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An Analysis of Teachers' Competence in Applying Instructional Variations in IPAS Learning: A Study in Grade V of SDN 004 Domo, Kampar Regency

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ABSTRACT
This study aims to analyze teachers' skills in applying variations in IPAS (Integrated Science and Social Studies) learning in Grade V of SDN 004 Domo, Kampar Regency, focusing on teaching style variations, the use of media, and teacher-student interaction patterns. The research employed a descriptive qualitative method with data collected through observation, interviews, and documentation. Data were analyzed using Miles and Huberman's interactive model, including data collection, reduction, display, and conclusion drawing. The findings reveal that teachers applied variations in teaching style, yet the use of media and interaction patterns remained limited. The study concludes that variations in teaching practices positively influenced student engagement, although they were not fully optimized across all aspects. The implication highlights the need for continuous professional development programs to enhance teachers' creativity and consistency in implementing varied learning strategies in line with the demands of the Merdeka Curriculum.

Keywords : Teacher Skills, Learning Variation, IPAS, Merdeka Curriculum

INTRODUCTION
Education is a planned process aimed at developing students' potential optimally through meaningful learning activities (Risfina et al., 2023). Law No. 20 of 2003 on the National Education System emphasizes that education is a conscious and planned effort to create a learning environment and learning process in which students actively develop their potential. Thus, the quality of education is largely determined by the quality of the learning process that takes place in schools.

Teachers, as the spearhead of education, play a strategic role in creating effective learning (Wulandari & Saputri, 2024). According to Aida (2019), teachers are not only responsible as instructors but also serve as mentors, facilitators, and evaluators who guide students toward achieving learning objectives. One crucial skill that influences the success of teaching is the ability to implement variation in instruction, which refers to the capacity to employ different methods, teaching styles, media, and interaction patterns to prevent student boredom and to enhance learning motivation (Susanti & Janattaka, 2020). Proper implementation of instructional variation can increase student engagement, foster creativity, and strengthen conceptual understanding (Fikri et al., 2023).

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In the context of IPAS (Integrated Science and Social Studies) learning in elementary schools, variation in instruction is particularly important due to the integrative nature of the subject matter, which combines elements of natural and social sciences. Andreani & Gunansyah (2023) state that IPAS aims to develop students' scientific and social literacy, nurture curiosity, and connect knowledge with everyday life. Therefore, the use of varied teaching strategies enables students to understand concepts in a more contextual manner.

However, preliminary observations conducted at SDN 004 Domo on February 5, 2025, revealed that teachers' skills in implementing instructional variation remain suboptimal. Teachers tended to rely on repetitive lecturing with limited use of media and teaching styles, resulting in a monotonous classroom atmosphere. Although facilities such as a library and a projector were available, their use was not maximized. This finding aligns with Hsb et al. (2024), who reported that a lack of instructional variation can decrease student motivation and participation.

On the other hand, the Merdeka Curriculum provides teachers with the flexibility to select learning methods and strategies that suit the characteristics of their students (Hasanah et al., 2023). This implies that the ability to implement variation in instruction is key to creating enjoyable, interactive, and relevant learning experiences. Previous studies Susanti & Janattaka (2020); Lestari & Fitriani (2024) have confirmed that varied instruction positively influences students' attention and participation. Nevertheless, research focusing on teachers' skills in implementing instructional variation within the context of IPAS learning in elementary schools, particularly under the Merdeka Curriculum, remains limited. This constitutes the research gap addressed in this study.

Furthermore, instructional variation affects not only student motivation but also the quality of classroom interaction. Harahap & Putri (2022) highlight that diverse teacher-student interactions can foster students' self-confidence, communication skills, and sense of responsibility in learning. Similarly, Ningsih et al. (2023) found that implementing small-group discussions with varied strategies significantly increased the participation of previously passive students. These findings underscore that variation in teaching style, media, and interaction forms a fundamental basis for creating active and meaningful IPAS learning.

