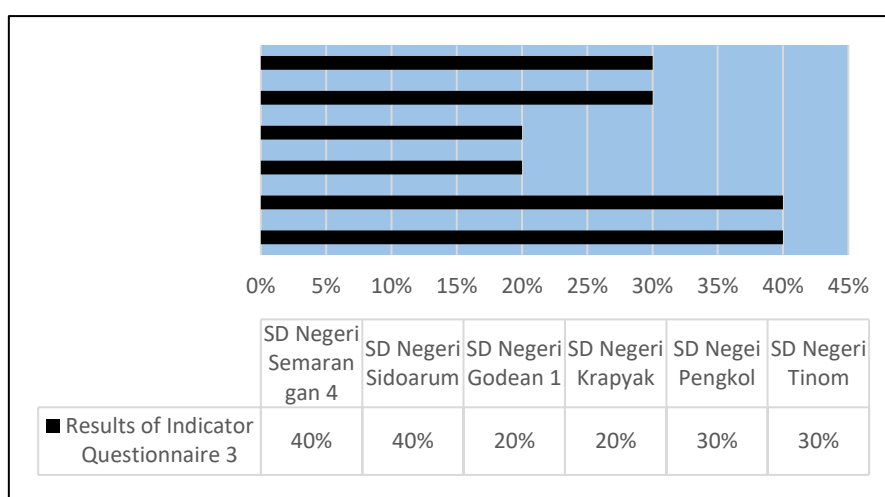


Figure 4. Indicator 3 questionnaire results

Based on the questionnaire results, teachers expressed that the current teaching materials have not effectively encouraged active student participation in the learning process. According to them, this is

largely due to the lack of activities within the materials that promote critical thinking, creativity, and collaboration—skills essential for meeting the demands of 21st-century education.

This concern aligns with the view of Kain et al. (2024), who emphasize the importance of 21st-century competencies such as communication, digital literacy, creativity, adaptability, and critical thinking in preparing students for future challenges, including integration into the workforce. Experts also highlight the evolving role of teachers as facilitators who are responsible for fostering these "4C" skills (critical thinking, creativity, collaboration, and communication) in students.

To address this gap, teachers agree that student engagement can be significantly improved through the use of interactive teaching materials. Such materials should support innovation, stimulate idea generation, and allow students to explore subject matter in greater depth. Teachers also acknowledged that existing materials fail to provide a fun and engaging learning experience, often resulting in passive student behavior during group discussions.

Ragil Nazar et al. (2024) further reinforce this point, stating that active learning requires not only the commitment and readiness of educators but also the availability of appropriate resources, including relevant and stimulating teaching materials.



Figure 5. Students in group discussions

The illustration reflects the current state of Pancasila Education during group discussions. It reveals a lack of student engagement, as evidenced by students appearing disengaged—some are talking among themselves, others are drowsy, passively participating, or not even opening the Student Worksheets (LKS) provided. This classroom environment suggests that the teaching materials in use fail to capture students' interest and are not effective in supporting an active learning atmosphere.

The overreliance on conventional LKS materials appears to contribute to this disengagement. Students perceive these materials as uninteresting, making it difficult for them to focus and participate meaningfully in the learning process. This observation aligns with Bavishi et al. (2022), who argue that students must be actively involved in discussions through engaging and interactive learning strategies. When students are not meaningfully involved in the learning process, the instruction fails to stimulate their participation and, as a result, becomes ineffective.

Monotonous and uninspiring learning experiences can easily lead to student distraction, ultimately reducing their motivation to learn and negatively impacting learning outcomes. Therefore, to foster active participation and improve student engagement, it is essential to implement dynamic, relevant, and interactive teaching materials that respond to students' interests and learning needs.



