

# STUDENT'S INITIAL ABILITY PROFILE IN DIFFERENTIATION LEARNING AT ELEMENTARY SCHOOL

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## Abstract

This study aims to identify the initial ability profile of 3rd-grade learners at UPT SD Negeri 18 Gresik, focusing on Pancasila literacy and cognitive skills. Data were collected through diagnostic tests, classroom observations, and student questionnaires. Results showed that 51.9% of students had moderate comprehension, while 25.9% demonstrated low understanding. Observations on October 14th, 21st, and 23rd, 2024, revealed that only 18.5% of students actively participated and showed critical thinking skills, whereas the majority still needed guidance. Questionnaire responses indicated that 44% of students felt confident, yet still required instructional support. These findings highlight the need for tailored learning strategies through differentiated instruction to address the diverse initial abilities of students. This research thus provides a solid foundation for developing differentiated LKPD to enhance students' understanding and application of Pancasila values.

Keywords: Differentiated Learning; Initial Ability Profile; Pancasila Literacy

### Abstrak

Penelitian ini bertujuan untuk mengidentifikasi profil kemampuan awal peserta didik kelas 3 UPT SD Negeri 18 Gresik dengan fokus pada literasi Pancasila dan keterampilan kognitif. Data dikumpulkan melalui tes diagnostik, observasi kelas, dan angket siswa. Hasil penelitian menunjukkan bahwa 51,9% siswa memiliki pemahaman pada tingkat sedang, sementara 25,9% menunjukkan pemahaman yang rendah. Observasi yang dilakukan pada tanggal 14, 21, dan 23 Oktober 2024 mengungkapkan bahwa hanya 18,5% siswa yang aktif berpartisipasi dan menunjukkan kemampuan berpikir kritis, sedangkan sebagian besar masih memerlukan bimbingan. Hasil angket menunjukkan bahwa 44% siswa merasa percaya diri, namun tetap membutuhkan dukungan instruksional. Temuan ini menekankan perlunya strategi pembelajaran yang disesuaikan melalui pendekatan diferensiasi untuk mengakomodasi keberagaman kemampuan awal siswa. Penelitian ini memberikan dasar yang kuat untuk mengembangkan LKPD berdiferensiasi guna meningkatkan pemahaman dan penerapan nilai-nilai Pancasila oleh peserta didik.

Kata Kunci: Pembelajaran Berdiferensiasi; Profil Kemampuan Awal; Literasi Pancasila

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## Introduction

Education is a nation's most valuable investment. It plays a crucial role in shaping the quality of future generations by facilitating the development of human potential, character, intelligence, and skills (Pristiwanti, 2022). To achieve educational goals, active collaboration among key stakeholders—including the government, educators, and the community—is essential (Puspita et al., 2022). These goals are in line with the 1945 Constitution of the Republic of Indonesia, which asserts the right of every citizen to receive quality education to enlighten national life (Hidayat, 2021).

To realize these goals, the national curriculum functions as a foundational guideline that outlines learning standards, content, and strategies aligned with Indonesia's educational aspirations Tunas, K. O., & Pangkey, R. D. H. (2024). As noted by Dhomiri (2023), the curriculum plays a strategic role in directing learning toward achieving national objectives. Among the pedagogical models endorsed by the current curriculum, differentiated instruction has emerged as an effective strategy to accommodate the diverse learning needs of students.

Differentiated learning is an innovative approach that allows educators to tailor instruction based on learners' needs, interests, and initial abilities (Yulaichah, Mariana, & Puspita, 2024; Widiastuti et al., 2022). It encourages flexible learning pathways and promotes student engagement by aligning the learning process with each learner's unique profile (Herwina, 2021; Fitriani, 2023). Learning becomes more meaningful when educators act as facilitators who respond to individual differences in readiness and motivation (Istiqfaroh, 2021). As Pane (2022) emphasizes, every learner is unique, and teaching practices should be grounded in this understanding.

The effectiveness of differentiated instruction is supported by various studies showing its positive impact on academic outcomes. Supartiningsih (2023) demonstrated that differentiation fosters a responsive classroom environment that supports each student's learning process. Hodges and McTigue (2014) found that students exposed to differentiated instruction experienced broader and deeper learning. Similarly, Alfarisi (2024) highlighted that differentiation improves cognitive performance when instruction is aligned with learners' actual needs. A key initial step in implementing this approach is conducting an accurate mapping of students' initial abilities.

Initial ability refers to students' prior knowledge, cognitive readiness, and capacity to understand new material (Tomlinson, 2021). Understanding these aspects helps teachers create a supportive and challenging learning environment (Wahyuningsari et al., 2022). Moreover, a comprehensive profile of students' initial ability enables educators to design effective learning strategies that maximize academic outcomes (Farid et al., 2022). Without this step, instructional practices risk becoming misaligned with learner needs.

