

Teacher Concepts Related to the 4C Based PAI Learning Model at SMPIT Al Haraki Depok

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ABSTRACT

Islamic Religious Education in the 21st century faces the challenge of not only transmitting normative knowledge, but also developing critical thinking, creativity, collaboration, and communication (4C) skills in a meaningful way. This article is part of the discourse on religious education and pedagogy in the 21st century, with the aim of conducting an in-depth study of teachers' concepts related to the 4C-based PAI learning model at SMPIT Al Haraki Depok. This study uses a qualitative approach with a case study design. Data were collected through classroom observations, in-depth interviews with the principal, curriculum assistant, and PAI teachers, as well as analysis of learning documentation. This study does not formulate quantitative hypotheses but focuses on the meaning and interpretation of teachers' concepts. The results show that PAI learning has integrated the 4C elements through strategies such as question prompts, information exploration, case studies, discussions, projects, presentations, cross-subject learning, and Student Led Conferences. These practices reflect the social constructivism approach and information theory, in which students play an active role as meaning builders and learning communicators. This article contributes to the development of religious education studies by showing that PAI can be a space for dialogical, collaborative, and reflective learning. These findings emphasize the importance of systematic teacher-based PAI learning design to meet the demands of 21st-century education

Keywords : *Islamic Religious Education, 4C Skills, Cognitive Metacognitive, Constructivism.*

INTRODUCTION

The Industrial Revolution 4.0 has brought significant changes in various sectors of life through the development of digital technologies such as artificial intelligence, *the internet of things*, and automation. These changes have not only accelerated the flow of information and knowledge production, but also given rise to new and complex challenges for human life. In this context, the ability of individuals to adapt, think critically, and make appropriate decisions has become increasingly crucial, because the inability to adapt to technological developments has the potential to cause backwardness in various aspects of life. (Quy et al. 2023)

In response to these challenges, the concept of *Society 5.0* was developed with an emphasis on the integration of technological advances and human values. Society 5.0 aims to create a smart, inclusive, and sustainable society, where technology is used to improve the quality of human life holistically. Therefore, human resource development is a key factor in ensuring that the use of technology is not only technical in nature, but also in line with social, cultural, and ethical values. (A/L Rajendran and Mohd Shah 2020)

The 21st century is characterized by rapid and complex changes, requiring every individual to have critical thinking, creativity, *collaboration*, and effective

communication skills. The Partnership for 21st Century Skills emphasizes that the 4Cs *critical thinking, creativity, collaboration*, and communication are essential competencies that must be developed through education. (Jihan Nurhamidah and Arladia Hafsyah 2024)

In facing these challenges, education plays a very strategic role as the main medium in preparing the future generation. Education not only functions as a process of transferring knowledge, but also as a means of shaping character and life skills in line with the demands of the times. Through education, students are equipped with the ability to adapt, innovate, and become ethical and responsible individuals in social and global life. (Dharma and Siregar 2015) In line with this, the PISA results OECD 2019 emphasize that effective learning must actively involve students, hold them accountable, and encourage the development of progressive thinking. (Inganah, Darmayanti, and Rizki 2023)

However, teaching practices in schools are still largely dominated by a *teacher-centered learning* approach, in which teachers have complete control over the learning process. Nugroho, Anugerahwati, and Mukti found that teachers tend to use lecture methods more often, while students play a passive role as recipients of information. (Nugroho and Anugerahwati 2019) This condition hinders the development of higher-order thinking skills and active student participation, preventing students from developing their competencies optimally. (Santayasa 2015)

In the context of national education, Islamic Religious Education has a very strategic position. Law No. 20 of 2003 on the National Education System stipulates that religious education is a compulsory subject at the primary and secondary education levels. PAI not only aims to equip students with religious knowledge, but also to shape their character, morality, and ethical awareness in facing developments in science and technology. (Muaz et al. 2023)

Social reality shows that PAI learning in schools still faces serious challenges. Phenomena such as drug abuse, youth violence, gang fights, and promiscuity. (Hartati 2017) This reflects the gap between the ideal goals of PAI and the results achieved in the field. PAI learning still tends to be conventional, normative, and ritualistic, making it less contextual to the realities of students' lives. (Tang 2018) This is in line with the view of Musa Asy'arie, who states that religious education in schools is often trapped in religious formalism that ignores the social context. (Musa Asy'arie 2005)

Based on preliminary study data from direct observation at SMPIT Al Haraki Depok, it was found that students' critical thinking skills were evident in some learning activities, but had not been designed and consistently applied to all students and stages of learning, so that they still depended on the context of the material and the teacher's strategies. Student creativity is more evident in the results of assignments (products), while the process of developing creative ideas has not been explicitly directed in learning. In terms of collaboration, group work activities have been carried out, but the division of roles and monitoring of each student's contribution have not been implemented systematically, so collaboration has not been optimal. Meanwhile, students have been given the opportunity to give

presentations, but argumentative communication skills and active participation are not yet evenly distributed among all students.

