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IPAS Teacher Strategies: Joyful Learning for Elementary Students' Critical Thinking

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Abstrak: *Kemampuan berpikir kritis menjadi orientasi utama dalam Pendidikan. Pengembangan kemampuan tersebut relevan dengan pembelajaran IPAS karena materinya berbasis fenomena, masalah kontekstual, dan proses penyelidikan yang menuntut keterlibatan kognitif aktif. Tetapi banyak pembelajaran Ipas yang masih konvensional dan kuran merangsang perkembangan kemampuan berpikir kritis. Sehingga dibutuhkan model atau strategi pembelajaran yang tepat. Penelitian ini bertujuan untuk menganalisis strategi guru dalam menciptakan pengalaman belajar Ilmu Pengetahuan Alam dan Sosial (IPAS) yang menyenangkan (joyful learning) guna menanamkan kemampuan berpikir kritis siswa sekolah dasar. Penelitian ini menggunakan pendekatan kualitatif dengan desain studi kasus di SD Islami Qur'ani. Pengumpulan data dilakukan melalui observasi partisipatif, wawancara mendalam, dan studi dokumentasi, yang kemudian dianalisis menggunakan model interaktif Miles, Huberman, dan Saldaña. Hasil penelitian menunjukkan bahwa strategi pedagogis guru diimplementasikan melalui tiga praktik utama yang saling terintegrasi: penggunaan media interaktif sebagai stimulus awal, penerapan metode bertanya aktif dan diskusi kelompok, serta penciptaan ruang interaksi kelas yang suportif. Suasana belajar yang suportif secara efektif menurunkan kecemasan siswa terhadap kesalahan, sehingga memfasilitasi keberanian mereka dalam memformulasikan pertanyaan analitis dan menyusun simpulan melalui argumentasi kolektif. Temuan ini menegaskan bahwa joyful learning bukan sekadar variasi metode yang menghibur, melainkan fondasi pedagogis yang esensial bagi berkembangnya proses berpikir reflektif dan rasional. Penelitian selanjutnya disarankan untuk menggunakan desain longitudinal dan studi komparatif pada sekolah dengan karakteristik yang berbeda guna melacak dampak strategi ini terhadap pembentukan keterampilan berpikir kritis dalam jangka panjang.*

Kata Kunci: Joyful learning, Berpikir kritis, Pembelajaran IPAS, Media interaktif, Sekolah dasar

Abstract: Critical thinking skills are a primary focus in education. Developing these skills is relevant to science learning because the material is based on phenomena, contextual problems, and inquiry processes that require active cognitive engagement. However, much science learning remains conventional and does not stimulate the development of critical thinking skills. Therefore, appropriate learning models and strategies are needed. This study aims to analyze the teachers' strategies in creating joyful learning experiences in Natural and Social Sciences (IPAS) to foster critical thinking skills among elementary school students. This research employed a qualitative approach with a case study design at SD Islami Qur'ani. Data were collected through participant observation, in-depth interviews, and document analysis, and subsequently analyzed using the interactive model developed by Miles,

Huberman, and Saldaña. The results indicated that the teachers' pedagogical strategies were implemented through three primary integrated practices: utilizing interactive media as an initial stimulus, applying active questioning methods and group discussions, and creating a supportive classroom interaction environment. A supportive learning atmosphere effectively mitigates students' anxiety regarding mistakes, thereby encouraging them to formulate analytical questions and draw conclusions through collective argumentation. These findings affirm that joyful learning is not merely an entertaining methodological variation, but rather an essential pedagogical foundation for the development of reflective and rational thinking processes. Future research is recommended to employ longitudinal designs and comparative studies across schools with different characteristics to track the long-term impact of these strategies on the development of critical thinking skills.