Figure 6. Learning Process

The picture above shows the teaching and learning process that occurs in the classroom. This clearly does not depict interesting and enjoyable learning, and can motivate students to participate fully in class. It can be seen that some students are sleepy, and learning seems to only utilize LKS. This condition is in accordance with the teacher's statement, which emphasizes the need for interesting teaching materials to involve students in learning and make students more relevant to learning. According to (2019), creating a learning environment that encourages students to explore ideas and interact with each other requires the support of innovative teaching materials that integrate visual, audio, and kinesthetic elements. Because it has been proven to be able to help students overcome perceptions of learning that is considered boring or irrelevant. This suggests and emphasizes the role of the teacher as a facilitator in creating a dynamic, creative, and enjoyable learning environment. The existence of an active and interesting learning environment allows students to participate more, a high curiosity in learning, and an increase and development of important skills possessed by students in the 21st century, namely critical thinking skills, collaboration, and creativity.

3.4 Flexibility for Differentiation

The results of the questionnaire show that the teaching materials currently used have not been able to adapt to the diverse learning needs of students. This is because teachers have difficulty modifying appropriate teaching materials to meet the needs of diverse students. The following are the results of the questionnaire on indicator 4.

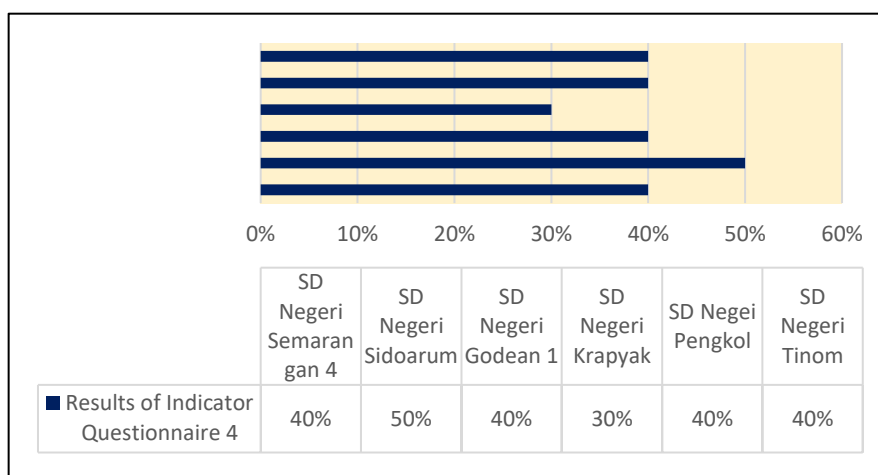


Figure. 7 Indicators Questionnaire Result 4

Teachers reported that the teaching materials currently in use lack variation in learning approaches, making them ineffective for addressing the diverse abilities of students. As a result,

students often struggle to progress through new subject matter, particularly those who require additional support. Conversely, students who have already mastered the material find themselves unchallenged and disengaged. The materials also fail to cater to students' varying interests or provide sufficient resources for learners who need extra guidance.

Offering diverse learning approaches and differentiated materials enables teachers to deliver more personalized and effective instruction. This approach allows students to learn in ways that best suit their individual preferences and needs. Differentiation is essential to ensure that every student has an equal opportunity to grow, develop, and reach their full potential.

Interview findings revealed that Pancasila Education teachers are not implementing differentiation in the classroom. All students are given the same Student Worksheet (LKS), with no adjustments made to accommodate differing learning needs. According to Sudarmin, Munirah, and Sukmawati (2024), differentiation involves modifying teaching strategies and materials to align with students' interests, abilities, and learning preferences in order to promote active learning and strengthen the internalization of Pancasila values.

However, the current reliance on text-heavy worksheets does not suit the learning styles of primary school students, who typically respond better to interactive, visual, and hands-on activities. This lack of variety results in students becoming passive, bored, and demotivated. As Gentry et al. (2024) emphasize, adapting curriculum, teaching materials, and learning processes to meet students' diverse needs is critical. To improve the effectiveness of Pancasila Education, it is necessary to implement innovative and varied instructional strategies that are tailored to students' developmental stages, making learning more meaningful, engaging, and relevant.



Figure 8. Individual Pancasila Education Learning Activities

Based on the picture, some students did not pay attention to the ongoing Pancasila Education lesson. Although some students were seen taking notes on their papers, the activity did not seem to be related to the lesson being taught. This shows that students did not actively participate in learning Pancasila Education. Furthermore, it was seen that some students were involved in conversations with their peers about subjects unrelated to Pancasila Education. This shows that students did not pay attention or participate in class. This phenomenon may indicate that the strategies or teaching materials used were not interesting enough for students or did not consider their needs and interests. Students often look for activities that they find more interesting, such as talking or doodling, when they do not feel connected to the material being taught. This situation can undoubtedly hinder learning and reduce the impact of teaching Pancasila Education.

