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Analysis of students' interest in learning pancasila education in islamic elementary schools

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Article Information:	ABSTRACT
Received 2025-05-26 Revised 2025-08-24 Accepted 2025-12-10	One of the main challenges in teaching Pancasila Education at the elementary school level is the low level of student interest in learning. This is reflected in the lack of attention, low engagement, weak internal motivation, and the tendency to procrastinate. In addition, students perceive the subject as boring, even though Pancasila Education is essential for character formation and the development of social skills. This study employed a descriptive qualitative approach with 28 fifth-grade students and one homeroom teacher as participants. Data were collected through observation, interviews, and questionnaires based on Crow and Crow's learning interest indicators. Triangulation techniques were applied to ensure data accuracy, thus providing a comprehensive overview of students' learning interest in Pancasila
Keywords: Pancasila Education, Learning Interest, Elementary School.	Education. The research findings show that students' interest in learning Pancasila Education is high when visual media and interactive activities are used. However, their awareness and concentration vary due to lecture-based methods and end-of-day scheduling. The main obstacles include difficulty understanding the material and limited media. Learning interest increases through varied methods, interactive media, differentiation, motivation, and more optimal scheduling. This study contributes by demonstrating that students' interest in learning Civics can be enhanced through a combination of interactive media, varied teaching methods, and differentiation. These findings enrich the discourse on effective strategies that improve students' motivation, focus, and participation in Pancasila learning.



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INTRODUCTION

One of the main challenges in teaching Pancasila Education at the elementary school level is the low level of student interest in learning. This lack of interest is reflected in several aspects. Chaudhuri et al. (2021) explain that students often show a lack of attention, such as not focusing when the teacher is explaining. Furthermore, Snell and Lefstein (2017) and Ahmad (2021) emphasize that student engagement in learning activities is also low, as indicated by the rarity of asking questions or giving responses. From the perspective of internal motivation, Otermans et al. (2025) argue that some students attend lessons merely as an obligation, without genuine awareness to understand the material in depth. Gao et al. (2025) also found that students often procrastinate in completing assignments or finish them incompletely. According to Alrajhi (2024), the lack of enjoyment is also evident from the perception that Pancasila Education is boring and unimportant, accompanied by negative expressions during learning. Rott et al. (2024) highlight that this issue is particularly concerning in fifth grade, where students are expected to begin developing critical thinking skills and applying national values. Fitriasari et al. (2020) assert that Pancasila Education is essential for character formation and social skills development. Therefore, as suggested by Darling-Hammond et al. (2019), Pancasila Education should be designed to connect learning materials with real-life events to make learning more meaningful.

Based on previous studies, students' learning interest is influenced by both internal and external factors. Yeh et al. (2019) argue that students generally show low learning interest, particularly in Mathematics. Similarly, Akhan et al. (2023) and Khan et al. (2023) emphasize that low interest is also evident in Social Studies, especially in topics that require memorization. Meanwhile, Burke et al. (2024) suggest that students' learning interest is at a moderate level, influenced by internal factors such as psychological conditions and external factors such as family support and varied teaching methods. Furthermore, Getie (2020) along with Yang et al. (2023) state that low learning interest is largely affected by psychological aspects, including attention and attitudes toward learning, as well as external factors such as teaching methods and parental involvement. Although research on learning interest in various subjects has been widely conducted, studies focusing on Pancasila Education in elementary schools remain limited, particularly in private schools. No previous research has provided a comprehensive overview of interest, challenges, and learning strategies in Pancasila Education. This study seeks to fill this gap by presenting a descriptive profile of students' learning interest.

Pancasila Education is an essential subject that should be taught from elementary school to higher education. However, its implementation at the elementary level still faces various challenges. Zamiri and Esmaeili (2024) emphasize that ideally, Pancasila Education should not only focus on the mastery of civic knowledge but also foster attitudes, build character, and train problem-solving skills through real-life experiences. Nevertheless, Wang et al. (2024) point out that low student interest in learning remains a major obstacle. Teachers' expectations for optimal student engagement are often not fully understood by students, resulting in weak motivation and declining enthusiasm. Harackiewicz et al. (2016) argue that learning interest is reflected in students' attention, enjoyment, and active participation, all of which play a crucial role in academic achievement. Although many studies have highlighted learning interest as a predictor of academic success, research specifically addressing students' interest in Pancasila Education at the elementary level remains limited. Therefore, empirical analysis is needed, particularly in Grade V, to understand how learning interest relates to student engagement and learning outcomes.

This study aims to analyze how fifth-grade students' learning interests at Bina Insani Elementary School are reflected in their participation in Pancasila Education learning. Specifically, this study examines the level of student interest, attention, and participation in the learning process, identifies factors that influence this learning interest, and explores alternative solutions to address it. Furthermore, this study seeks to provide a descriptive overview of the fifth-grade students' learning interest profiles as a basis for developing teaching approaches that are more relevant to their needs and characteristics. Theoretically, this study is expected to enrich the study of student learning interests in Pancasila Education, which has so far been relatively limited, especially at the elementary

school level. Practically, the findings of this study are useful for teachers in designing more effective, interactive, and characteristic-appropriate learning strategies, thereby increasing student engagement and learning outcomes. For schools, the results of this study can be used as a reference in formulating learning policies that support the strengthening of Pancasila Education from an early age.

Based on the background and objectives of this study, several hypotheses can be formulated. First, it is hypothesized that the learning interest of fifth-grade students at Bina Insani Elementary School significantly influences their level of participation in Pancasila Education classes. Students who demonstrate higher levels of interest are expected to show greater attention, enjoyment, and active involvement during the learning process. Second, factors such as teacher expectations, teaching approaches, and classroom atmosphere are hypothesized to play an important role in shaping students' motivation and interest in learning. Third, it is assumed that low levels of student interest will negatively affect their engagement and learning outcomes, while the implementation of appropriate and interactive teaching strategies can enhance both interest and performance. Therefore, this study hypothesizes a strong relationship between students' learning interest, their participation in Pancasila Education, and the effectiveness of instructional approaches applied in the classroom.