The findings show that 4C-based PAI learning has been applied in learning practices, but the implementation of each 4C element has not been designed and implemented consistently and evenly. The development of 4C skills is still partial and contextual, so it is necessary to design learning that is more structured and based on clear teacher concepts.

A number of previous studies have examined 21st-century skills-based learning (4C) in various contexts. Zahra Jannah and Rustam highlight planned and effective learning management in improving students' 4C skills, but their study is general across subjects and does not focus on the concept of PAI teachers. (Jannah and Rustam 2025) The study by Sukron Jamil and Andi Murniati shows that the integration of 4C skills in Fiqh learning has a positive impact on students' critical thinking, creativity, collaboration, and communication, but the study emphasizes the application of learning methods rather than a comprehensive 4C-based PAI learning model. (Jamil and Murniati 2025) Arina Mana Sikana et al., through a literature review, confirmed the effectiveness of learning models such as Project-Based Learning, Problem-Based Learning, STEM, and Quantum Learning in developing 4C skills integrated with Islamic values, but this study was theoretical and did not reflect classroom learning practices. (Sikana, Fauzi, and Zawawi 2025) Meanwhile, Yuliani examined the challenges and opportunities for developing 4C skills in PAI learning in Indonesia conceptually without empirical data support. (Yuliani 2024) and Nurhalisah et al. found that the implementation of 4C learning by Indonesian language teachers was in the very good category, but did not examine PAI subjects or the concept of teachers as the basis for learning design. (Nurhalisah, Paidia, and Rahmatiah 2022)

Based on previous research mapping, there is still a research gap, namely the limitation of studies that specifically examine teachers' concepts related to the 4C-based PAI learning model. Therefore, this study presents novelty by focusing empirical studies on teachers' concepts in designing and interpreting 4C-based PAI learning at SMPIT Al Haraki Depok. This study aims to examine in depth teachers' concepts related to the 4C-based PAI learning model at SMPIT Al Haraki Depok, including their understanding, design, and implementation of the learning model developed by teachers. This study does not formulate quantitative hypotheses because it uses a qualitative approach that focuses on the meaning, understanding, and interpretation of teachers' concepts of the 4C-based PAI learning model

RESEARCH METHODS

This study is *field research* that aims to examine in depth teachers' concepts related to the 21st-century skills (4C) based Islamic Education (PAI) learning model at SMPIT Al Haraki Depok. This research focuses on teachers' understanding, formulation, and conceptual practices in interpreting and developing the elements of *critical thinking*, *creativity*, *collaboration*, and *communication* in PAI learning in accordance with the context of integrated Islamic schools.

The approach used in this study is a qualitative approach with a case study type of research. The selection of case studies is based on the research objective, which seeks to explore a phenomenon in depth in a real context. In line with Creswell's view, a case study is a research strategy used to intensively explore a bounded system, whether in the form of a program, activity, or social group, through in-depth data collection using various techniques over a certain period of time.(Creswell 2013) In this study, the system examined was the concept of teachers related to the 4C-based PAI learning model at SMPIT Al Haraki Depok.

This research is empirical and naturalistic in nature, as data was obtained directly from the field in a natural setting. The researcher was directly involved as the main instrument in collecting data through interaction with the research subjects.(Nasution 1996) The focus of the research was on the reality of PAI learning practices and the dynamics of teachers' understanding of 4C skills development, as they occur in the context of everyday learning in schools.

The data sources in this study consisted of primary and secondary data sources.(Sugiyono 2015) Primary data sources were obtained through observation and in-depth interviews with the principal, curriculum assistant, and Islamic Education teachers at SMPIT Al Haraki Depok. Meanwhile, secondary data sources were obtained from various supporting documents, such as learning tools, learning activity records, and other documents relevant to the implementation of 4C-based PAI learning.

RESULT AND DISCUSSION

Teacher Concepts Related to the 4c Learning Model at SMPIT Al Haraki Depok Teachers' Concepts Related to Critical Thinking in Islamic Education Learning Question Promters

Question prompts in PAI learning at SMPIT Al Haraki serve as an initial strategy that determines the quality of students' critical thinking activation. Teachers do not use questions merely to check understanding, but consciously design questions that focus students' attention on the core concepts, challenge initial arguments, and encourage students to ask and answer questions reflectively. This practice shows the emergence of critical thinking indicators at the stage of providing simple explanations, particularly in the ability to focus questions and analyze arguments that develop during learning.(Pandu, Purnamasari, and Nuvitalia 2023)

When analyzed through the perspective of Piaget's cognitive theory, these questions serve as stimuli that create cognitive disequilibrium, thereby encouraging students to engage in assimilation and accommodation processes.(Piaget 1950) When teachers ask students about their initial understanding of certain concepts, such as the meaning of seeking knowledge or the definition of Islamic Religious Education, students are directed to relate new information to their existing knowledge schemas. Thus, question prompts help create meaningful learning, not just memorization. The practice of teachers deliberately designing incorrect or controversial questions, as found in the research results, creates cognitive tension

that forces students to compare new information with their existing knowledge. This process shows that question prompts serve as triggers for students' cognitive restructuring.