In reality, however, many elementary schools still fail to apply differentiated instruction effectively, despite evidence supporting its benefits (Yani, 2023). This is often due to constraints such as limited time, inadequate assessment tools, and a lack of awareness regarding the importance of initial ability mapping. Consequently, teaching tends to be uniform, neglecting students' diverse learning profiles.

Preliminary observations at UPT SD Negeri 18 Gresik conducted on October 14, 21, and 23, 2024, revealed that differentiation principles had not been implemented in the classroom. Teachers had not previously assessed students' initial abilities, and as a result, instructional materials did not align with learners' actual needs. These findings emphasize the urgency of conducting diagnostic assessments to inform the development of appropriate learning strategies. This study aims to analyze the initial ability profiles of third-grade students at UPT SD Negeri 18 Gresik in terms of Pancasila literacy and cognitive readiness. Using a qualitative-descriptive approach supported by diagnostic testing, classroom observation, and learner questionnaires, this research seeks to provide a comprehensive depiction of learners' initial competencies. The findings are expected to guide the development of differentiated student worksheets (LKPD) that enhance students' ability to internalize and apply Pancasila values effectively.

#### **Research Method**

This study employed a quantitative descriptive design to objectively identify students' initial ability profiles in Pancasila literacy and cognitive readiness. This approach was chosen

for its capacity to generate numerical data that accurately represent student performance, enabling clear categorization based on observed phenomena (Creswell & Creswell, 2018).

The research was conducted at UPT SD Negeri 18 Gresik, involving all 27 third-grade students as research participants. The primary objective was to assess students' levels of understanding and readiness to engage with Pancasila-based content using three instruments: a diagnostic test, a classroom observation checklist, and a student questionnaire. Each instrument was designed to collect reliable and valid data related to students' cognitive, behavioral, and affective characteristics.

	Table 1. Data type and Data Collection Technique						
No.	Data Type	Instrument	Data Collection	Explanation			
			Technique				
1.	Cognitive	Multiple-	Written test	Based on the third-grade			
	Ability	choice and	diagnostic	curriculum; includes LOTS and			
		short answers		HOTS indicators			
2.	Learning	Structured	Direct classroom	Evaluates student participation and			
	Behavior	observation	observation	critical thinking during lessons			
		sheet					
3.	Affective	Likert-scale	Self-administered	Measures student confidence in			
	Domain	questionnaire	survey	understanding and applying			
		1	J	Pancasila values			

The diagnostic test consisted of 25 items—15 multiple-choice and 10 short-answer

questions-targeting both Lower-Order Thinking Skills (LOTS) and Higher-Order Thinking Skills (HOTS). These items were constructed based on indicators derived from the national third-grade curriculum for civic education. To ensure content validity, the instrument underwent expert validation by two education professionals specializing in Pancasila literacy and elementary assessment. Each item was reviewed for relevance, clarity, and alignment with learning objectives. Revisions were made according to expert suggestions, and a CVI (Content Validity Index) of 0.92 was obtained, indicating strong validity.

The test was administered in a controlled classroom setting under researcher supervision to ensure the integrity of student responses. Each student was allocated 60 minutes to complete the test. The results were then analyzed using descriptive statistics to categorize students into one of three proficiency levels.

Classroom observations were conducted during three Pancasila learning sessions in October 2024. The observation instrument focused on indicators such as active participation, conceptual understanding, and evidence of critical thinking. Observations were conducted by the researcher, and findings were cross-validated with field notes to reduce observer bias.

The questionnaire was designed using a five-point Likert scale, assessing students' selfconfidence, perceived understanding, and ability to apply Pancasila values. Items were constructed in simple, age-appropriate language and piloted with a small sample for clarity and internal consistency. The resulting Cronbach's Alpha score was 0.87, indicating good reliability.

Data from all instruments were analyzed using descriptive statistics, allowing students' initial abilities to be categorized into high, medium, and low based on test scores, observation patterns, and questionnaire responses.

480 Sari-1, Puspita-2, Setyowati-3, Initial Ability Profile of Students...

Category	Score range	Description
High	80 - 100	Demonstrates full comprehension and critical application of Pancasila values; actively engages in class
Medium	60 - 79	Understands basic concepts but requires guidance for implementation; moderate engagement
Low	< 60	Struggles with understanding and application; passive participation and limited critical thinking

This classification served as the basis for constructing differentiated learning strategies tailored to students' actual capabilities.

#### **Result and Discussion**

This study aimed to identify the initial ability profiles of third-grade students at UPT SD Negeri 18 Gresik, focusing on Pancasila literacy and cognitive ability. Data were collected through three complementary instruments: a diagnostic test, classroom observations, and student questionnaires. The findings from each instrument were analyzed and triangulated to classify students' initial abilities into three categories: high, medium, and low.

The diagnostic test assessed students' cognitive understanding of Pancasila values. The results are presented in Table 3.