Keywords: Joyful learning, Critical thinking, IPAS learning, Interactive media, Elementary school

INTRODUCTION

Strengthening capabilities *Critical Thinking* Being one of the main orientations of 21st century education, including at the elementary school level, this ability allows students to analyze information, evaluate arguments, and make rational and reflective decisions (Rohmah et al., 2025). In the learning of Natural and Social Sciences (IPAS), the development of *Critical Thinking* has strong relevance because of the phenomena-based nature of IPAS material, contextual problems, and inquiry processes that demand active cognitive involvement (Manihuruk et al., n.d.). Theoretically, the development of critical thinking is rooted in the constructivist paradigm. Jean Piaget's cognitive constructivism emphasizes that knowledge is built through active interaction between the individual and the environment through the process of assimilation and accommodation (Fatmahwati & Sumartiningsih, 2025). At the concrete operational stage, elementary school students need contextual and exploratory learning experiences to foster logical reasoning (Nurani et al., 2025, Hayat et al., 2024). This perspective is enriched by Vygotsky's social constructivism which emphasizes the importance of social interaction, dialogue, and *scaffolding* in developing high-level cognitive function (Wibowo et al., 2025). In addition, In an active, dialogical and open learning atmosphere, students have the space to test ideas or ideas and build a collective and complex scope of understanding.

The conceptualization of critical thinking in this study refers to the thinking of Robert H. Ennis who views *Critical Thinking* as a process of reflective and rational thinking in determining what to believe or do (Qithrotun Nida Aulia et al., 2025; Widiantie, 2025). In addition, Critical thinking is seen as a reflective practice that grows through problematization and argumentative dialogue**.** Thus, learning that supports the development of these abilities is not enough to just present material, but needs to present a challenging experience, be open to questions, and provide space for evidence-based argumentation.

However, the practice of learning science in elementary schools still shows a tendency oriented towards the delivery of concepts and solving routine problems, class activity more often places students as recipients of information than as questioners or active observers (Pamorti et al., 2024). Many students lack creativity in solving science problems due to a lack of understanding of basic concepts, difficulty analyzing concepts, and low grasping power (Fajrin Wijayanti et al., 2025). This condition has implications for limited space for reflection and dialogue that are essential for the growth of critical thinking, at the same time, learning that lacks positive emotional experiences often makes students reluctant to express ideas or question the information received (Maulidiyah et al., 2025).

A number of studies have examined certain learning models in improving critical thinking skills, and others have discussed the implementation of *joyful learning* In increasing motivation and learning outcomes, see the research (Rohayani & Winarto, 2026; Andayanie et al., 2025; Kusmana & Putri, 2025; Muhammad Barry Mahmudi et al., 2025; Salong & Ansiska, 2025; Affandi & Megawati, 2024; Sajida et al., 2024; Jeet & Pant, 2023). However, the relationship between a pleasant learning experience and the formation process *Critical Thinking*, in the learning of social studies in elementary schools, has not been studied in depth from the perspective of teacher practice in the classroom. In addition, on Previous studies have described the implementation based on learning models, there is still a gap in explaining how the intensity of two-way dialogue in classroom learning (diological interaction between teacher and student) in joyful learning can be a prerequisite for the emergence of students' courage in formulating analytical questions and arguing. The affective and cognitive dimensions in learning are often positioned separately, In fact, this separation obscures the understanding of how teachers' responses to mistakes and the intensity of two-way dialogue acts as a construction space for students' reasoning or critical thinking.

Starting from this, this article seeks to analyze teachers' strategies in creating a pleasant social studies learning experience and explain how these strategies shape students' critical thinking processes. This study fills this gap by providing a comprehensive explanation of the relationship between students' intellectual involvement and their ability to express opinions with facts or evidence or rationality. By placing learning experiences as a space of interaction between emotional engagement and high-level cognitive activity, this study is expected to make a conceptual and empirical contribution to the development of social studies learning practices in elementary schools.