RESEARCH METHOD

This study employs a descriptive qualitative approach aimed at providing a comprehensive overview of students' learning interest in the Pancasila Education subject at the elementary school level. This approach was chosen because it aligns with the research objective, namely to explore in depth the experiences, perceptions, and engagement of students in the learning process. According to Mayorga-Fernández et al. (2024), qualitative research provides broad opportunities to investigate learning experiences more deeply, thereby allowing researchers to understand the dynamics that occur within the classroom. This is in line with the view of Holland and Ciachir (2024), who emphasize that qualitative research relies heavily on rich descriptive data, as such data is able to provide a comprehensive contextual understanding of the phenomena under study. Furthermore, Korstjens and Moser (2017) stress that the strength of qualitative research lies in its ability to capture subtle details of participants' experiences and uncover the meanings they attribute to a given situation.

In this study, the researcher acts as the primary instrument in data collection, which is a fundamental principle of qualitative research. Rutledge and Hogg (2020) assert that researchers in qualitative studies do not merely function as passive observers, but rather engage actively with participants in order to explore contextual information more deeply. In line with this, Hamilton and Finley (2019) argue that in-depth interviews and questionnaires are effective instruments in qualitative research because they can reveal participants' perspectives, motivations, and attitudes more comprehensively. By utilizing these instruments, the researcher was able to explore students' views on the Pancasila Education subject while also obtaining supporting information from the teacher to enrich the analysis.

The research subjects consisted of 28 students and one homeroom teacher. Participants were selected purposively, taking into account their direct involvement in the learning process as well as their ability to provide relevant data regarding students' learning interest in the Pancasila Education subject. Campbell et al. (2020) explain that purposive sampling is an appropriate technique in qualitative research because it allows researchers to select participants who truly understand the phenomenon being studied. The fifth-grade level was considered important because at this stage students are in a transitional phase toward more structured learning experiences, making learning interest an essential factor influencing their engagement and learning outcomes. In addition, Negrin et al. (2022) emphasize that the involvement of the homeroom teacher can enrich the research data, as teachers play a crucial role in observing students' behavior, enthusiasm, and consistency in learning.

Data collection in this study was conducted through three techniques, namely direct observation, semi-structured interviews, and questionnaires. Spanjers et al. (2008) highlight that direct observation is an effective method for capturing students' behavior, expressions, and level of

engagement during the learning process. Furthermore, Pessoa et al. (2019) state that semi-structured interviews can provide deeper insights into teachers' perceptions while also serving to validate the data obtained from students. Meanwhile, according to van der Scheer et al. (2018), questionnaires are an important instrument for measuring students' learning interest because they can reveal the extent of students' engagement based on predetermined indicators. Thus, the use of these three complementary methods was expected to generate research findings that are more reliable and comprehensive.

The data collection process was carried out on different days to maintain focus and accuracy. On the first day, the researcher conducted direct classroom observations while simultaneously distributing questionnaires to students. Cavilla (2017) explains that data collection conducted directly through observation and questionnaires can provide an overview of students' behavior as well as their personal reflections on learning interest. On the following day, the researcher interviewed the homeroom teacher to confirm and deepen the findings obtained in the first stage. According to Arda Tuncdemir (2025), interviews with teachers play an important role in complementing data because teachers can provide additional perspectives related to students' learning interest. Furthermore, Swain and King (2022) emphasize that a sequential approach in data collection allows researchers to organize information systematically and ensures that each instrument is used optimally to reveal students' learning interest profiles.

The aspects observed and measured in this study refer to the learning interest indicators proposed by Crow and Crow (1958). They explain that learning interest can be identified through four main indicators, namely: (1) active involvement in learning, (2) attention to learning activities, (3) enjoyment in participating in lessons, and (4) the desire to continue engaging in the learning process. These indicators were applied consistently across observations, interviews, and questionnaires to ensure data compatibility. Moreover, Denzin (2017) emphasizes that the application of triangulation is crucial in qualitative research because it enables researchers to compare and verify information from various sources and methods. In this way, the study was able to produce a more accurate and comprehensive portrayal of students' learning interest in the Pancasila Education subject.

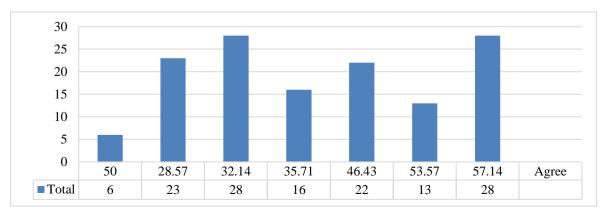
RESULTS AND DISCUSSION

Results

Student learning interest in pancasila education subjects

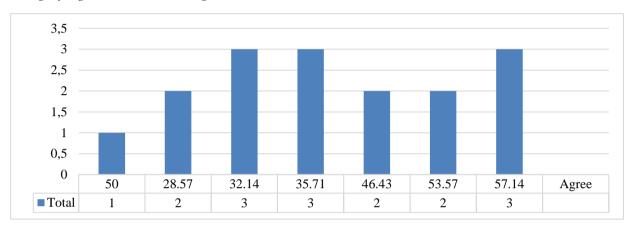
The study highlights students' learning interest in Pancasila Education based on questionnaires, observations, and interviews. Findings show that most students display positive attitudes, active engagement, and enjoyment, especially when lessons use visual media, videos, or educational games. Observations reveal that students generally remain focused, though learning conditions are sometimes less ideal. Teacher interviews indicate that students' interest increases when lessons are interactive and enjoyable, showing the importance of varied and engaging teaching approaches.

Figure 1
Strongly Agree Category of Student Learning Interest



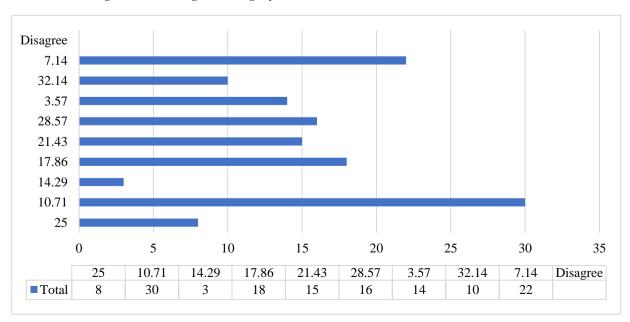
The highest percentage in the Strongly Agree (SA) category appears in the statements that students consider Pancasila Education important and beneficial (60.71%) and that they are able to remain focused when completing tasks (57.14%). These findings reflect a strong awareness of the subject's relevance while also demonstrating good learning discipline. Nevertheless, some indicators show relatively low SA responses, such as task independence without teacher guidance (17.86%) and a preference for learning through games (28.57%). This condition indicates that some students still rely heavily on external motivation and require more varied learning strategies to foster both their interest and independence in learning.