Score category	Score range	Amount of student	Percentage %
High	80 - 100	6	22.2 %
Medium	60 - 79	14	51.9 %
Low	< 60	7	25.9 %
Total	-	27	100 %

Table 3. Diagnostic test result of 3rd grade learners

The majority of students (51.9%) scored in the medium category, while 25.9% fell into the low category. Only 22.2% demonstrated high levels of understanding. This distribution suggests a systemic gap in foundational comprehension of Pancasila values, indicating that the majority of students require more targeted and supportive learning strategies to deepen their understanding. These findings are consistent with Rachmadhani's (2023) conclusion that differentiated instruction is necessary to address individual variations in student readiness.

Observation data provide insight into student behavior and engagement during Pancasila education classes. As shown in Figure 1, only 18.5% of students demonstrated active participation and critical thinking, while 48.1% engaged moderately and required guidance. The remaining 33.3% appeared passive and showed difficulty in grasping lesson concepts. This suggests that while a portion of students is cognitively capable, many struggle to actively process and apply what they learn. These findings resonate with Herwina (2021) and Yulaichah et al. (2024), who emphasized that learners require learning environments tailored to their initial abilities to achieve optimal engagement and comprehension.

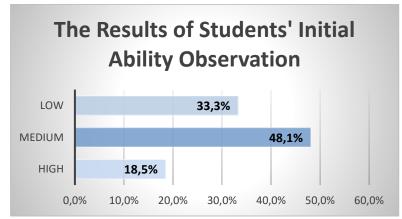


Figure 1. Results Of Students Initial Ability Observation

Student perceptions of their own abilities were gathered through a Likert-based questionnaire. Figure 2 summarizes the results: 26% of students reported high confidence in understanding Pancasila values, 44% indicated moderate confidence, and 30% expressed low self-confidence.

These varying levels of confidence reflect more than cognitive gaps—they also point to affective and motivational disparities among learners. According to Hodges & McTigue (2014), students are more likely to succeed in learning environments where their psychological readiness is acknowledged and supported. Thus, the high percentage of students reporting moderate to low confidence underscores the need for personalized learning strategies that also address affective factors.

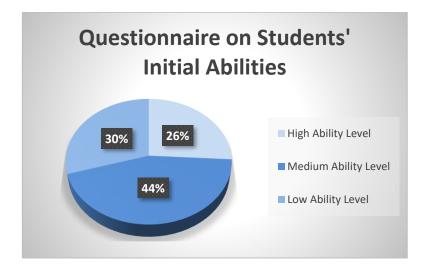


Figure 2. 3rd grade students' initial ability questionnaire result of UPT SD Negeri 18 Gresik

When triangulated, data from the diagnostic test, classroom observation, and student questionnaire consistently indicate that the majority of third-grade students fall into the medium to low ability categories. This convergence across instruments not only confirms the validity of the data but also reinforces the urgency for implementing differentiated instruction as a responsive and inclusive pedagogical approach. As emphasized by Tomlinson (2021), differentiation allows teachers to address the diverse starting points of learners by providing tailored academic challenges and emotional scaffolding.

The findings further support the argument presented by Putra (2024), who noted that uniform instructional strategies often lead to disengagement, particularly when students are expected to internalize complex moral and civic values—such as those found in Pancasila—without adequate alignment to their actual readiness. In the present study, low levels of behavioral engagement and student confidence suggest a mismatch between the curriculum and the learners' current capacities.

Moreover, the cognitive dimension of the findings highlights that structured and targeted interventions are needed, as most students show incomplete mastery of foundational concepts. This is echoed in the behavioral evidence, which indicates that active participation is limited to a small subset of learners. From an affective standpoint, the disparities in self-confidence underscore the need to incorporate motivational strategies within the instructional design.

Taken together, these results strongly advocate for the development of differentiated student worksheets (LKPD), specifically designed to meet the initial ability profiles of learners. Within the context of existing research and theory, these findings contribute to a growing body of empirical evidence affirming that differentiated instruction is not simply advantageous but fundamentally necessary for promoting meaningful, equitable, and effective learning experiences in diverse elementary school settings.

### Conclusion

This study revealed that the majority of third-grade students at UPT SD Negeri 18 Gresik demonstrated varying levels of initial ability in Pancasila literacy and cognitive readiness, with most falling into the medium and low categories. The consistency across diagnostic tests, classroom observations, and student questionnaires indicates that students require differentiated support not only in content comprehension but also in engagement and confidence-building. These findings emphasize the necessity of implementing differentiated instructional strategies, particularly through the development of student worksheets (LKPD) that are tailored to learners' initial ability profiles. By aligning learning materials with students' readiness levels, educators can foster more inclusive, responsive, and effective learning environments—especially in the context of character education like Pancasila. For educational practice, it is recommended that schools adopt more structured diagnostic tools to accurately assess students' starting points at the beginning of instruction. Additionally, professional development programs should prioritize training teachers in the design and implementation of differentiated learning, including strategies to address cognitive, behavioral, and affective learner differences. Future research should explore the long-term impact of differentiation-based interventions on student achievement and character development, and further refine tools for profiling student readiness across diverse educational settings.

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