In addition, the implementation of the Merdeka Curriculum requires teachers to be more creative and adaptive in designing varied instructional approaches. Teachers are expected not only to master subject content but also to design learning strategies that align with students' needs, characteristics, and interests. Thus, research on teachers' skills in applying instructional variation is highly relevant, as it provides empirical insights into the extent to which teachers have adapted to the demands of the new curriculum.

RESEARCH METHOD

This study employed a descriptive qualitative method (Sugiyono, 2020). This approach was chosen because it allows for an in-depth description of teachers' skills in implementing instructional variations in IPAS (Integrated Science and Social Studies) learning based on real classroom conditions. The method emphasizes a holistic understanding of phenomena through the collection of data in the form of words, actions, and relevant documents. Descriptive qualitative research aims to obtain a factual and systematic picture of the research object (Moleong, 2021). The focus of this study was directed at variations in teaching style, the use of learning media, and the interaction patterns between teachers and students in IPAS learning in Grade V at SDN 004 Domo.

The research was conducted at SDN 004 Domo, located in Kampar Kiri District, Kampar Regency. The site was selected purposively, considering that the school presented issues

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regarding teachers' instructional variation skills, which were identified during preliminary observation. Furthermore, the school was considered strategic due to its relatively adequate learning facilities, such as a library and a projector, to support the study. The research was carried out in July 2025 and consisted of three stages: (1) preparation, including preliminary observation and instrument development; (2) implementation, which involved data collection through observation, interviews, and documentation; and (3) data analysis and report writing. The subjects of this study consisted of the homeroom teacher of Grade V as the main informant and five Grade V students as supporting informants. The teacher was selected because of direct involvement in IPAS instruction, while students were selected to provide perspectives from the recipients of instruction. The data sources were divided into two categories: primary and secondary. Primary data were obtained through interviews, observations, and direct documentation of learning activities, while secondary data were drawn from school documents, teaching instruments, students' evaluation results, and other relevant records.

Data were collected using three main techniques: (1) observation, to examine the application of teaching style variations, use of media, and teacher–student interactions; (2) interviews, to explore deeper insights into teachers' strategies, experiences, and challenges; and (3) documentation, to complement the data through a review of teaching instruments, student evaluation results, and school records. The research instruments included: Observation Sheets, Interview Guidelines and Document Review Sheets.

The validity of the data was ensured through triangulation techniques, namely source triangulation (teachers, students, and documents), technique triangulation (observation, interview, and documentation), and time triangulation (observations across different sessions). These procedures were intended to guarantee data consistency, credibility, and validity. The flow of the Miles & Huberman model of data analysis can be illustrated as follows:

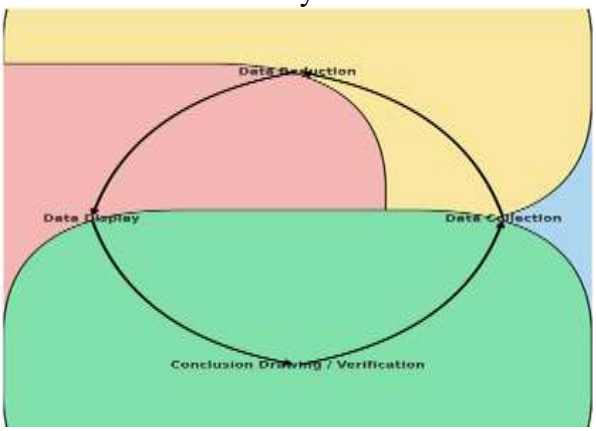

Figure 1. Miles & Huberman Data Analysis Model (Interactive Cycle)

The Miles & Huberman data analysis model consists of four main components: data collection, data reduction, data display, and conclusion drawing/verification (Faigawati et al., 2023). These components operate interactively and iteratively, forming a recurring cycle until valid and consistent conclusions are obtained.