METHOD

This study uses a qualitative approach with the type of case study carried out during the period from March 1 to May 5, 2025 in the Qur'anic Islamic elementary school which

was chosen purposively. The selection of subjects and locations is based on the consideration that the social studies teacher in the classroom has actually and actively implemented the learning approach *joyful learning*. The research subjects are determined purposively, including One person social studies teacher in grade IV, four people students, and One person the principal as a supporting informant. The selection characteristics of the four students were based on the criteria for fluent communication and the representation of variations in their level of involvement in exploratory activities in the classroom, so as to be able to provide in-depth information related to the critical thinking process**.** Data collection was carried out through participatory observation in the learning process, in-depth interviews, and documentation studies of learning tools. Data is analyzed interactively through the stages of data condensation, data presentation, and conclusion drawing (Miles et al., 2014). The validity of the data is tested through triangulation of sources, techniques, and member checking to ensure the validity of the findings, to direct the analysis process, research instruments as analytical constructions as follows:

Table 1. Research Instruments

Aspects	Conceptual Construction	Aspects analyzed
Joyful *Learning*	Learning as an interaction space that provides psychological security as well as intellectual involvement	(1) The courage of students to ask questions and express opinions; (2) The intensity of two-way dialogue; (3) Teachers' responses to mistakes as part of the learning process; (4) Exploratory activities based on contextual phenomena
The Process of *Cultivating Critical Thinking*	Critical thinking as a reflective practice that grows through problematization and argumentative dialogue	(1) Formulation of analytical questions; (2) Submission of reason/evidence-based opinions; (3) Identification of cause-effect relationships; (4) Drawing conclusions through collective argumentation

RESULTS AND DISCUSSION

Results

Teachers' Pedagogical Strategies in Creating Joyful Learning Based on Media and Dialogue

This study found that grade IV science teachers at SD Islami Qur'ani use interactive and varied learning media as the first strategy in creating a fun IPAS learning experience while stimulating students' critical thinking. The media used includes animated videos, interactive games based on Wordwall, as well as applicative teaching aids such as posters and real objects, teachers consistently start learning by displaying interesting phenomena or questions through these media, which immediately triggers students' curiosity and

participation in the classroom. This is confirmed by the statement of the fourth grade teacher who stated:

"*If the children are immediately given material from books, they will get bored quickly. So I always lure them first using Wordwall or natural phenomenon videos. If they are enthusiastic and laughing relaxed, then I will include the main question. From there, they usually have more courage to guess and are not afraid to answer the wrong question*" (Teacher Interview, November 15, 2025).

The use of media in learning social studies in the school does not only function as a variety of methods so that students do not feel bored, from the results of observation, it can be seen that media is used in a planned manner to build initial focus and direct students' attention to the problem to be learned, when animated videos or interactive games are shown, students do not only show emotional responses in the form of enthusiasm, but also start asking simple questions related to the observed phenomenon. This initial event became very important because the teacher used it to lead students into a deeper discussion.

In practice, the questions the teacher asks do not stop at the level of remembering or remensuring information, the teacher often asks the students to explain the reason behind the answers they give. When students express their opinions, the teacher follows up with follow-up questions that demand a more detailed explanation. This pattern of interaction shows that the media plays a role as an initial trigger, while the deepening of thinking occurs through dialogue built afterwards. The success of this dialogue is largely determined by the teacher's response to the student's mistakes. The teacher does not position the wrong answer as a failure, but as a discourse material.

"*If there is a student whose answer is deviant, I do not immediately blame, I ask him back, "what is the reason for such an opinion?" Then I threw it to his other friends, so they justified each other*," said the teacher (Teacher Interview, November 15, 2025).

In addition to the use of interactive media, this study also identifies the application of active questioning methods and group discussions as a second strategy in creating fun and meaningful learning. The teacher is not only a source of information, but more acts as a facilitator who asks open-ended questions and encourages students to ask each other questions in groups, students are accustomed to asking questions, either verbally or in writing, before the start of the discussion. In learning at Qur'ani Islamic Elementary School, the habit of asking these questions creates a more lively and participatory classroom atmosphere, students are not only waiting for the teacher's explanation, but are encouraged to be directly involved in the process of finding answers.