Figure 2
Category Agree Student Learning Interest



The Agree (A) category dominates in several statements, such as students' enthusiasm when engaging in educational games (57.14%) and their experiences of difficulty in understanding the material (57.14%). This indicates that most students possess a fairly good level of learning motivation; however, this motivation tends to depend on the application of enjoyable teaching methods. Furthermore, the high percentage in the aspect of difficulty in understanding material suggests that although students recognize the importance of the subject, they still encounter cognitive challenges. Therefore, it is necessary to implement more diverse and innovative learning strategies to help students overcome these difficulties and maintain consistent interest in learning.

Figure 3Student Learning Interest Disagree Category



The Disagree (DA) category appears prominent in the aspect of completing tasks without teacher guidance (25%) and the preference for learning through games (17.86%). This condition indicates the presence of a group of students who still lack intrinsic motivation and tend to be passive in the learning process. These findings present an important challenge for teachers to implement differentiated approaches so that less active students can remain optimally engaged through strategies tailored to their learning styles and individual needs.

The Strongly Disagree (SD) category shows a relatively low percentage, ranging from 0-10%, with the highest figure at 10.71% in the aspect of independence in completing tasks and the ability to understand difficult material. This condition can be considered positive because only a small number of students explicitly rejected or disagreed with the statements related to learning interest. Nevertheless, the presence of this small percentage still reflects that some students face serious challenges, both in terms of motivation and comprehension. Therefore, individual teacher intervention is essential to support these students so that they can remain actively engaged in the learning process.

The questionnaire results show that most students demonstrated strong interest in learning Pancasila Education, as reflected in the high percentages of Strongly Agree and Agree compared to negative responses. In the attraction aspect (statements 1-4), students responded positively, with 89.28% enjoying the lessons, 96.42% acknowledging the subject's importance, 85.71% showing increased interest when images or videos were used, and 82.14% feeling more enthusiastic with educational games. Similarly, the attention aspect (statements 5-7) also received positive responses: 92.85% paid good attention, 92.86% maintained focus despite less ideal conditions, and 89.28% remained engaged due to the teacher's explanations. However, the awareness aspect (statements 8-10) showed slightly lower results, with only 64.29% completing tasks independently, 89.28% attempting challenging problems, and 67.86% feeling confident when answering questions. In the concentration aspect (statements 11-13), 92.85% focused on tasks, 89.28% were not easily distracted, and 78% persisted when facing difficult material. Regarding media and material difficulty (statements 14-16), 75% preferred games over memorization, 71.43% found Pancasila learning challenging, and 67.85% desired more varied media.

Interview findings with the teacher reinforced the questionnaire data, indicating that students generally showed enthusiasm and interest, especially when lessons involved interactive media. Nonetheless, the teacher noted that some students still relied on external encouragement, particularly when completing assignments independently, which corresponds with the portion of students who expressed reluctance or struggled to maintain interest. Overall, the findings highlight the importance of differentiated instruction, interactive learning strategies, and varied media use to ensure consistent student engagement in Pancasila Education.

Student interest in pancasila education learning

The findings of this study provide an in-depth overview of students' learning interest in Pancasila Education as observed through questionnaires, classroom observations, and teacher interviews. The data reveal patterns of student engagement, attention, awareness, and concentration during the learning process, highlighting both strengths and challenges. Students generally demonstrated enthusiasm for lessons that connect with real-life contexts and incorporate interactive media. However, difficulties such as maintaining focus, low literacy skills, and reliance on teacher prompts were also identified. Teacher insights further emphasized the importance of varied strategies, including gamification and innovative media, to foster consistent motivation and deeper understanding in Pancasila Education learning.

Table 1 *Teacher Interview Results*

No	Aspect	Findings
1	Interest	Students show enthusiasm at the start of PPKn lessons because the material connects to daily
		life. The most engaging media are interactive videos and outdoor activities, such as creating a

		"laptop book" on cultural diversity. Digital games are not yet used, and media remain limited
		to videos.
2	Attention	Students generally pay attention during lessons, though some struggle to maintain consistent
		focus. Differences in engagement appear across teaching methods, with each group containing
		both active and passive students. Distractions commonly arise from lecture-based instruction
		and end-of-day scheduling, which often lead to boredom and fatigue.
3	Awareness	Active students complete assignments without being prompted, whereas passive students
		require frequent reminders. All students make efforts to tackle challenging tasks, with some
		beginning immediately and others seeking clarification first. Only a small number of students
		show confidence in expressing their opinions.
4	Concentration	Not all students are able to focus on completing tasks because some do not have the necessary
		workbooks (LKS). Many students are easily distracted, and limited literacy skills further
		reduce their ability to focus and listen effectively. To address this, the teacher uses strategies
		such as having students read tasks in turn from the workbook and asking questions after the
		material is presented.
5	Additional	Difficult topics for students include the history of Pancasila's birth, the meaning of its symbols,
3	Additional	and Indonesia's cultural diversity. Teachers view gamification and educational games as highly
		engaging, especially when supported by appealing visuals, audio-visual explanations, and
		memory-based activities. They hope for more innovative, trend-aligned media that remain
		accessible for senior teachers.
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Source: Research Results, 2025

The findings of this study critically highlight that students' interest in Pancasila Education is generally positive, yet still conditional and dependent on specific learning methods. Some positive aspects from the student questionnaire were also confirmed by the interview results with the homeroom teacher, who stated that students were enthusiastic at the beginning of Pancasila Education lessons because the material discussed topics related to their daily lives. Students showed greater interest when presented with video lessons, group projects, and outdoor learning activities. However, the teacher's ability to use digital media is still limited, so only video media have been applied. Furthermore, the teacher noted that not all students were able to consistently focus on the lesson; when using group discussion or question-and-answer methods, only a few were actively engaged. Disruptions to concentration often arose from lecture-based teaching and late scheduling, which made students feel tired. The reliance on external motivation, particularly teacher guidance and media use, signals that deeper internalization of learning values has not been fully achieved. Therefore, sustainable improvement in PPKn learning requires differentiated instruction, innovative media integration, and strategies that progressively build students' independence, confidence, and intrinsic motivation.