RESULTS AND DISCUSSION

This study aims to describe teachers' skills in implementing variations of science and social studies learning (IPAS) in Grade V at SDN 004 Domo. Data were collected through observation, interviews, and documentation, and subsequently analyzed to reveal the application of instructional variations across three main aspects: (1) variations in teaching style, (2) variations in instructional media and materials, and (3) variations in teacher–student

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interaction patterns. The presentation of results is supported by triangulation between field data, theoretical perspectives, and findings from previous research.

1. Variations in Teaching Style

Observations indicated that the teacher employed a range of vocal intonations, emphasis on key terms, and eye contact with students (Yuliana & Prasetyo, 2021). These strategies helped create a more engaging classroom atmosphere and enhanced student focus. The teacher also utilized simple body movements, such as pointing or nodding, although the frequency and diversity of gestures remained limited. The teacher tended to remain near the blackboard, which led to students seated at the back feeling less attended to.

In the interview, the teacher stated: *"I try to change my intonation so the children stay focused, but sometimes it is difficult to move closer to them because of time constraints."* A student also expressed: *"When the teacher comes closer, I feel more motivated to pay attention."*

Figure 1. Variations in Teaching Style through Body Movements and Vocal Intonation

Figure 1 illustrates the use of body movements such as pointing, nodding, and hand gestures to clarify the delivery of content. Observations also revealed the teacher's use of rising and falling intonation, along with emphasis on key terms, to sustain student attention. As the teacher explained during the interview: *"I usually raise my voice when explaining the core material so that the children pay more attention."* This strategy proved effective, although most eye contact was still directed primarily at students seated in the front rows.

Students' responses reinforced the benefits of these variations. One student noted: *"When the teacher's voice changes, I become more enthusiastic about listening."* However, they also hoped the teacher would move closer to their desks more frequently to foster a livelier classroom environment. Unfortunately, teacher mobility remained limited due to time constraints, leaving physical interaction less than optimal.

From an analytical perspective, these findings demonstrate that variations in teaching style positively contributed to students' attention and motivation. This aligns with the findings of Rahmawati & Sari (2023), who reported that changes in intonation and body language enhance student engagement. However, the lack of positional variation reduced classroom dynamism. Pratama et al. (2022) emphasize that teacher mobility within the classroom provides visual stimulation that can alleviate student boredom. Therefore, optimizing teacher movement and diversifying body gestures remains an urgent necessity to further improve the effectiveness of IPAS instruction at SDN 004 Domo.

2. Variations in Instructional Media and Learning Materials

The use of instructional media was still dominated by the blackboard and textbooks. Occasionally, the teacher utilized a projector to display images or videos, as well as real objects from the surrounding environment (Wahyuni & Setiawan, 2023). For example, in a lesson on

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ecosystems, the teacher brought leaves, stones, and water into the classroom, making the learning process more contextual.

The teacher acknowledged: *"Actually, we do have a projector, but I rarely use it because it requires more preparation time."*

A student also expressed: *"When there are pictures or videos, I understand more quickly than just by listening."*

Figure 2. Utilization of Visual Media and Real Objects in IPAS Learning

The description in Figure 2 illustrates examples of how the teacher employed real objects and visual aids during instruction. Documentation showed that the teaching materials were actually equipped with engaging illustrations, yet their use was inconsistent. This finding aligns with Lestari & Fitriani (2024), who emphasized that variations in instructional media play a crucial role in strengthening students' conceptual understanding, as well as with Siregar et al. (2021), who highlighted the effectiveness of visual media in linking abstract concepts with real-life experiences.

In practice, teachers at SDN 004 Domo still tended to rely on conventional media such as the blackboard and textbooks, primarily because of their availability and practicality. On certain occasions, the teacher employed the projector to display images or videos that were difficult to explain verbally, and also incorporated real objects from the local environment such as leaves, stones, and water to provide contextual learning experiences in the ecosystem topic. This strategy was proven to enhance students' clarity of understanding.