3.5 Adapting the Characteristics and Nature of the Age of Students

Adapting teaching materials to student characteristics and the times is a crucial aspect of modern education. Interviews with teachers revealed that although technology such as projectors, Wi-Fi and Chromebooks are available at school, their use in learning is still limited. Teachers tend to only utilize technology to display videos and PowerPoint, without optimizing technology-based learning resources such as e-worksheets. One of the main obstacles faced is the lack of teacher skills in developing digital

teaching materials that are interesting and relevant to students. This reflects the gap between the availability of technology and teachers' ability to utilize it effectively. According to Nisa et al. (2020) students will have difficulty adapting to the world of work if they do not adjust to the times. Yuliwinarti et al. (2023) also emphasized that the digital era demands a generation that is skilled, resilient, and broad-minded.

The results of the questionnaire distributed to teachers support this finding, showing that the teaching materials used today are not in accordance with the interests and learning needs of students in the digital era. Teachers also assess that the existing teaching materials have not reflected the socio-cultural developments faced by students in the era of globalization. In addition, both teachers and students expressed the need for game-based e-worksheets in learning Pancasila Education. A game-based learning approach is considered to increase student engagement and make the learning process more enjoyable. In line with the opinion of Szempruch & Smyła (2020), students are more interested in learning if learning is packaged in an interesting and fun way. In addition, teachers agreed that technology-based open materials can help students understand contemporary issues and increase their interest in learning. This is in accordance with the statement of Supianto et al. (2024), which states that the Merdeka Curriculum emphasizes the use of technology.

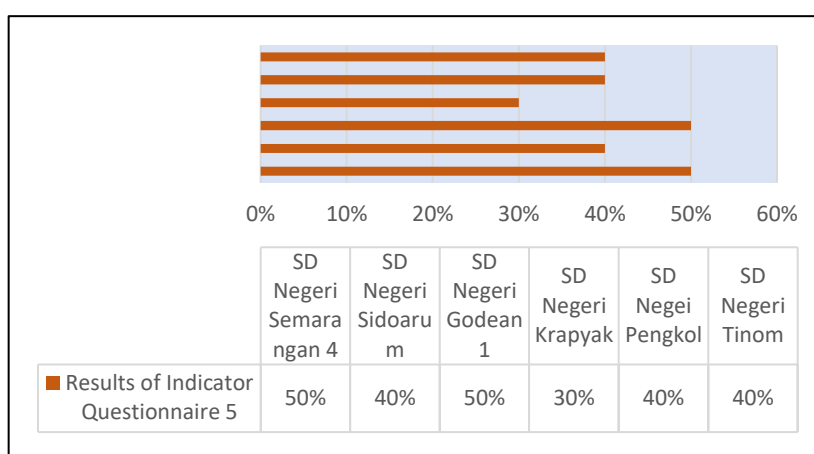


Figure 9. Indicators Questionnaire Result 5

It is clear that the teaching materials used by teachers today are not considered to be in accordance with the characteristics and nature of the students' era. So, there is a need to integrate technology into learning that is packaged in a fun form. However, to achieve this goal, teachers need to be given more in-depth training on how to use technology effectively in the teaching and learning process. This is in line with the expression (2023) that the role of teachers is important in providing support in integrating technology into learning. This training should include engineering skills and strategies on how to design teaching materials that are interactive and in accordance with the characteristics and needs of students. The obstacles that are often faced in integrating technology in learning are often caused by a lack of support from the government, school principals, collaboration between teachers, which results in the difficulty of integrating technology in learning even though technology devices are adequate (Akram, Abdelrady, Al-Adwan, & Ramzan, 2022). Therefore, it is important to collaborate between schools and the government to ensure that technology in schools is not only physically available, but also supported by competent human resources in its use. Thus, it can be concluded that the main challenge for teachers in integrating technology into learning, especially in the subject of Pancasila Education, lies in the readiness of educators to use technology and the ability of educators to design relevant teaching materials in accordance with the development of the students' times. The existence of technology is expected to be an effective tool to support learning in accordance with the natural nature of students.