Furthermore, the learning process that guides students to gradually construct their understanding and definition of PAI concepts demonstrates the involvement of inference skills. Students do not simply repeat the teacher's explanations, but engage in deductive and inductive reasoning by connecting concrete examples, learning experiences, and discussion outcomes to produce conceptual understanding. This activity demonstrates indicators of critical thinking in the aspect of making and considering conclusions, where students are trained to determine the results of their considerations rationally and argumentatively.

From a metacognitive theory perspective, the practice of prompting questions also encourages students to become aware of and evaluate their own thinking processes. When students are asked to define terms, consider the meaning of a concept, and identify the assumptions behind their answers, learning has touched on indicators of critical thinking at the stage of further explanation. (Flavell 1979) Students do not merely understand the material, but reflect on how and why an understanding is constructed, which shows the close relationship between critical thinking and metacognitive awareness.

Reviewed through Bloom's revised taxonomy, the questions and class discussions that took place at SMPIT Al Haraki involved higher-order thinking processes. Activities such as analyzing statements, evaluating peers' opinions, and formulating new understandings placed students at the *analyze*, *evaluate*, and *create* levels. (Anderson and Krathwohl 2001) At this stage, students are also trained to make decisions and interact constructively with others in group work and discussions, reflecting critical thinking indicators in terms of strategy and tactics. Thus, question prompts serve as a gateway to the development of HOTS in PAI learning, rather than as routine verbal activities.

Critical thinking indicators in 4C based PAI learning at SMPIT Al Haraki do not appear partially, but are integrated throughout the entire learning process from the early stages. Trigger questions serve as an entry point that connects cognitive, metacognitive, and HOTS abilities, so that PAI learning is not only oriented towards mastery of material, but also towards the systematic and continuous development of students' critical thinking skills.

Based on this analysis, question prompts can be understood as a key strategy that bridges the development of critical thinking, metacognitive awareness, and HOTS in PAI learning. These findings indicate that the quality of 4C learning is not solely determined by advanced methods, but rather depends heavily on how teachers design the initial phase of learning as a space for activating student thinking

Information Exploration

Teachers at SMPIT Al Haraki understand that exploring information in PAI learning is an important indicator in developing students' critical thinking,

especially in terms of building basic skills. At this stage, students are guided to independently search for and explore information through verses from the Qur'an and other supporting sources. These activities train students to observe information and consider the results of their observations, as well as assess the suitability and relevance of sources to the material being studied. Thus, information exploration is not interpreted as merely searching for data, but as an initial process of developing precision in thinking and caution in understanding religious knowledge.

From a cognitive theory perspective, information exploration reflects the learning process as an active mental activity, in which knowledge is constructed through the selection, organization, and integration of information.(Slavin 1995) When students independently search for verses and other references, they are building cognitive structures through direct experience. This process shows a shift in PAI learning from a pattern of knowledge transmission to learning that requires student intellectual involvement, so that the understanding formed is not mechanical or rote.

Exploring information also reinforces meaningful learning because new information is linked to students' prior knowledge.(Flavell 1979) In the context of PAI learning, students not only find verses, but also interpret and relate them to the material being discussed. This process confirms that exploring information helps students build a deeper conceptual understanding, because knowledge is acquired through a process of linking meanings, not just passively receiving information.

From a metacognitive theory perspective, information exploration demonstrates the development of students' awareness of their own thinking processes.¹ When students select sources, compare verses, and assess the accuracy of information, they indirectly manage the learning strategies they use. This activity shows that information exploration trains students to monitor and evaluate their thinking processes, which is the core of metacognitive skills in learning.

When analyzed using Bloom's revised taxonomy, information exploration involves thinking processes at the analyzing and evaluating levels, as students must sort information, understand meaningful relationships, and assess the relevance of sources. However, before reaching that stage, students' critical thinking skills are built through basic skills, namely observing information and considering the credibility of sources.(Anderson and Krathwohl 2001) Thus, information exploration serves as an important foundation for the development of higher-order thinking in PAI learning.

Based on this analysis, information exploration in PAI learning at SMPIT Al Haraki plays a strategic role as the initial stage in the development of students' critical thinking. Focusing on basic critical thinking skills makes students more careful, reflective, and less likely to accept information at face value. Therefore, information exploration not only enriches students' religious understanding but also strengthens the critical thinking foundation needed in 21st-century PAI learning.