However, the frequency of using diverse media remained limited. The teacher admitted that the main obstacle was not the availability of resources, but rather the limited preparation time and the habit of relying on lecture-based methods. Consequently, visual illustrations embedded in teaching materials and the potential of interactive media were not fully optimized. In fact, student responses indicated that they found it easier to comprehend the material through pictures, videos, or media-based educational games.

Overall, variations in instructional media and learning materials at SDN 004 Domo have demonstrated positive impacts, although their implementation remains limited both in frequency and creativity. Strengthening the use of interactive and innovative media has become an urgent necessity to make IPAS learning more engaging, motivating, and aligned with the principles of the *Merdeka Curriculum*, which emphasizes meaningful learning experiences.

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3. Variations in Interaction Patterns

The teacher's interaction pattern was still largely dominated by one-way communication at the beginning of the lesson. Afterward, the teacher initiated a question-and-answer session (two-way interaction), although only a portion of the students actively participated. Multi-directional interactions, such as group discussions, were rarely conducted, as they were perceived to be time-consuming and hindered by differences in students' academic abilities (Suryani & Ramadhan, 2022). The teacher explained: *"In group discussions, the more capable students usually dominate, while the others just follow along."*
Meanwhile, one student expressed: *"I feel more confident speaking in small groups than directly in front of the whole class."*

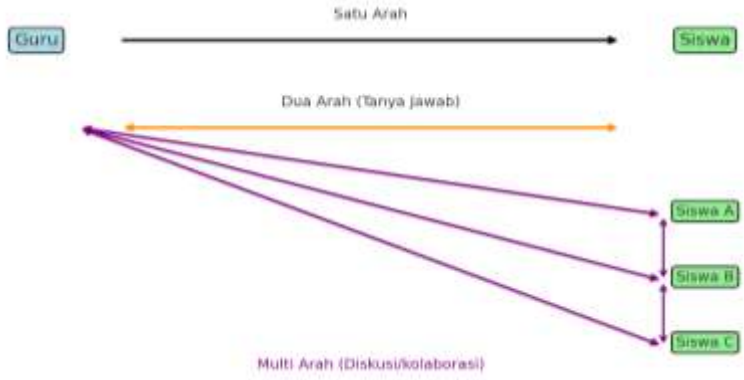

Figure 3a. Schematic Representation of Teacher-Student Interaction Patterns in IPAS Learning
(illustrating the schematic directions of one-way, two-way, and multi-directional interaction)

As illustrated in Figure 3a, the interaction pattern during IPAS instruction initially relied on a one-way format (teacher → student) when the teacher was delivering material. This later developed into a two-way format (teacher ↔ student) through question-and-answer sessions, although participation remained limited to a small number of active students. Attempts to move toward multi-directional interaction (student ↔ student ↔ teacher) through group discussions were seldom implemented due to time constraints and differences in students' academic performance. This schematic representation indicates that the interaction pattern in the classroom was still dominated by the teacher, while opportunities for collaborative student participation had not yet been fully optimized.

Furthermore, Figure 3b presents real classroom documentation of the IPAS learning process in Grade V at SDN 004 Domo. The photo illustrates the teacher and students engaging in group learning activities. Although the teacher attempted to facilitate discussions, student participation varied: some groups were actively involved in the discussion, while several students remained passive. This observation reinforces the findings from the previous schematic, indicating that multi-directional interaction has not yet been fully optimized.

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Figure 3b. Documentation of Teacher–Student Interaction in IPAS Learning in Grade V at SDN 004 Domo, Kampar Regency

(depicting the classroom atmosphere as students work in groups under the teacher's guidance)

Both figures complement one another: Figure 3a provides a conceptual overview of interaction patterns, while Figure 3b depicts the actual classroom practice. Taken together, they reveal a clear gap between the ideal interaction pattern expected and the limited implementation observed in practice. This finding aligns with Harahap & Putri (2022), who emphasize that multi-directional interaction enhances students' communication and collaboration skills. Furthermore, Ningsih et al. (2023) demonstrated that small-group discussions can help students overcome fear of participation. Thus, the present study indicates that although teachers at SDN 004 Domo have attempted to introduce interactional variations, collaborative patterns have not yet become a primary focus in IPAS learning.