4. CONCLUSION

The research conducted on six teachers in Godean sub-district, Yogyakarta, explored the analysis of the need for teaching materials in the subject of Pancasila Education. The findings show that teachers need game-based electronic student worksheets that are tailored to the characteristics and nature of the students' eras. This is in order to increase student participation in learning Pancasila education. Even though electrical devices in schools are adequate, teachers have the challenge of lacking the skills to innovate teaching materials. This research has limitations, only focusing on analyzing the needs of Pancasila Education teaching materials. Assisting teachers in developing game-free e-worksheet, researchers suggest taking technology training such as canva and educational *games*. In summary, the guidelines that can be used by teachers to develop a game-based e-worksheet include, identifying learning objectives with student characteristics and materials, using simple *games* and making it easier for teachers to assess such as *wordwall*, *quiziiz*, *educaplay* and *Kahoot*.

REFERENCES

- Agra, G., Soares, N., Simplício, P., Lopes, M. M., Melo, M. Das Gracas, & Lima Da Nóbrega, M. (2019). Analysis Of The Concept Of Meaningful Learning In Light Of The Ausubel's Theory. *Revista Brasileira De Enfermagem*, 72(1), 248–255.
- Ainley, M. (2017). Interest: Knowns, Unknowns, And Basic Processes. In P. A. O'Keefe & J. M. H. (Eds.) (Eds.), *The Science Of Interest* (Pp. 3–24). Springer International Publishing. <https://doi.org/10.1007/978-3-319-55509-6>
- Akram, H., Abdelrady, A. H., Al-Adwan, A. S., & Ramzan, M. (2022). Teachers' Perceptions Of Technology Integration In Teaching-Learning Practices: A Systematic Review. *Frontiers In Psychology*, 13(June), 1–9. <https://doi.org/10.3389/fpsyg.2022.920317>
- Altamimi, M. O., & Ogdol, R. (2023). The Effects Of Shared Reading Approach On Improving Students' Comprehension. *International Journal Of Research In Education And Science*, 9(2), 308–328. <https://doi.org/10.46328/ijres.3047>
- Arifin, M. Z., & Setiawan, A. (2020). Strategi Belajar Dan Mengajar Guru Pada Abad 21. *Indonesian Journal Of Instructional Technology*, 1(2), 37–46. Retrieved From <http://journal.kurasinstitit.com/index.php/ijit>
- Aziz, K. I. H., & Andanty, F. D. (2024). Differentiated Learning Instruction In The Cultural Studies Classroom: EFL Students' Experiences. *Journal Of English For Academic And Specific Purposes (JEASP)*, 7(1), 65–75. <https://doi.org/10.18860/jeasp.v7i1.26781>
- Bavishi, P., Birnhak, A., Gaughan, J., Mitchell-Williams, J., & Phadtare, S. (2022). Active Learning: A Shift From Passive Learning To Student Engagement Improves Understanding And Contextualization Of Nutrition And Community Health. *Education Sciences*, 12(7). <https://doi.org/10.3390/educsci12070430>
- Borihantanachot, O., Mangkhang, C., Phuweenaphan, P., & Nantasri, C. (2024). Developing Learning Innovation Of Digital Open Badge In Social Studies To Enhance Citizenship Characteristics Of Secondary School Students. *Journal Of Curriculum And Teaching*, 13(4), 55–70. <https://doi.org/10.5430/jct.v13n4p55>
- Creswell, J. W., & Creswell, D. J. (2017). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches (5th Ed.)*. SAGE Publications.
- Creswell, John W., & Creswell, J. D. (2018). Mixed Methods Procedures. In *Research Defign: Qualitative, Quantitative, And Mixed M Ethods Approaches*.
- Creswell, John Ward. (1998). *Qualitative Inquiry And Research Design: Choosing Among Five Tradition*. London: SAGE Publications.
- Denzin, N. K., & Lincoln, Y. S. (2018). *The SAGE Handbook Of Qualitative Research (5th Ed.)*. SAGE Publications.