Case Study

Case study-based learning in Islamic Education at SMPIT Al Haraki is understood as a pedagogical strategy that directly develops students' critical thinking skills, particularly in analyzing arguments. Through the presentation of religious and social cases, students are guided to identify problems, understand contexts, and assess various perspectives that arise. This activity positions students not merely as recipients of information, but as active subjects who assess the truth, relevance, and implications of an argument based on Islamic Education values.

From a cognitive theory perspective, case studies reflect the learning process as an active and constructive mental activity. When students analyze a case, they engage in internal thinking processes such as comparing information, linking facts to concepts, and drawing rational conclusions.(Slavin 2018) This process shows that religious knowledge is not transferred directly but is constructed through higher-order thinking activities that strengthen students' cognitive structures.

The case study approach is also closely related to the concept of meaningful learning. Ausubel explains that learning will be more effective when new information is linked to concepts that already exist in the cognitive structure of learners.(Ausubel 1969) Actual cases used in PAI learning allow students to relate religious values to their familiar experiences and realities. Thus, PAI teachings are not understood as abstract concepts, but as relevant and applicable guidelines for life.

From a metacognitive theory perspective, case studies encourage students to be aware of and evaluate their own thinking processes.(Flavell 1979) When students are asked to assess a case, they not only express their opinions but also consider the reasons and their validity. This activity shows that analyzing arguments in case studies trains students to reflect on the quality of their reasoning, which is at the core of critical thinking.

When analyzed using Bloom's Taxonomy, case study-based learning involves thinking processes at the analyzing and evaluating levels. Students describe the elements of the case, assess the strength of the arguments, and determine their stance based on PAI values. Thus, case studies are not merely a variation of learning methods, but a pedagogical strategy with a strong theoretical foundation in the development of critical thinking skills. This approach allows for the integration of cognitive, metacognitive, and affective aspects in PAI learning.

Discussion

Discussion in Islamic Religious Education learning can be understood as a pedagogical strategy that places dialogue and intellectual interaction at the core of the learning process. Through discussion, students not only passively receive religious information, but are encouraged to express their opinions, explain their understanding, and respond rationally to the views of others. In the context of critical thinking, this discussion practice primarily develops the key indicator of

providing simple explanations, namely the ability of students to verbally express ideas, reasons, and initial understandings in learning situations.

Theoretically, discussion is consistent with cognitive theory, which views learning as an active process of processing information. Learning does not take place through a one-way transfer of knowledge from teacher to student, but rather through mental activities such as understanding, reasoning, and testing understanding. (Piaget 1970) When students engage in PAI discussions, they try to re-explain religious concepts in their own words, respond to questions, and relate the material to relevant experiences. This process shows that students are constructing understanding through meaningful cognitive activities, not merely memorizing normative concepts.

Discussions are also closely related to cognitive constructivism, which places students as active subjects in constructing knowledge. Interactions between students in discussions allow for differences in opinion that trigger cognitive conflict. This condition encourages students to clarify, improve, or defend the explanations they present. (Vygotsky 1978) In PAI learning, discussions not only serve to understand Islamic teachings textually, but also to reason out their meaning and relevance in the context of social life. Thus, indicators provide simple explanations that develop through a process of clarifying ideas and initial arguments that are continuously refined.

From a metacognitive perspective, discussions provide space for students to become aware of and reflect on their own thinking. When students are asked to express their opinions or respond to their peers' views, they focus not only on the answers themselves, but also on the reasoning behind them. (Flavell 1979) This activity encourages students to reexamine the clarity of their explanations and adjust them based on the responses that arise in the discussion. This awareness strengthens students' ability to control and evaluate their thinking processes, which is an important foundation for critical thinking.

When analyzed using Bloom's revised taxonomy, discussions in PAI learning encourage student engagement at the intermediate to high cognitive levels. The process of understanding occurs when students listen to and interpret the opinions of others, while the ability to analyze and evaluate emerges when students compare views, consider reasons, and assess the suitability of opinions with Islamic values. However, in the context of critical thinking indicators, this entire process culminates in the students' ability to provide simple explanations that are logical, relevant, and rationally accountable. (Anderson and Krathwohl 2001)

Thus, discussion in PAI learning is not merely a classroom communication method, but a pedagogical strategy with a strong theoretical foundation in the development of critical thinking. Through guided discussion, students are trained to explain their understanding rationally, respond to different views, and relate Islamic teachings to the realities of life. This practice shows that discussion contributes significantly to developing key indicators of critical thinking, particularly the ability to provide simple explanations, as the basis for forming reflective and contextual religious reasoning.