Students' learning interest in pancasila education

The classroom observation results provide a comprehensive overview of students' learning interest in Pancasila Education, focusing on four key aspects: interest, attention, awareness, and concentration. The data reveal that students generally show positive indicators such as enthusiasm at the beginning of lessons, attentiveness to the teacher's explanations, and a willingness to complete assignments on time. However, some challenges remain, including a lack of consistent active participation, limited confidence in expressing opinions, and difficulties in maintaining focus throughout the session. These findings highlight the complexity of fostering student engagement, where both encouraging behaviors and inhibiting factors coexist within the learning environment.

 Table 2

 Results of Classroom Observation on Students' Learning Interest in Pancasila Education

Aspect	Number of	Yes	No	Dominant Findings
	Indicators			
Interest	5 indicators	3	2	Students are responsive to learning media and participate without
				prompting, but enthusiasm at the beginning and emotional expression (smiles/laughs) are weaker.

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Attention	5 indicators	2	3	Students follow instructions and listen attentively, but lack consistent
				eye contact, hand-raising, and focus during lessons.
Awareness	5 indicators	4	1	Students complete tasks diligently and confidently, yet are less active
				in giving personal opinions.
Concentration	5 indicators	3	2	Students finish tasks on time and stay focused despite distractions,
				though some are still easily distracted by sounds or peers.

Source: Research Results, 2025

The comprehensive findings from questionnaires, teacher interviews, and classroom observations reveal that students' engagement in Pancasila Education is generally positive but highly situational and dependent on external factors. Both students and the teacher confirmed that enthusiasm rises when lessons are supported by interactive media, contextualized materials, or engaging activities such as projects and games. However, limitations remain, as digital media use is minimal, and lecture-style teaching often reduces attention, especially when scheduled at the end of the day. Observation results further indicate inconsistencies, with many students struggling to sustain focus, rarely volunteering opinions, and showing dependency on teacher reminders. Low literacy skills also hinder concentration and independent task completion. These findings suggest that students' motivation and participation are not yet rooted in strong intrinsic factors. Therefore, sustainable improvement requires differentiated instruction, expanded digital and interactive media use, and pedagogical strategies that build students' independence, confidence, and critical thinking skills.

Discussion

Analysis of factors influencing students' learning interest

Based on the research findings, students' interest in learning Pancasila Education is categorized as high, as shown by the dominance of "Strongly Agree" and "Agree" responses across nearly all aspects of the questionnaire. Goldberg (2021) states that learning interest consists of elements of attraction, attention, awareness, and concentration. Ling (2022) adds that learning interest is an important factor that influences student engagement in the learning process. The findings show that the aspects of attraction and attention obtained the highest percentages, above 85%, indicating that students feel happy, interested, and focused during the lessons, especially when teachers use learning media such as pictures and videos, as explained by Xiong (2025). Davies (2013) emphasizes that students are more enthusiastic when material is connected to everyday experiences and delivered through group activities or outdoor learning. In line with Vygotsky perspective, learning is part of enculturation habituation and internalization of values through social interaction and the surrounding environment. Quoc and Van (2023) highlight that in the social constructivist perspective, language plays an essential role as a psychological tool for thinking and understanding the world. Thus, the use of group discussions, visual media, and interactive activities not only increases learning interest but also strengthens concept internalization through active communication.

However, the study also reveals variations in students' learning interest, particularly in the aspects of awareness and concentration. Van Leeuwen and Janssen (2019) explain that students' learning independence varies, with some completing tasks only when guided by the teacher. Renninger and Hidi (2020) add that although some students show initial interest, not all possess a high level of learning awareness. Jamet et al. (2020) found that students' concentration can be disrupted by monotonous lectures or lessons scheduled at the end of the day. Hollister et al. (2022) emphasize that material delivery that lacks creativity and provides limited interaction such as the absence of engaging activities like educational games or ice-breaking can hinder the maintenance of focus and learning interest. Xie (2021) also points out that repetitive and less varied teaching methods tend to reduce students' emotional and intellectual engagement. Based on these perspectives, the implementation of diverse learning methods and the creation of interactive classroom environments are essential to maintain students' interest throughout the learning process.

Thus, students' learning interest is diverse and influenced by many factors, both internal such as motivation and self-confidence and external, including teaching strategies and classroom conditions, as explained by Hinduja et al. (2024). Gunawardena et al. (2024) state that understanding such variations is crucial for teachers in designing learning approaches that fit the needs and characteristics of each student. In line with Sartika et al. (2024), teachers who implement varied instructional methods from material delivery and the use of learning media to interaction techniques can effectively increase students' learning interest. Marini et al. (2025) add that when learning is designed to be non-monotonous and able to actively involve students, the opportunities to build focus, enhance participation, and strengthen learning awareness increase significantly. Therefore, innovation in teaching methods becomes key for teachers in creating enjoyable, interactive, and meaningful learning environments, including in Pancasila Education.

Determinants and challenges of students' learning interest

Based on the research findings, students' interest in learning Pancasila Education is influenced by several key factors, particularly student engagement and the relevance of the material to everyday life. The findings show that most students enjoy the learning process and consider the subject important and beneficial, reflecting strong intrinsic motivation. In line with this, Haleem et al. (2022) emphasize that the use of varied learning media, such as pictures and videos, is an essential factor in increasing student engagement. Arends (2012) also argues that the use of visual media and interactive methods that connect the material to real-life contexts can strengthen understanding while fostering enthusiasm for learning.

Ainscow (2020) and Nor et al. (2022) state that when educators link the material to daily activities, students can more easily understand the lessons. Russell et al. (2025) also highlight that contextual learning not only facilitates comprehension but also enhances the perceived relevance of the material for students. In addition, Leek et al. (2024) show that students' attention and focus can be maintained when the classroom environment is conducive and teaching methods are engaging. Uus et al. (2022) found that several students demonstrate independence in completing tasks without direct teacher guidance, which serves as an indicator of good learning awareness. Cenić et al. (2023) emphasize the importance of teachers connecting the material to real-life experiences through interactive methods, such as discussions and outdoor learning activities. Thus, students' interest in Pancasila Education can be improved through a combination of relevant and contextual learning strategies and the use of diverse media and instructional methods.

However, this study also identifies several inhibiting factors that may decrease students' interest in Pancasila Education. The main challenge faced by most students is difficulty in understanding the material, reported by 71.43%. This condition has the potential to reduce learning motivation if not addressed with appropriate teaching strategies. Correspondingly, Zhou and Zhang (2025) highlight the importance of applying the ARCS Model (Attention, Relevance, Confidence, Satisfaction), which underscores the need to strengthen students' confidence when facing challenging material in order to maintain learning interest.