Then, in group discussions it becomes a follow-up space to deepen the process, in addition, in learning at SD Islami Qur'ani, group discussions do not only function as a division of tasks, but as a vehicle for students to evaluate each other's arguments and draw

conclusions based on evidence from learning sources or simple experiments. When students are asked to present the results of the discussion, they must be able to explain the reasons behind the answers agreed upon by their group, this process encourages students to formulate arguments more concisely and consider the points of view of their peers. This is illustrated by the expression of one of the students: "*It's nice to learn social studies during group work, sometimes my answers are different from my classmates' answers, then which discussion group is the most correctly matched with the book, then later move forward*" (Student Interview 2, November 20, 2025).

Cultivation of Critical Thinking in the IPAS Learning Ecosystem

In the process of nurturing students' critical thinking in science learning, the findings in this study are the creation of a learning atmosphere that is dialogical and full of appreciation or reward and supportiveness, where mistakes are seen as part of the teaching and learning process. Teachers provide positive reinforcement, not responding to students' questions with judgment, but opening up space for the delivery of different ideas to students. This condition fosters the courage of students to express opinions and question the information received, which then becomes the foundation for the development of critical thinking, because students feel emotionally safe to take risks in asking and expressing opinions. This admission was straightforward conveyed by one of the students:

"*Studying social studies is exciting because the teacher is not fierce if my answer is wrong, in fact he is often applauded for daring to try to answer, so my friends and I are not afraid if we want to ask difficult questions, sir*" (Student Interview 4, November 20, 2025).

In learning practice, the teacher's response to inappropriate answers is not conveyed in the form of direct correction that turns off the course of the discussion, instead, the teacher tends to ask follow-up questions or ask other students to respond to the opinion. This interaction pattern creates a space for dialogue that allows differences of views to emerge openly, students not only practice conveying ideas, but also learn to accept criticism and refine arguments, this situation shows that psychological security plays an important role in encouraging intellectual participation, this condition shows that teachers' interpersonal skills in building empathic communication greatly determine such participation.

"*…I always avoid the word "wrong" when responding to students' answers, instead I throw it back into the class discussion forum, "what do others think of this friend A?" this way of communication turns out to provoke them to dare to argue* logically." (Teacher Interview, November 15, 2025).

At Qur'ani Islamic Elementary School, a similar practice can be seen when grade IV students are invited to do a simple experiment on energy, then asked to present the results and defend their arguments in front of the class, the presentation is not just a report of activities, but a space to convey reasons and answer questions from classmates, in this

process, students learn to draw conclusions based on observations and consider responses from other parties. Support for this flexible learning approach is also confirmed from an institutional perspective, the principal emphasized that schools provide broad autonomy for teachers to be creative in the classroom.

"*Formally, our guidelines do not require teachers to use a certain joyful learning model, but the principles of school management, teachers are free to innovate as long as the achievement indicators are met and students learn with a sense of joy (not burdened or afraid, especially for science lessons which require a lot of observation and critical thinking, because they directly intersect with the daily lives of individuals*" (Principal Interview, December 5, 2025).

Discussion

Conceptually, the phenomenon of media use in Qur'ani Islamic Elementary School shows that positive emotions built through media act as cognitive catalysts. Pleasure (joy) lowers students' affective filters, so they feel more relaxed and open to respond to exploratory activities based on contextual phenomena without pressure. These findings are in line with research showing that interactive media can improve students' active engagement and critical thinking skills (Cahyaningsih & Maemonah, 2024; Yusup & Mastoah, 2025). In a study, the application of Games Based Learning (GBL) with Wordwall media was proven to increase students' critical thinking skills by up to 88% and the completeness of learning outcomes reached 95% (Prasasti & Wahyudi, 2025). In grade IV students at Qur'ani Islamic Elementary School, the use of similar media not only made students enthusiastic, but also encouraged them to ask questions, analyze the information displayed, and relate it to previous knowledge.