Analysis

In Islamic Religious Education, critical thinking is not simply defined as the ability of students to give correct answers based on the text. Critical thinking requires students to be able to draw rational conclusions based on analysis of information, consideration of values, and justifiable reasons. Ennis emphasizes that the essence of critical thinking lies in the ability to draw logical conclusions after weighing evidence and arguments.(Ennis 1985) In the context of Islamic Religious Education, the ability to draw conclusions is important so that religious understanding is not dogmatic, but arises from a conscious and reflective reasoning process.(Facione 2015)

Case study-based learning provides a relevant space to develop these indicators of drawing conclusions. Case studies place students in problematic situations that require rational assessment before taking a stance. Cognitively, this process is in line with Bloom's Taxonomy, particularly in the realm of analyzing and evaluating. Students examine the facts of the case, relate them to the principles of Islamic teachings, and then draw conclusions as a form of synthesis of understanding.(Anderson and Krathwohl 2001) Thus, the conclusions reached are not the result of memorization, but rather the result of critical thinking.

From a cognitive constructivist perspective, the ability to draw conclusions in case studies reflects an active process of knowledge construction. Piaget explains that cognitive development occurs when individuals encounter inconsistencies between old knowledge and new information.(Piaget 1970) Case studies in PAI learning create these conditions by presenting problems that do not always have a single answer. When students conclude solutions or religious attitudes, they are reconstructing their understanding through meaningful cognitive adjustments.

In addition to the cognitive aspect, the ability to draw conclusions also has a metacognitive dimension. Flavell emphasizes that metacognition is related to an individual's awareness of their own thinking process. In case studies, students not only determine the final conclusion, but also reflect on the reasons and reasoning processes used.(Flavell 1979) Therefore, case study-based PAI learning contributes to the development of holistic critical thinking, as it trains students to conclude religious issues in a reflective, rational, and responsible manner.

Cross Curricular

Interdisciplinary learning places students in learning situations that require the ability to analyze relationships between concepts, rather than simply understanding material in isolation. In the context of critical thinking, Ennis emphasizes that thinking skills develop when students are able to assess the relevance of information and connect various sources of knowledge rationally.(Ennis 2011) In the context of PAI learning, cross-subject integration provides an authentic space for analysis because religious values are not studied as normative concepts that stand alone, but are tested for relevance through interaction with other fields of knowledge.

Cognitively, cross-subject learning encourages students to conduct cross-domain analysis as described in Bloom's Taxonomy. When students relate PAI to language, art, or skills in a case study or project, they are required to describe the role of each subject and assess its contribution to building a comprehensive understanding.(Anderson and Krathwohl 2001) This activity shows that critical thinking indicators in the form of analytical skills do not only appear at the conceptual level, but also in the process of weighing the appropriateness of values, context, and learning objectives.

From a constructivist perspective, cross-subject integration strengthens the process of knowledge construction because students build understanding through linking diverse learning experiences. Piaget explains that meaningful learning occurs when students construct knowledge through the adjustment of cognitive structures.(Piaget 1970) In integrated PAI learning, students' analysis of the relationship between religious teachings and cross-subject contexts shows that religious understanding is built actively and reflectively, not through passive acceptance. Thus, cross-subject integration not only enriches the learning experience but also strengthens students' critical thinking through the ability to analyze the relationships between concepts in a single unit of meaning.

Teacher Time

Teacher Time is a space for dialogue in Islamic Education learning that serves to develop critical thinking through the process of analyzing arguments. When students are invited to discuss current issues, they not only express their opinions, but also assess the relevance of information, distinguish between reasons and opinions, and relate their views to Islamic values. This activity shows that critical thinking develops through student involvement in analyzing issues rationally, rather than through passive acceptance of knowledge.(Facione 2015)

Socially and cognitively, dialogue during Teacher Time allows students to build understanding through interaction. Exchanging ideas with teachers and peers encourages students to review their understanding, consider other points of view, and deepen their analysis of religious issues. This process makes PAI learning a space for shared reflection, where the meaning of religious teachings is formed through reasoning and dialogue.(Vygotsky 1978)

The role of teachers in Teacher Time focuses on facilitating the thinking process, not on establishing a single truth. With provocative questions and argumentative clarifications, teachers help students sharpen their analysis and consider the implications of the views presented. Through this mechanism, Teacher Time functions as a pedagogical strategy that strengthens students' critical thinking skills, particularly in analyzing PAI issues contextually and responsibly.

Teacher Concepts Related to Creativity in PAI Learning Project

Creativity in Islamic Religious Education learning, as understood by teachers, is not positioned solely as the ability to produce visually appealing works,

but rather as a mental process of building meaningful connections between religious teachings and student learning experiences. Within the framework of association theory, creativity emerges when students are able to connect previously separate ideas, symbols, and concepts into new, relevant understandings.(Mednick 1962) Projects in Islamic Religious Education learning provide a context that enables this process to occur, because students do not only receive material textually, but are required to process it into meaningful representations through their own choice of media and form of work.