The findings also show that variations in teaching style at SDN 004 Domo were applied in several forms, including the use of vocal intonation, emphasis on key terms, eye contact, and body gestures. These results are consistent with Rahmawati & Sari (2023), who asserted that variations in teaching style particularly through intonation and body language can increase student attention and facilitate comprehension. However, the teacher rarely shifted position in the classroom, which made the learning atmosphere less dynamic and limited equal interaction with students.

Consistent application of teaching style variations is believed to enhance student motivation and participation. Pratama et al. (2022) argue that variations in movement and teacher positioning in the classroom provide visual stimuli that reduce learning fatigue. The findings of this study support this claim, as students reported feeling more enthusiastic when the teacher moved closer to them during instruction. Therefore, greater emphasis on teacher mobility and flexibility in positioning within the classroom is needed to further optimize student engagement.

With regard to the use of instructional media and learning materials, the teacher primarily relied on the blackboard and textbooks, although the projector and real objects were occasionally employed. Lestari & Fitriani (2024) highlight that appropriate variations in media according to the nature of the content can strengthen student understanding. The limited frequency of interactive media use at SDN 004 Domo indicates that the potential of instructional media has not yet been fully optimized.

Students reported that they understood material more easily when the teacher used pictures, videos, or real objects. This corroborates Siregar et al. (2021), who emphasized that visual media help students connect abstract concepts with real-life experiences. Hence, teachers' creativity in selecting and integrating relevant instructional media is crucial for improving the effectiveness of IPAS learning.

In terms of interaction patterns, the teacher relied more heavily on one-way interaction

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when delivering material, before shifting to two-way interaction through question-and-answer sessions. Unfortunately, multi-directional interactions, such as group discussions or student collaboration, were still rarely conducted. Harahap & Putri (2022) contend that learning that emphasizes multi-directional interaction fosters students' communication and collaboration skills. The classroom conditions at SDN 004 Domo demonstrate that this potential has not yet been maximized.

Students also reported feeling more confident expressing their opinions in small groups than when speaking in front of the entire class. This finding resonates with Ningsih et al. (2023), who revealed that small-group discussions reduce students' fear of participation and enhance their self-confidence. Therefore, the implementation of multi-directional interaction through collaborative activities could be an effective strategy to increase student participation.

Overall, this study confirms that teachers' skills in employing variations in instruction significantly influence students' motivation, engagement, and comprehension. In line with Putra & Ayu (2024), instruction that integrates variations in teaching style, the use of media, and interaction patterns proves more effective in creating an active, interactive, and enjoyable learning environment. Accordingly, teachers at SDN 004 Domo need to further enhance their consistency and creativity in developing instructional variations to optimize student learning outcomes.

CONCLUSION

Based on the findings at SDN 004 Domo, it can be concluded that teachers' skills in implementing instructional variations have been applied, yet remain suboptimal. Variations in teaching style such as the use of vocal intonation, emphasis on key terms, eye contact, and body gestures were effective in capturing students' attention; however, teachers' limited movement within the classroom resulted in less dynamic interaction. Instructional media use was still dominated by the blackboard and textbooks, while visual and interactive media were rarely employed. In terms of interaction patterns, teachers relied more on one-way and two-way communication, whereas multi-directional interactions through group discussions were seldom practiced due to time constraints and differences in students' abilities. These conditions indicate that instructional variation plays an important role in enhancing students' motivation, engagement, and comprehension, yet its implementation requires more consistent and creative development.

Teachers are advised to adopt greater consistency in varying their teaching style by increasing movement around the classroom, diversifying body gestures, and integrating visual and interactive media to create more dynamic and engaging learning. Interaction patterns also need to be improved through small-group discussions, enabling students to gain confidence and actively participate. Schools are expected to provide support through adequate media facilities and innovative training for teachers, while future researchers are encouraged to further investigate the impact of instructional variations on students' learning outcomes.

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