The teacher's pedagogical response to the students' answers proves that critical thinking does not grow from one-sided instruction, but from the intensity of a two-way dialogue that normalizes mistakes as an integral part of the learning process. Thus, the pleasure of learning that arises does not stand alone, but is connected to a more directed analytical process. These findings are reinforced by research on the use of media and technology in social studies learning which confirms that the integration of technology with values can foster students' creativity, hard work, and curiosity (Ramadhani & Supriyadi, 2024). Referring to the Qur'ani Islamic Elementary School, media is a means that helps students build understanding through concrete experiences, this is in line with the framework of cognitive constructivism put forward by Jean Piaget, that learning that involves direct experience allows the process of assimilation and accommodation in the student's cognitive structure (Lestari et al., 2024). In other words, media is not just a visual aid, but a bridge between real experience and concept formation in classroom learning (Rosyada et al., 2025).

In addition to the use of interactive media, this study also identifies the application of active questioning methods and group discussions as a second strategy in creating fun and meaningful learning. The teacher is not only a source of information, but more acts as a facilitator who asks open-ended questions and encourages students to ask each other questions in groups, students are accustomed to asking questions, either verbally or in writing, before the start of the discussion.

The active questioning method approach has similarities with the Student Question Have method which has been proven to be effective in improving the critical thinking skills of elementary school students, the study shows that the method that involves active oral and written questions is able to develop students' analytical and evaluative abilities (Amaliyah & Handayani, 2024; Riffaii, 2024). Meanwhile, the findings on learning at Qur'ani Islamic Elementary School, the habit of asking these questions creates a more lively and participatory classroom atmosphere, students not only wait for the teacher's explanation, but are encouraged to be directly involved in the process of finding answers. Then, in group discussions it becomes a follow-up space to deepen the process, in addition, in learning at SD Islami Qur'ani, group discussions do not only function as a division of tasks, but as a vehicle for students to evaluate each other's arguments and draw conclusions based on evidence from learning sources or simple experiments. When students are asked to present the results of the discussion, they must be able to explain the reasons behind the answers agreed upon by their group, this process encourages students to formulate arguments more concisely and consider the points of view of their peers.

This situation reflects Vygotsky's view of social constructivism which emphasizes the importance of social interaction and dialogue in developing high-level cognitive functions through discussion, students learn to convey ideas, listen to the opinions of others, as well as revise their understanding when encountering stronger arguments (Wibowo et al., 2025; Lestari et al., 2024). The students' statement above emphasizes that the problematization process occurs naturally through differences of ideas between peers (peer interaction), where they practice drawing conclusions through collective argumentation. In addition, an active and applicative learning model (based on projects, discussions, or real problems) plays a very important role, especially in the application of collaboration and reflection in forming students who are able to think critically in accordance with the learning achievements of the 4c 21st Century (Solichin & Tyas, 2025). This is also in line with the findings of research in which teachers at SD Islami Qur'ani have adaptively applied these elements, although not designed by all teachers.

Conceptually, these findings dismantle the traditional view that often separates the affective and cognitive realms, emotional security here is not just an ice-breaking element to

make students happy, but an epistemological prerequisite, when anxiety about mistakes is reduced, students' cognitive load is completely freed to explore critically analytically. A critical analysis of these interactions shows that teachers deliberately deconstruct the hierarchy of knowledge in the classroom, by returning questions to the forum, teachers move the location of authority of truth from "textbooks" to "logical agreements between students", this practice of transferring authority is what essentially forces students to think critically, as they are required to validate information independently, rather than simply accepting doctrine from the teacher.