- Fauziah, M., Fauziah, Y., & Dzulkurnain, M. I. (2024). Development Of Lesson Study-Based Learning Materials To Enhance Reading Skills Of Elementary School Students. *Multidisciplinary Science Journal*, 7(1). <https://doi.org/10.31893/Multiscience.2025062>
- Febriansyah, F., Herlina, K., Nyeneng, I. D. P., & Abdurrahman, A. (2021). Developing Electronic Student Worksheet (E-Worksheet) Based Project Using Fliphtml5 To Stimulate Science Process Skills During The Covid-19 Pandemic. *INSECTA: Integrative Science Education And Teaching Activity Journal*, 2(1), 59–73. <https://doi.org/10.21154/Insecta.V2i1.2555>
- Ferary, D. (2021). On Ki Hadjar Dewantara's Philosophy Of Education. *Nordic Journal Of Comparative And International Education*, 5(2), 65–78. <https://doi.org/10.7577/Njcie.4156>
- Gentry, H., Patton, R. M., Lindell, D., & Ludwick, R. (2024). Civic Knowledge And Self-Reported Political Astuteness Of Academic Nurse Educators In The United States. *Journal Of Professional Nursing*, 54(June), 85–91. <https://doi.org/10.1016/J.Profnurs.2024.06.001>
- Hajj, M. El, & Harb, H. (2023). Rethinking Education: An In-Depth Examination Of Modern Technologies And Pedagogic Recommendations. *IAFOR Journal Of Education*, 11(2), 97–113. <https://doi.org/10.22492/Ije.11.2.05>
- Hamzah, N., Zakaria, N., Ariffin, A., & Rubani, S. N. K. (2024). The Effectiveness Of Collaborative Learning In Improving Higher Level Thinking Skills And Reflective Skills. *Journal Of Advanced Research In Applied Sciences And Engineering Technology*, 42(1), 191–198. <https://doi.org/10.37934/Araset.42.1.191198>
- Indriyani, D., Komalasari, K., Malihah, E., & Fitriyani, S. (2023). Promoting Civic Engagement Among Students In The Preservation Of Local Culture During A Time Of Disruption. *Jurnal Civics: Media Kajian Kewarganegaraan*, 20(1), 104–113. <https://doi.org/10.21831/Jc.V20i1.58790>
- Kain, C., Koschmieder, C., Matischek-Jauk, M., & Bergner, S. (2024). Mapping The Landscape: A Scoping Review Of 21st Century Skills Literature In Secondary Education. *Teaching And Teacher Education*, 151(August), 104739. <https://doi.org/10.1016/J.Tate.2024.104739>
- Lee, K., Dabelko-Schoeny, H., Roush, B., Craighead, S., & Bronson, D. (2019). Technology-Enhanced Active Learning Classrooms: New Directions For Social Work Education. *Journal Of Social Work Education*, 55(2), 294–305. <https://doi.org/10.1080/10437797.2018.1540322>
- Liantori, Beni, & Sujarwo, S. (2023). Citizenship Education In Elementary Schools: Factors Influencing Classroom Participations Of College Students. *Jurnal Pendidikan Progresif*, 13(3), 1410–1421. <https://doi.org/10.23960/Jpp.V13.I3.202338>
- Manora, H. (2019). Peranan Kepala Sekolah Dalam Meningkatkan Mutu Pendidikan Hecks. *Edification Vol.*, 1(1).
- Marcon, M. L., & Sehnem, S. (2024). Heading Towards Sustainability: An Exploration Of Circular Economy Teaching Methodologies Through Games, Online Platforms, And Digital Innovations. *International Journal Of Management Education*, 22(3), 100995. <https://doi.org/10.1016/J.Ijme.2024.100995>
- Murdiyanto, T., Wijayanti, D. A., Maula, N. F., & Sovia, A. (2023). "In-Math" As A Website-Based E-Learning Media In The Endemic Era. *International Journal Of Information And Education Technology*, 13(1), 1–9. <https://doi.org/10.18178/Ijiet.2023.13.1.1773>
- Nalipay, M. J. N., Huang, B., Jong, M. S. Y., Chai, C. S., & King, R. B. (2024). Promoting STEM Learning Perseverance Through Recognizing Communal Goals: Understanding The Impact Of Empathy And Citizenship. *International Journal Of STEM Education*, 11(1). <https://doi.org/10.1186/S40594-024-00471-W>
- Nisa, A. F., Prasetyo, Z. K., & Istiningsih. (2020). The Teachings Of Ki Hadjar Dewantara In Improving The Character Of Elementary School Students In The Revolution Of Industry 4.0 Era*. *International Conference On Educational Research And Innovation (ICERI, 401(Iceri 2019))*, 49–56. <https://doi.org/10.2991/Assehr.K.200204.010>
- Nurhayati, Suwartono, T., Saripudin, A., & Juwita, N. (2022). Applying Web-Based Technology In Developing Student Worksheets On Writing Local Culture Content Drama Script. *Theory And*