Project-based learning demonstrates how creativity develops through divergent thinking. When students are given the space to choose how to present PAI values for example, through posters, digital comics, or visual presentations they are constructing various possible associations from a single religious concept. This process shows that creativity does not arise from aimless freedom, but rather from intellectual challenges that encourage students to connect PAI material with visual language, technology, and personal experiences. Projects serve as a medium that activates students' abilities to develop ideas in varied and reflective ways.(Guilford 1967)

From a learning environment perspective, PAI projects designed with flexibility in form and media create conditions conducive to the development of creativity. When learning does not direct students towards a single, uniform product, students have the opportunity to build associations according to their preferences and ways of thinking. This condition strengthens conceptual understanding because students not only remember the content of the lesson, but also reconstruct it into new forms that have personal meaning. The integration of visual and verbal elements in the project also enriches the way students process information, so that their understanding of PAI becomes more profound and does not stop at memorization.

Creativity is strengthened when PAI projects are developed across subjects. Combining PAI with language, arts, or practical skills expands the network of associations that students can build. Religious values are no longer understood as stand-alone concepts, but as principles that can be translated into various contexts of life. These findings show that creativity in project-based PAI learning is the result of a complex and continuous association process, in which students connect Islamic teachings with the diverse knowledge and experiences they have.

Thus, the concept of teachers related to creativity in project-based PAI learning places students as active subjects in constructing meaning. Creativity is not understood as an end goal in the form of a product, but as an associative thinking process that allows students to interpret, process, and express Islamic values contextually. PAI learning designed through projects shows that creativity can grow substantially when students are given the space to connect knowledge, experience, and media into a unified understanding.

Problem Solver

Creativity in Islamic Religious Education learning, especially in the context of problem solving, cannot be reduced to the ability to generate new ideas alone, but rather as a thinking process that connects religious knowledge with the concrete situations faced by students. Within the framework of association theory, creativity arises when students are able to build meaningful relationships between concepts, experiences, and information that were previously separate. Mednick views creativity as the ability to combine elements that are distantly related into a new unity of understanding. (Mednick 1962) In Islamic Religious Education learning, this process is evident when students are faced with religious issues that do not have a single standard answer, requiring them to flexibly connect Islamic principles, values, social experiences, and logical reasoning to formulate relevant solutions.

The ability to solve problems creatively is also closely related to divergent thinking. Guilford asserts that creativity develops through the ability to generate various alternative thoughts on a single issue, not merely finding the answer that is considered correct. (Guilford 1950) In PAI learning that provides space for discussion and dialogue, students are not directed towards reproducing normative concepts, but are encouraged to develop various possible responses that can be justified rationally and in terms of religious values. This process shows that creativity functions as a higher-order cognitive ability that enables students to weigh the relevance of ideas, evaluate arguments, and formulate contextual solutions to the issues being discussed.

From the perspective of creativity psychology, problem solving cannot be separated from meaningful cognitive engagement. Runco emphasizes that creativity develops when individuals understand problems deeply, interpret contexts, and generate solutions that are appropriate to the situation at hand. (Runco 2010) In PAI learning, activities such as explaining reasons, defending arguments, and responding to other views train students to think solution-oriented, not reactive. Creativity does not appear instantly, but is formed through a process of continuous reflection and information processing, so that students' religious understanding becomes more mature and applicable.

Sawyer explains that creativity often grows through social interaction, especially in discussions that allow for the exchange of ideas and negotiation of meaning. Creativity develops optimally when students have the psychological freedom to express ideas without pressure to find one correct answer. (Robert Keith Sawyer 2006) In the context of PAI learning, a learning environment that provides space for students to formulate opinions and solutions in their own way allows creativity in problem solving to develop naturally. Thus, creativity in PAI learning not only functions as a cognitive ability, but also as a reflective and solution-oriented way of thinking that helps students use Islamic teachings as a foundation for addressing life's problems consciously and responsibly.

Alki Drawing School

Creativity in education is understood as the ability to build new relationships between previously separate ideas, experiences, and symbols. In

association theory, the creative process does not arise spontaneously, but rather through the combination of various ideas stored in an individual's cognitive structure into a new form of meaningful understanding. Mednick asserts that creativity occurs when individuals are able to associate distant concepts into a single original idea that is relevant to a particular context. (Mednick 1962) In the context of PAI learning, associative creativity is important because students are not only confronted with normative concepts, but are also required to relate Islamic values to concrete life experiences and symbols.

The activities at Alki Drawing School can be analyzed as a pedagogical space that supports the formation of association-based creativity. Through drawing, illustration, and comic activities, students connect Islamic values, religious narratives, and personal experiences into visual representations that they construct themselves. From the perspective of Guilford's theory of divergent thinking, visual arts activities provide open stimuli that allow for a variety of ideas and interpretations of the same theme to emerge. This process places students not merely as recipients of meaning, but as subjects who actively construct meaning through symbols, imagination, and visual experiences, so that creativity develops as a thinking process, not just an end product. (Guilford 1950)

Sawyer shows that creativity develops through interaction between individuals, learning experiences, and an environment that supports the exploration of ideas. Creativity grows optimally when the learning environment provides freedom of expression and appreciation for the process, not just the results. (R. Keith Sawyer 2012) In the context of Alki Drawing School, appreciation for students' work extends the creative process from mere visual production to reflection on meaning and value. Thus, this activity serves as a pedagogical bridge that connects PAI learning with the personal, contextual, and meaningful appreciation of values, where creativity becomes a means of internalizing Islamic teachings through a lively associative process.