Overall, the use of interactive media, active questioning methods, and group discussions showed a complementary pattern of pedagogical strategies, media built initial interest, open-ended questions deepened analysis, and group discussions strengthened evaluation and conclusion making. All three form a learning experience that is not only emotionally pleasurable, but also intellectually challenging. In this case, joyful learning is not understood as a purely pleasant atmosphere, but rather as a prerequisite condition that allows students to be actively involved in the process of reflective and argumentative thinking.

These findings are in line with the Deep Learning approach that emphasizes mindful, meaningful, and joyful elements simultaneously, mindful learning is reflected when students are invited to think critically through open-ended questions and discussions (Kinasih & Hidayah, 2025). The meaningful element is seen in the material when it is associated with concrete experience through the medium and simple experiments, while the joyful element is seen in the classroom atmosphere that is not stressful and gives space for the expression of opinions, the three elements do not run separately, but reinforce each other in daily learning practice (UBM et al., 2025). Research on STEAM-based IPAS teaching materials also proves that learning that contextually and exploratively designed learning is able to increase students' creativity and critical thinking skills (Siregar et al., 2023). At Qur'ani Islamic Elementary School, a similar practice can be seen when grade IV students are invited to do a simple experiment on energy, then asked to present the results and defend their arguments in front of the class, the presentation is not just a report of activities, but a space to convey reasons and answer questions from classmates, in this process, students learn to draw conclusions based on observations and consider responses from other parties. This event indicates that *Critical Thinking* has transcended the boundaries of individual skills into a social practice (*Social Practice*), Peer evaluation (*Peer Evaluation*) that occurs spontaneously proves that students are not just memorizing the concept of energy, but are testing the validity of their designs through empirical dialectics.

The event of the energy experiment indicates that critical thinking has exceeded the limits of individual skills to become a social practice, peer evaluation that occurs spontaneously proves that students are not just memorizing the concept of energy, but are testing the validity of their designs through empirical dialectics. The findings of this study confirm that the strategies described earlier are not only stand-alone, but are interrelated in a holistic learning ecosystem. Interactive media sparks curiosity, the method of asking questions and discussions trains analysis and evaluation, while the atmosphere of appreciation and supportivity provides psychological security for reflective thinking, the interaction of the three forms a learning environment that allows students to be actively involved in the process of building knowledge.

This is in line with the conceptualization of critical thinking from Robert H. Ennis which emphasizes the process of reflective and rational thinking in determining what to believe or do (Almazroa & Alotaibi, 2023; Ennis, 2011). In IPAS learning at SD Islami Qur'ani, the reflective process is seen when students not only receive information, but are asked to explain the reasons behind their answers and consider possible alternatives. Thus, the fun learning here is not just entertainment, but a condition that allows for deeper cognitive engagement, with Contextualizing Ennis's views in the framework of joyful learning, this research offers a new synthesis: that the process of determining "what to believe" requires a climate of freedom in which such beliefs can be doubted and tested without the threat of academic sanction. These findings also corroborate research on inquiry that methods that actively engage students in searching and discovering themselves can increase motivation, curiosity, and deep understanding (Trisnani, 2025; Rustandi, 2023). Whereas in the perspective of constructivism put forward by Jean Piaget, the practice in the Islamic Qur'anic Elementary facilitates the process of assimilation and accommodation through concrete and exploratory experiences, Meanwhile when viewed from the perspective of Vygotsky's social constructivism, social interaction in group discussions and scaffolding from teachers helps students achieve higher cognitive function (Wibowo et al., 2025).

Overall, the use of interactive media, active questioning methods, and group discussions showed a pattern of pedagogical strategies that complemented each other. Critical thinking grows as a habituated practice, not as a skill taught separately (Maulidiyah et al., 2025). Thus, a pleasant learning experience serves as an affective foundation that allows for the development of reflective and rational thinking skills in a sustainable manner. The principal's statement emphasized that the success of the implementation of fun and cognitively challenging learning in this school grew from the school culture that facilitated the independence of teacher learning in responding to the learning needs of students (students).