Furthermore, the limited use of learning media generally restricted to videos and the monotonous lecture method also act as obstacles. According to Aldalur and Perez (2023), limited media use and unvaried teaching methods are often ineffective in consistently maintaining students' attention. Teacher interviews revealed that lessons scheduled at the end of the day make students feel tired and bored, thereby reducing their concentration. This view is consistent with Santrock (2011), who explains that students' physical and psychological conditions play an important role in influencing the learning process and their level of focus in class. Differences in motivation and independence among students were also identified as inhibiting factors that require attention. According to Cui et al. (2024), variations in learning motivation within a single class can lead to imbalances in participation. This is reinforced by Taş and Minaz (2024), who state that students who remain passive and require reminders to complete tasks demonstrate low learning awareness, which in turn can lead to a decline in overall learning interest.

Teachers' strategies for improving students' learning interest

Based on the research findings, several strategies can be implemented to enhance students' interest in learning Pancasila Education. The first strategy is the utilization of diverse and interactive learning media. The results indicate that most students are more enthusiastic when teachers use media such as pictures or videos, with many expressing a desire for more varied tools. According to Evmenova et al. (2025), interactive media can strengthen student motivation and make learning more engaging. Similarly, Jabbar and Felicia (2015) as well as Alotaibi (2024) emphasize that game-based media, such as puzzles, are effective in capturing students' attention, increasing learning interest, and creating a more meaningful learning atmosphere by combining play and education. Furthermore, Davies et al. (2013) highlight that a creative learning environment supported by innovative media expands students' learning experiences and enhances their engagement in the learning process. Therefore, schools play an important role in equipping teachers with training in creative media use and providing necessary facilities to ensure learning aligns with student characteristics.

The second strategy is the application of varied teaching methods to encourage active student engagement. The findings reveal that although most students remain fairly focused, only a few participate in discussions or Q&A sessions. Márquez et al. (2023) argue that low participation often results from the limited methods employed by teachers. In line with this, Liu et al. (2023) note that traditional lecture-based approaches are less effective in fostering classroom interaction. Do et al. (2023) explain that constructivist theory emphasizes effective learning when students actively construct knowledge through experience and social interaction. In practice, Winataputra et al. (2007) recommend Discovery Learning, while Ningsih et al. (2025) highlight Problem-Based Learning (PBL) to develop critical thinking skills. Guo et al. (2020) also confirm the effectiveness of Project-Based Learning (PjBL) in engaging students in real-world projects. Additionally, Muhardis (2023) stresses that Contextual Teaching and Learning (CTL) strengthens students' interest as Pancasila content is presented in the context of their daily lives.

The third strategy is the implementation of differentiated instruction to address disparities in student interest and independence. Langelaan et al. (2024) explain that differentiated instruction is essential to meet diverse student needs for more optimal learning. The findings show that some students remain passive, lack confidence, and are not accustomed to completing tasks without teacher guidance. In this regard, Pekrun (2021) emphasizes that providing personal motivation, additional guidance, and positive reinforcement can help less active students become more engaged in learning. Moreover, Cents-Boonstra et al. (2020) stress the crucial role of teachers as informers, motivators, facilitators, and classroom managers in enhancing learning interest. Similarly, Yan et al. (2023) note that teachers who successfully fulfill these roles can encourage students to become more active, confident, and enthusiastic in the learning process.

The final strategy is the adjustment of learning schedules. The research findings indicate that when Pancasila Education is scheduled at the end of the day, many students feel tired, resulting in reduced concentration. Valente et al. (2024) assert that placing lessons at less favorable times can hinder learning effectiveness since students' physical condition has declined. This view aligns with Santrock (2011), who affirms that physical and psychological factors directly affect students' focus and engagement in class. Therefore, schools are advised to schedule Pancasila Education at more optimal times, such as in the morning when students are fresh and energized. Diallo and Tudose (2024) emphasize that proper scheduling enhances mental readiness and learning concentration. Furthermore, Goyibova et al. (2025) underscore that time management strategies, when combined with varied media, teaching methods, and differentiation, can transform Pancasila Education from a mere academic routine into a meaningful experience that fosters character development and sustainably increases students' learning interest.

CONCLUSION

Based on the discussion, students' learning interest in Pancasila Education is influenced by several factors. Overall, students' interest is high, particularly in the aspects of curiosity and attention,

supported by visual media, videos, and interactive activities, although awareness and concentration vary due to lecture-based methods and end-of-day scheduling. Learning interest is also shaped by student engagement, the relevance of the material to daily life, and the use of diverse learning media. Major obstacles include difficulty understanding the material, monotonous lectures, limited media, and less optimal scheduling. Differences in motivation and independence also affect participation. Increasing learning interest can be achieved through interactive media, varied instructional methods, and differentiated learning tailored to student needs, supported by motivation and the teacher's role as facilitator. Optimizing learning schedules especially avoiding end-of-day classes also helps maintain focus and create more meaningful learning experiences.

The findings reinforce constructivist theory, emphasizing that motivation, learning media, and social context significantly shape students' learning interest. Theoretically, this study highlights the importance of affective factors such as interest, attention, and real-life relevance in fostering value internalization and active engagement. Practically, teachers and schools should adopt varied and interactive approaches: utilizing visual media, videos, and outdoor activities; implementing Problem-Based Learning and differentiated instruction; and scheduling lessons at more optimal times. These strategies help strengthen intrinsic motivation, concentration, and participation, resulting in more effective and meaningful Pancasila Education learning.

This study has several limitations. First, the data rely mainly on questionnaires and interviews, making the findings dependent on the honesty and subjective perceptions of students and teachers. Second, the study was conducted in a single school, limiting the generalizability of its findings. Third, the measurement of learning interest did not include in-depth classroom observations to capture students' behavioral dynamics directly. Therefore, future research is recommended to involve more diverse samples across various schools and grade levels, employ mixed methods combining systematic observation and longitudinal studies to assess changes in learning interest over time, and examine the influence of technology or innovative learning models more specifically.