Alki Expo

Creativity in the perspective of association theory is understood as an individual's ability to connect various elements of experience, knowledge, and symbols into a new unity of meaning. This theory emphasizes that creative ideas arise from the process of linking previously separate concepts, especially when individuals are faced with situations that demand contextual interpretation and presentation of ideas. According to Koestler, creativity emerges when two different frames of thinking are brought together in a new space of meaning that is relevant to a specific purpose. (Koestler 1964)

Alki Expo can be analyzed as a learning space that facilitates the formation of such creative association processes. This activity places students in a situation where Islamic values are not only understood conceptually, but must be processed and communicated through socially acceptable works. Eysenck stated that creativity develops through the ability to combine old ideas into new structures that are functional and meaningful. (Eysenck 1995)

Creativity often arises when individuals are faced with limitations and contextual demands that encourage the exploration of various possible solutions. (Kaufman and Sternberg 2010) Creativity in ALKI Expo is not based solely on aesthetics, but develops through a complex process of design and decision-making. Kolb explains that concrete experiences followed by reflection and application will deepen the learning process, including the development of creativity. (Kolb 2014)

Hennessey and Amabile show that a social context that recognizes students' work encourages intrinsic motivation, which is an important factor in the creative process. (Hennessey and Amabile 2010) ALKI Expo can be understood as a vehicle for developing creativity in line with association theory. Students' creativity develops through the process of connecting Islamic values, learning experiences, and social communication demands into meaningful works. This activity shows that PAI learning at SMPIT Al Haraki is not only oriented towards mastery of material, but also towards students' ability to process and convey religious values creatively, contextually, and accountably in the public sphere.

Teacher Coccepts Related To Collaboration In PAI Learning Group Division

Within the framework of constructivism theory, learning is understood as an active process in which knowledge is constructed through social interaction and shared experiences. Constructivism places learners as subjects who construct their own understanding through dialogue, negotiation of meaning, and cooperation with others. Vygotsky emphasized that individual cognitive development cannot be separated from the social context in which interactions take place, especially through collaborative activities that enable the exchange of ideas and shared meaning. (Vygotsky 1978)

The strategy of dividing students into groups in PAI learning can be analyzed as an effort to create a social environment that supports collective knowledge construction. From a social constructivist perspective, diversity in backgrounds, abilities, and ways of thinking within a group is an important source of learning. When students are placed in groups that are not socially or academically homogeneous, they are encouraged to explain, listen, and adjust their understanding to one another. This process allows for cognitive conflict, which, according to Piaget, plays an important role in promoting knowledge restructuring and intellectual development.

Collaboration built through role sharing within groups reinforces the meaning of learning as a social process. Constructivism views knowledge as not being passively transferred from teacher to student, but rather constructed through shared activities. Johnson and Johnson emphasize that effective collaborative learning is characterized by individual responsibility, face-to-face interaction, and positive interdependence among group members. (Johnson and Johnson 1999) The division of tasks within a group not only organizes the work, but also shapes the awareness that learning success is the result of shared contributions.

From a constructivist perspective, explaining to others is a form of deep knowledge reconstruction, as students must reorganize their thoughts so that they can be understood by other group members. Thus, group division in PAI learning can be understood as an important foundation in building constructivist-based collaboration. Through structured yet flexible social interactions, students learn to build knowledge together, develop social responsibility, and foster the ability to work together in line with PAI values. Collaboration is no longer interpreted as mere group work, but as a social learning process that enables the formation of a deeper, more reflective, and meaningful understanding of religion.

Discussion

In constructivist theory, discussion is understood as a social space where knowledge is constructed through interaction, exchange of ideas, and negotiation of meaning. Learning is no longer positioned as an individual process of receiving information, but rather as a collective activity that allows students to build a shared understanding. This view emphasizes that dialogue between students plays a central role in forming a deeper conceptual understanding, especially when students are faced with different perspectives and interpretations.(Slavin 1995)

Discussions in PAI learning can be analyzed as a concrete form of social constructivism, where religious understanding is not built solely through teacher lectures, but through a dialogical process. Through discussion, students learn to relate Islamic concepts to their life experiences, test their understanding through their peers' responses, and revise their initial ideas based on arguments that arise in group interactions. According to Fosnot, this process is at the heart of constructivist learning, because knowledge grows through reflection on meaningful social experiences.(Fosnot 2005)