Conceptual and Pedagogical Implications of the Findings

The practical implication of these findings is the need for teachers to design learning that consciously integrates elements of fun and cognitive challenges, the use of media alone is not enough if it is not balanced with triggering questions and open dialogue spaces. In addition, group discussions will be less meaningful if students do not feel safe to speak. Therefore, teachers' professional development needs to be focused on the ability to design a balanced learning experience, which not only pursues material completeness, but also prioritizes teachers' interpersonal skills in responding to classroom dynamics. Conceptually, these findings show that joyful learning is inseparable from the challenging cognitive dimension, the pleasure of learning is not just a pleasant atmosphere, but a pedagogical condition that allows students to actively engage in the thought process. The integration of media, dialogue, and argumentative discussion shows that affective and intellectual elements work simultaneously, not in opposition (Ramadhani et al., 2024). Thus, fun learning can actually be a prerequisite for the growth of reflective thinking skills.

Another pedagogical implication is the importance of building a classroom culture that values questions as a core part of learning, when questions are positioned not as distractions, but rather as indicators of engagement, then the classroom transforms into an active and exploratory space. In this case, teachers must play the role of facilitators who maintain a balance between freedom of thought and conceptual accuracy, this balance becomes the foundation for the formation of sustainable critical thinking practices. Another pedagogical implication is the importance of building a classroom culture that values questions as a core part of learning, when questions are positioned not as distractions, but rather as indicators of engagement, then the classroom transforms into an active and exploratory space. In this case, teachers must play the role of facilitators who maintain a balance between freedom of thought and conceptual accuracy, this balance becomes the foundation for the formation of sustainable critical thinking practices through the transfer of authority of truth from teachers to students' dialogical processes.

The limitations of this study lie in the design of a single case study in one location, so generalizations of these findings need to be done carefully, given that the locus of this study implicitly implements joyful learning, further research can explore comparative studies in schools that already have formal curriculum guidelines or policies related to this approach to enrich understanding of the dynamics of joyful learning and critical thinking at the elementary school.

The limitations of this study lie in the design of a single case study in one location, so generalizations of these findings need to be done carefully, given that this study focuses on the strategy of implementing joyful learning by teachers in one specific locus, further research

can explore comparative studies in schools with different student demographic characteristics to enrich understanding of the dynamics of joyful learning and critical thinking at the school level basic**.** In addition to the limitations of the analysis content, this study has also not explored longitudinally the impact of the pedagogical strategy on the development of students' critical thinking in the long term. Therefore, further research can consider designs that allow the more systematic tracking of students' thinking skills development. Comparative and longitudinal approaches will broaden the understanding of how joyful learning contributes to the formation of a more permanent critical thinking disposition.

CONCLUSION

This study concludes that teachers' strategies in creating a pleasant IPAS learning experience at SD Islami Qur'ani are built through the integration of three main practices: the use of interactive and varied media, the application of active questioning methods and group discussions, and the creation of supportive interaction spaces. These three strategies form a mutually reinforcing learning ecosystem, where media functions as a cognitive trigger, discussions train argumentative reasoning, and a supportive atmosphere frees students to express their opinions. In this case, *joyful learning* is not just a pleasant atmosphere, but rather a prerequisite condition that allows for active intellectual engagement. Thus, the role of teachers is not just a material presenter, but as a designer of learning experiences that are able to balance fun and cognitive challenges in one complete framework.

These findings confirm that the cultivation of *critical thinking* develops effectively through exploratory experiences, argumentative dialogue, and meaningful social interactions. Based on this, this study recommends several specific directions for future studies. First, research with a longitudinal design is needed to track the effectiveness of the application of *joyful learning* on the formation of students' critical thinking dispositions in the long term. Second, it is recommended that there be a comparative study in schools with different demographic characteristics to test the level of adaptability of this strategy. Third, future research needs to formulate and test formative assessment rubrics that are specifically designed to assess critical thinking indicators when students are engaged in *joyful learning activities*.

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