- Practice In Language Studies*, 12(2), 263–273. <https://doi.org/10.17507/Tpls.1202.07>
- Nurizka, R., Irawan, R., Sakti, S. A., & Hidayat, L. (2020). Internalization Of School Culture To Foster Awareness Of Pancasila Values In Elementary School Students. *Universal Journal Of Educational Research*, 8(10), 4818–4825. <https://doi.org/10.13189/Ujer.2020.081053>
- Oktaviani, L., Aulia, U. Y., Murdiono, M., & Suharno, S. (2024). Strengthening The Critical Thinking Skill Through The Six-Hat Thinking Model In Pancasila Education. *Journal Of Education And Learning (Edulearn)*, 18(4), 1272–1278. <https://doi.org/10.11591/edulearn.V18i4.21202>
- Phillips, L. G., De Rivera, L., & Harris, P. (2023). Platforms And Possibilities: A Scoping Study Of Curriculum Resources For Global Citizenship Education. *Australian Educational Researcher*, 51(4), 1503–1523. <https://doi.org/10.1007/S13384-023-00651-7>
- Ragil Nazar, E., Nasir, N., Bagea, I., & Abubakar. (2024). Peluang Dan Tantangan Implementasi Kurikulum Merdeka Belajar: Sebuah Studi Interview Di Sekolah Penggerak Dan Mandiri Berubah. *Kelola: Jurnal Manajemen Pendidikan*, 11(1), 18–31. <https://doi.org/10.24246/J.Jk.2024.V11.I1.P18-31>
- Robb, T. N., & Ewert, D. (2024). Classroom-Based Extensive Reading: A Review Of Recent Research. *Language Teaching*, 1–30. <https://doi.org/10.1017/S0261444823000319>
- Robiasih, H., Setiawan, A., & Dardjito, H. (2021). Character Education Strengthening Model During Learning From Home: Ki Hajar Dewantara's Scaffolding Concept. *Jurnal Penelitian Dan Evaluasi Pendidikan*, 25(1), 25–34. <https://doi.org/10.21831/Pep.V25i1.36385>
- Ruyadi, Y., & Dahliyana, A. (2022). Basic Competency Of Pancasila Ideological Education For Elementary School In Indonesia. *Cakrawala Pendidikan*, 41(3), 703–718. <https://doi.org/10.21831/Cp.V41i3.45918>
- Ruyadi, Y., Hadianto, D., Nugraha, D. M., Praja, W. N., Dahliyana, A., & Supriyono, S. (2023). Challenges And Strengthening The Role Of Pancasila Ideology In The Reform Era Through Increasing Literacy. *Jurnal Civics: Media Kajian Kewarganegaraan*, 20(2), 313–321. <https://doi.org/10.21831/Jc.V20i2.63991>
- Santos, M. J. S., Carlos, V., & Moreira, A. A. (2023). Building The Bridge To A Participatory Citizenship: Curricular Integration Of Communal Environmental Issues In School Projects Supported By The Internet Of Things. *Sensors*, 23(6). <https://doi.org/10.3390/S23063070>
- Sekarsari, P., Sukriono, D., & Dayati, U. (2023). Pengembangan Buku Ajar Berbasis Quantum Teaching Berbantuan Augmented Reality Materi Keberagaman Sebagai Identitas Nasional Bangsa Indonesia. *Jurnal Ilmiah Pendidikan Pancasila Dan Kewarganegaraan*, 8(1), 71. <https://doi.org/10.17977/Um019v8i1p71-81>
- Sekhar, A. (2019). How Class Group Discussion And Positive Feedback Increases Student Engagement And Learning In International Postgraduate Students. *25th SINGAPORE International Conference On Marketing, Economics, Education & Interdisciplinary Studies (MEEIS-19)*. <https://doi.org/10.17758/Eirai8.Ed1219119>
- Slameto. (2015). *Belajar Dan Faktor-Faktor Yang Mempengaruhi*. Jakarta: Rineka Cipta.
- Sudarmin, Munirah, & Sukmawati. (2024). Development Of A Pancasila Education Teaching Module With Integration Of Mattabe' Culture For Strengthening Student Character Values. *Journal Of Ecohumanism*, 3(6), 1743–1753. <https://doi.org/10.62754/JoE.V3i6.4136>
- Sunarso, Hidayah, Y., Firmansyah, A., & Arpanudin, I. (2024). *Content Analysis Of Pancasila And Civic Education Curriculum At The Junior High School Level In Indonesia: Philosophical Perspectives In Affirming Civic Identity*. 21(1), 98–106.
- Suparlan, H. (2016). Filsafat Pendidikan Ki Hadjar Dewantara Dan Sumbangannya Bagi Pendidikan Indonesia. *Jurnal Filsafat*, 25(1), 56. <https://doi.org/10.22146/Jf.12614>
- Suyato, S. (2023). Engineering The Development Of Democratic Citizenship Education Curriculum In The Global Era: A Few Perspectives From Theoretical Frameworks. *Jurnal Civics: Media Kajian Kewarganegaraan*, 20(1), 26–35. <https://doi.org/10.21831/Jc.V20i1.59915>
- Tabrani, Z. A., Walidin, W., Idris, S., & Huda, M. (2024). Pancasila As The Core Value For Character