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REFERENCE

- Ahmad, C. (2021). Causes of students' reluctance to participate in classroom discussions. *ASEAN Journal of Science and Engineering Education*, *1*(1), 47-62. https://doi.org/10.17509/ajsee.v1i1.32407
- Ainscow, M. (2020). Promoting inclusion and equity in education: lessons from international experiences. *Nordic Journal of Studies in Educational Policy*, 6(1), 7–16. https://doi.org/10.1080/20020317.2020.1729587
- Akhan, N. E., Demirezen, S., & Çiçek, S. (2023). We are late enough: take action in social studies classes. *SAGE Open*, *13*(3). https://doi.org/10.1177/21582440231193824
- Aldalur, I., & Perez, A. (2023). Gamification and discovery learning: Motivating and involving students in the learning process. *Heliyon*, *9(1)*, e13135. https://doi.org/10.1016/j.heliyon.2023.e13135
- Alotaibi M. S. (2024). Game-based learning in early childhood education: a systematic review and meta-analysis. *Frontiers in psychology, 15*, 1307881. https://doi.org/10.3389/fpsyg.2024.1307881
- Alrajhi, A. S. (2024). The salient antecedents of boredom in formal English language learning. *Cogent Education*, 11(1). https://doi.org/10.1080/2331186X.2024.2342672

- Arda Tuncdemir, T. B. (2025). The power of creative drama: Integrating playful learning approaches in teacher education. *Research in Drama Education: The Journal of Applied Theatre and Performance*, 1–22. https://doi.org/10.1080/13569783.2025.2457745
- Arends, R. (2012). *Learning to teach*. McGraw-Hill. https://books.google.co.id/books?id=B1trewAACAAJ
- Burke, C. M., Montross, L. P., & Dianova, V. G. (2024). Beyond the classroom: an analysis of internal and external factors related to students' love of learning and educational outcomes. *Data*, *9*(6), 81. https://doi.org/10.3390/data9060081
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of research in nursing: JRN*, 25(8), 652–661. https://doi.org/10.1177/1744987120927206
- Cavilla, D. (2017). The effects of student reflection on academic performance and motivation. *SAGE Open*, 7(3). https://doi.org/10.1177/2158244017733790
- Cenić, D. S., Milosavljević Đukić, T., Stojadinović, A. M., & Spasić Stošić, A. D. (2023). Outdoor education: perspectives of teachers and students in the context of school in nature as an innovative approach in education. *International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)*, 11(3), 497–510. https://doi.org/10.23947/2334-8496-2023-11-3-497-510
- Cents-Boonstra, M., Lichtwarck-Aschoff, A., Denessen, E., Aelterman, N., & Haerens, L. (2020). Fostering student engagement with motivating teaching: an observation study of teacher and student behaviours. *Research Papers in Education*, 36(6), 754–779. https://doi.org/10.1080/02671522.2020.1767184
- Chaudhuri, S., Muhonen, H., Pakarinen, E., & Lerkkanen, M. K. (2021). Teachers' focus of attention in first-grade classrooms: Exploring teachers experiencing less and more stress using mobile eye-tracking. *Scandinavian Journal of Educational Research*, 66(6), 1076–1092. https://doi.org/10.1080/00313831.2021.1958374
- Crow, L. D., & Crow, A. (1958). *Educational psychology*. American Book Company. https://books.google.co.id/books?id=j_gzAAAAMAAJ
- Cui, G., Zhou, J., Zhang, H., Hong, T., & Hu, Y. (2024). The influence of study interest, perceived autonomy support, and student enthusiasm on class-related boredom of english majors. *SAGE Open, 14(1)*. https://doi.org/10.1177/21582440241228915
- Darling-Hammond, L., Flook, L., Cook-Harvey, C., Barron, B., & Osher, D. (2019). Implications for educational practice of the science of learning and development. *Applied Developmental Science*, 24(2), 97–140. https://doi.org/10.1080/10888691.2018.1537791
- Davies, D., Jindal-Snape, D., Collier, C., Digby, R., Hay, P., & Howe, A. (2013). Creative learning environments in education—A systematic literature review. *Thinking Skills and Creativity*, 8, 80–91. https://doi.org/10.1016/j.tsc.2012.07.004
- Davies, D., Jindal-Snape, D., Collier, C., Digby, R., Hay, P., & Howe, A. (2013). Creative learning environments in education—A systematic literature review. *Thinking Skills and Creativity*, 8, 80–91. https://doi.org/10.1016/j.tsc.2012.07.004
- Denzin, N. K. (2017). The research act. Routledge. https://doi.org/10.4324/9781315134543
- Diallo, F. P., & Tudose, C. (2024). Optimizing the scheduling of teaching activities in a faculty. *Applied Sciences*, 14(20), 9554. https://doi.org/10.3390/app14209554
- Do, H. N., Do, B. N., & Nguyen, M. H. (2023). 3How do constructivism learning environments generate better motivation and learning strategies? The Design Science Approach. *Heliyon*, 9(12), e22862. https://doi.org/10.1016/j.heliyon.2023.e22862