- Building In Islamic Higher Education Institutions. *Jurnal Ilmiah Peuradeun*, 12(2), 565–592. <https://doi.org/10.26811/Peuradeun.V12i2.1212>
- Triyanto, & Fadhilah, N. (2018). Jurnal Civics : Media Kajian Kewarganegaraan Pengalaman Pembelajaran. *Jurnal Civics: Media Kajian Kewarganegaraan*, 15(1), 170–179.
- Widana, I. W., Sumandya, I. W., & Citrawan, I. W. (2023). The Special Education Teachers' Ability To Develop An Integrated Learning Evaluation Of Pancasila Student Profiles Based On Local Wisdom For Special Needs Students In Indonesia. *Kasetsart Journal Of Social Sciences*, 44(2), 527–536. <https://doi.org/10.34044/J.Kjss.2023.44.2.23>
- Wijayanti, D. M., Pramono, S. E., & Handoyo, E. (2024). Principal Decision-Making In Implementing Merdeka Curriculum In Elementary Schools: A Review. *International Journal Of Evaluation And Research In Education*, 13(6), 4365–4373. <https://doi.org/10.11591/Ijere.V13i6.28940>
- Winarni, L. N. (2020). The Existence Of Pancasila In Facing Threats Against Diversity. *Jurnal IUS Kajian Hukum Dan Keadilan*, 8(1), 89–96. <https://doi.org/10.29303/Ius.V8i1.749>
- Wuryandani, W., & Herwin. (2021). Cypriot Journal Of Educational Civics In Elementary School Students. *Cypriot Journal Of Educational Sciences*, 16(2), 627–640.
- Yuliwinarti, E. M., Hendratno, & Istiq'faroh, N. (2023). Implementasi Pendidikan Karakter Ki Hadjar Dewantara Di Sekolah Dasar Kelas Awal Pada Era Digital. *Journal Of Contemporary Issues In Primary Education*, 1(2), 68–80. <https://doi.org/10.61476/Zdgbsb94>