- Evmenova, A. S., Regan, K., Mergen, R., & Hrisseh, R. (2025). Educational games and the potential of AI to transform writing across the curriculum. *Education Sciences*, 15(5), 567. https://doi.org/10.3390/educsci15050567
- Fitriasari, S., Masyitoh, I. S., & Baeihaqi. (2020). The role of Pancasila education teachers and citizenship in strengthening character education based on Pancasila values. *In Proceedings of the 2nd Annual Civic Education Conference (ACEC 2019)* (pp. 534–540). Atlantis Press. https://doi.org/10.2991/assehr.k.200320.101
- Gao, B., Wijaya, T. T., He, Y., Ma, H., & Wu, L. (2025). What factors affect student procrastination on mathematics homework: Self-determination theory perspective. *Acta Psychologica*, 256, 105020. https://doi.org/10.1016/j.actpsy.2025.105020
- Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. *Cogent Education*, 7(1). https://doi.org/10.1080/2331186X.2020.1738184
- Goldberg, P., Schwerter, J., Seidel, T., Müller, K., & Stürmer, K. (2021). How does learners' behavior attract preservice teachers' attention during teaching? *Teaching and Teacher Education*, 97, 103213. https://doi.org/10.1016/j.tate.2020.103213
- Goyibova, N., Muslimov, N., Sabirova, G., Kadirova, N., & Samatova, B. (2025). Differentiation approach in education: Tailoring instruction for diverse learner needs. *MethodsX*, *14*, 103163. https://doi.org/10.1016/j.mex.2025.103163
- Gunawardena, M., Bishop, P., & Aviruppola, K. (2024). Personalized learning: The simple, the complicated, the complex and the chaotic. *Teaching and Teacher Education*, *139*, 104429. https://doi.org/10.1016/j.tate.2023.104429
- Guo, P., Saab, N., Post, L. S., & Admiraal, W. (2020). A review of project-based learning in higher education: Student outcomes and measures. *International Journal of Educational Research*, 102, 101586. https://doi.org/10.1016/j.ijer.2020.101586
- Haleem, A., Javaid, M., Qadri, M. A., & Suman, R. (2022). Understanding the role of digital technologies in education: A review. *Sustainable Operations and Computers*, 3, 275–285. https://doi.org/10.1016/j.susoc.2022.05.004
- Hamilton, A. B., & Finley, E. P. (2019). Qualitative methods in implementation research: An introduction. *Psychiatry research*, 280, 112516. https://doi.org/10.1016/j.psychres.2019.112516
- Harackiewicz, J. M., Smith, J. L., & Priniski, S. J. (2016). Interest matters: the importance of promoting interest in education. *Policy insights from the behavioral and brain sciences*, *3*(2), 220–227. https://doi.org/10.1177/2372732216655542
- Hinduja, P., Fakir Mohammad, R., & Siddiqui, S. (2024). Factors influencing students' academic self-efficacy in related domains. *SAGE Open*, 14(4). https://doi.org/10.1177/21582440241289738
- Holland, A., & Ciachir, C. (2024). A qualitative study of students' lived experience and perceptions of using ChatGPT: immediacy, equity and integrity. *Interactive Learning Environments*, 33(1), 483–494. https://doi.org/10.1080/10494820.2024.2350655
- Hollister, B., Nair, P., Hill-Lindsay, S., & Chukoskie, L. (2022). Engagement in online learning: Student attitudes and behavior during COVID-19. *Frontiers in Education*, 7, 851019. https://doi.org/10.3389/feduc.2022.851019
- Jabbar, A. I. A., & Felicia, P. (2015). Gameplay engagement and learning in game-based learning: A systematic review. *Review of Educational Research*, 85(4), 740-779. https://doi.org/10.3102/0034654315577210
- Jamet, E., Gonthier, C., Cojean, S., Colliot, T., & Erhel, S. (2020). Does multitasking in the classroom affect learning outcomes? A naturalistic study. *Computers in Human Behavior*, 106, 106264. https://doi.org/10.1016/j.chb.2020.106264

- Khan, S., Shiraz, M., Shah, G., & Muzamil, M. (2023). Understanding the factors contributing to low enrollment of science students in undergraduate programs. *Cogent Education*, 10(2). https://doi.org/10.1080/2331186X.2023.2277032
- Korstjens, I., & Moser, A. (2017). Series: Practical guidance to qualitative research. Part 2: Context, research questions and designs. *European Journal of General Practice*, 23(1), 274–279. https://doi.org/10.1080/13814788.2017.1375090
- Langelaan, B. N., Gaikhorst, L., Smets, W., & Oostdam, R. J. (2024). Differentiating instruction: Understanding the key elements for successful teacher preparation and development. *Teaching and Teacher Education*, 140, 104464. https://doi.org/10.1016/j.tate.202
- Leek, J., Rojek, M., Dobińska, G., & Kosiorek, M. (2024). Navigating the power of time in classroom practices: teachers' and students' perspectives. *Educational Review*, 1–23. https://doi.org/10.1080/00131911.2024.2438878
- Ling, X., Yang, J., Liang, J., Zhu, H., & Sun, H. (2022). A deep-learning based method for analysis of students' attention in offline class. *Electronics*, 11(17), 2663. https://doi.org/10.3390/electronics11172663
- Liu, F., Wang, X., & Izadpanah, S. (2023). The comparison of the efficiency of the lecture method and flipped classroom instruction method on EFL students' academic passion and responsibility. *SAGE Open*, 13(2). https://doi.org/10.1177/21582440231174355
- Marini, A., Safitri, D., Niladini, A., Zahari, M., Dewiyani, L., & Muawanah, U. (2025). Developing a website integrated with project-based learning: Evidence of stimulating creativity among elementary school students in Indonesia. *Social Sciences & Humanities Open, 11*, 101402. https://doi.org/10.1016/j.ssaho.2025.101402
- Márquez, J., Lazcano, L., Bada, C., & Arroyo-Barrigüete, J. L. (2023). Class participation and feedback as enablers of student academic performance. *SAGE Open, 13(2)*. https://doi.org/10.1177/21582440231177298
- Mayorga-Fernández, M. J., Sepúlveda-Ruiz, M. P., & García-Vila, E. (2024). Reconstructing practical knowledge in initial training. A qualitative study. *International Journal of Qualitative Methods*, 23. https://doi.org/10.1177/16094069241244862
- Muhardis, M. (2023). Learning about independence from Kaba Si Buyuang Karuik. *Cogent Arts & Humanities*, 10(2). https://doi.org/10.1080/23311983.2023.2270785
- Negrin, K. A., Slaughter, S. E., Dahlke, S., & Olson, J. (2022). Successful recruitment to qualitative research: a critical reflection. *International Journal of Qualitative Methods*, 21. https://doi.org/10.1177/16094069221119576
- Ningsih, T. Z., Aman, A., Nasrulloh, A., Ofianto, O., Erniwati, E., Asri, Z., ... Firza, F. (2025). Enhancing communication and collaboration skills through discovery, cooperative and problem-based learning models in Social Studies education. *Cogent Education*, 12(1). https://doi.org/10.1080/2331186X.2025.2500110
- Nor, H., Hizriani, N., & Kadariyah, N. L. (2022). Teachers' materials development, lesson planning, and teaching skills readiness in teaching english. *PANYONARA: Journal of English Education*, 4(1), 32-64. https://doi.org/10.19105/panyonara.v4i1.5909
- Otermans, P. C. J., Kaur, H., Patrao, A., Banerjee-Wøien, T. L., & Baines, S. (2025). Motivation is key: exploring the role of motivation on learning approaches. *Learning: Research and Practice*, 1–17. https://doi.org/10.1080/23735082.2025.2536502
- Pekrun, R. (2021). Teachers need more than knowledge: Why motivation, emotion, and self-regulation are indispensable. *Educational Psychologist*, 56(4), 312–322. https://doi.org/10.1080/00461520.2021.1991356

- Pessoa, A. S. G., Harper, E., Santos, I. S., & Gracino, M. C. da S. (2019). Using reflexive interviewing to foster deep understanding of research participants' perspectives. *International Journal of Qualitative Methods*, 18. https://doi.org/10.1177/1609406918825026
- Quoc, N. L., & Van, L. H. (2023). Enhancement of EFL learners' lexical retention: The role of social constructivism. *Cogent Education*, 10(1). https://doi.org/10.1080/2331186X.2023.2223811
- Renninger, K. A., & Hidi, S. E. (2020). To level the playing field, develop interest. *Policy Insights from the Behavioral and Brain Sciences*, 7(1), 10-18. https://doi.org/10.1177/2372732219864705
- Rott, D., Kohnen, M., & Fischer, C. (2024). The importance of promoting critical thinking in schools: Examples from Germany. *Gifted Education International*, 40(2), 214-232. https://doi.org/10.1177/02614294241251577
- Russell, J. L., Bryk, A. S., & Sherer, J. Z. (2025). Bringing scientific-professional learning communities into practice: exploring variation in educational improvement network health and development. *Peabody Journal of Education*, 100(1), 64–81. https://doi.org/10.1080/0161956X.2025.2444843
- Rutledge, P. B., & Hogg, J. L. C. (2020). In-depth interviews. In J. Bulck (Ed.), *The international encyclopedia of media psychology* (pp. 1–6). Wiley. https://doi.org/10.1002/9781119011071.iemp0019
- Santrock, J. W. (2011). *Educational psychology*. McGraw-Hill Medical Publishing https://books.google.co.id/books?id=M8S4kgEACAAJ
- Sartika, S. B., Suyidno, & Wiguna, A. (2024). The Analysis of Students Needed in Digital Teaching Media. *JTP-Jurnal Teknologi Pendidikan*, 26(1), 44–62. https://doi.org/10.21009/jtp.v26i1.40737
- Snell, J., & Lefstein, A. (2017). "Low Ability," participation, and identity in dialogic pedagogy. *American Educational Research Journal*, 55(1), 40-78. https://doi.org/10.3102/0002831217730010
- Spanjers, D. M., Burns, M. K., & Wagner, A. R. (2008). Systematic direct observation of time on task as a measure of student engagement. *Assessment for Effective Intervention*, *33*(2), 120-126. https://doi.org/10.1177/1534508407311407
- Swain, J., & King, B. (2022). Using informal conversations in qualitative research. *International Journal of Qualitative Methods*, 21. https://doi.org/10.1177/16094069221085056
- Taş, H., & Minaz, M. B. (2024). The effects of learning style-based differentiated instructional activities on academic achievement and learning retention in the social studies course. *SAGE Open*, 14(2). https://doi.org/10.1177/21582440241249290
- Uus, Õ., Mettis, K., & Väljataga, T. (2022). Self-directed learning: A case-study of school students scientific knowledge construction outdoors. *Cogent Education*, 9(1). https://doi.org/10.1080/2331186X.2022.2074342
- Valente, S., Dominguez-Lara, S., & Lourenço, A. (2024). Planning time management in school activities and relation to procrastination: a study for educational sustainability. *Sustainability*, 16(16), 6883. https://doi.org/10.3390/su16166883
- van der Scheer, E. A., Bijlsma, H. J. E., & Glas, C. A. W. (2018). Validity and reliability of student perceptions of teaching quality in primary education. *School Effectiveness and School Improvement*, 30(1), 30–50. https://doi.org/10.1080/09243453.2018.1539015
- van Leeuwen, A., & Janssen, J. (2019). A systematic review of teacher guidance during collaborative learning in primary and secondary education. *Educational Research Review*, 27, 71–89. https://doi.org/10.1016/j.edurev.2019.02.001
- Wang, X., Yang, L., Chen, K., & Zheng, Y. (2024). Understanding teacher emotional exhaustion: Exploring the role of teaching motivation, perceived autonomy, and teacher–student

- relationships. Frontiers in Psychology, 14, 1342598. https://doi.org/10.3389/fpsyg.2023.1342598
- Winataputra, U. S., Delfi, R., Pannen, P., & Mustafa, D. (2007). *Teori belajar dan pembelajaran*. Universitas Terbuka.
- Xie, J. (2021). The effects of boredom on EFL learners' engagement. *Frontiers in Psychology, 12*, 743313. https://doi.org/10.3389/fpsyg.2021.743313
- Xiong, X. (2025). Influence of teaching styles of higher education teachers on students' engagement in learning: The mediating role of learning motivation. *Education for Chemical Engineers*, *51*, 87–102. https://doi.org/10.1016/j.ece.2025.02.005
- Yan, X. Q., Zhou, Y. Y., Zhang, K., & Cui, G. Y. (2023). Perceived Teacher Enthusiasm and Professional Commitment: The Mediating Role of Boredom and Learning Engagement. *Psychology research and behavior management*, *16*, 1149–1163. https://doi.org/10.2147/PRBM.S400137
- Yang, D., Chen, P., Wang, K., Li, Z., Zhang, C., & Huang, R. (2023). Parental involvement and student engagement: a review of the literature. *Sustainability*, 15(7), 5859. https://doi.org/10.3390/su15075859
- Yeh, C. Y. C., Cheng, H. N. H., Chen, Z. H., & Chan, T. W. (2019). Enhancing achievement and interest in mathematics learning through Math-Island. *Research and Practice in Technology Enhanced Learning*, 14(1), 5. https://doi.org/10.1186/s41039-019-0100-9
- Zamiri, M., & Esmaeili, A. (2024). Strategies, Methods, and Supports for Developing Skills within Learning Communities: A Systematic Review of the Literature. *Administrative Sciences*, 14(9), 231. https://doi.org/10.3390/admsci14090231
- Zhang, W., Liu, Y., Dong, Y., He, W., Yao, S., Xu, Z., & Mu, Y. (2023). How we learn social norms: a three-stage model for social norm learning. *Frontiers in psychology*, *14*, 1153809. https://doi.org/10.3389/fpsyg.2023.1153809
- Zhou, Q., & Zhang, H. (2025). Flipped classroom teaching and ARCS motivation model: Impact on college students' deep learning. *Education Sciences*, 15(4), 517. https://doi.org/10.3390/educsci15040517