In the context of collaboration, discussion serves as a mechanism for forming shared understanding. When students convey their thoughts and respond to the views of others, they are engaged in the process of co-constructing knowledge. Wenger explains that meaningful learning occurs when individuals actively participate in learning communities and build meaning together through social practice.(Wenger 1998) Gillies asserts that structured group discussions can improve the quality of interaction and strengthen students' ability to explain, clarify, and defend arguments.(Gillies 2007)

Collaborative discussions contribute significantly to conceptual understanding and higher-order thinking skills. Mercer states that exploratory dialogues, in which students test and develop ideas with each other, have been shown to be more effective in building deeper knowledge than individual learning.(Mercer 2000)

This type of dialogue enables students to understand Islamic values not only as normative concepts, but as meanings that can be interpreted and applied in the context of real life. Thus, discussion in PAI learning can be understood as the heart

of constructivist-based collaboration. Discussions are not only a means of exchanging information, but also a social learning space that shapes the way of thinking, arguing, and collectively interpreting Islamic teachings. Collaboration through discussion makes PAI learning more dialogical, reflective, and meaningful, in line with the objectives of Islamic education which emphasize understanding, awareness, and conscious practice of values.

Digital Collaboration

From a constructivist perspective, digital technology is understood as a space for interaction that enables students to build knowledge collaboratively. In PAI learning, digital technology facilitates the exchange of ideas and the joint formation of religious understanding. (Schunk 2012) Digital collaboration can be understood as an extension of social constructivism, which views knowledge as being constructed through shared activities within a learning community. When students interact within the same digital document or learning space, they engage in a process of collective knowledge formation, in which each idea, response, and improvement complements the others. This is in line with Jonassen's view, which positions technology as a *mindtool* that facilitates collaborative and reflective thinking. (Jonassen 1996)

Constructivism also emphasizes the importance of social interaction in developing thinking skills and learning responsibility. In the digital space, collaboration does not depend on physical presence, but on the active participation of each group member. When students engage in online collaboration, they learn to manage roles, communicate effectively, and take responsibility for their contributions to the group's results. According to Siemens, this type of network-based learning reinforces collaborative learning because knowledge is distributed and built through relationships between learners. (Siemens 2005)

The use of digital technology through group quizzes and educational games can be understood as a constructivist approach that combines collaboration with learning motivation. This activity requires students to discuss, agree on strategies, and evaluate results collectively, so that the element of competition remains within the framework of cooperation. In line with previous research findings, technology-based collaborative learning has been proven to increase student engagement and strengthen the quality of interaction during the learning process.

Based on this description, digital collaboration in PAI learning can be interpreted as the implementation of a constructivist approach that expands the learning ecosystem of students. Technology does not merely serve as a technical means to improve efficiency, but also as a social space that enables the formation of religious understanding in a collaborative, reflective, and contextual manner. Through digital interaction, PAI learning becomes more participatory and aligned with the characteristics of 21st-century students, while remaining oriented towards the internalization of Islamic values as the fundamental goal of learning.

Presentation

From a constructivist perspective, presentations are not positioned as the final stage for assessing mastery of material, but as part of a social learning process that encourages the joint formation of knowledge. Understanding is not conveyed unilaterally from teacher to student, but is developed through interaction, dialogue, and collaboration among students. Thus, group presentations in PAI learning can be understood as a social space that allows for the exchange of ideas, negotiation of meaning, and collective formation of religious understanding.(Fosnot 2005)

Social constructivism emphasizes that learning occurs optimally when students engage in collaborative activities that require the exchange of ideas and shared responsibility. In the process of preparing presentations, students not only gather information, but also discuss ways of understanding the material, agree on points of view, and determine the most appropriate form of delivery. This process shows that presentations serve as a vehicle for co-constructing knowledge, where religious understanding is built through dialogue and group agreement.(Slavin 1995)

In Islamic Religious Education learning, group presentations play a strategic role because the material discussed is directly related to religious values, beliefs, and practices. The collaborative process of compiling material trains students to interpret Islamic teachings, relate them to real life, and communicate them effectively. This activity reflects a constructivist approach that places students as active subjects in constructing meaning through social interaction.(Brooks and Brooks 1999)

Group presentations also serve as a means of collective reflection. Through the presentation of material and feedback from other groups, students have the opportunity to test their understanding, clarify misconceptions, and broaden their perspectives. In line with Vygotsky's view, such interactions enable *the zone of proximal development*, where students' thinking skills develop through the support and input of their peers.(Vygotsky 1978)

Previous research findings support the effectiveness of group presentations as a collaborative learning strategy. Gillies shows that group work ending with a presentation can improve the quality of interaction, shared responsibility, and students' ability to organize and communicate ideas. In the context of religious education, this approach is relevant because it encourages the internalization of Islamic values through dialogue and cooperation, rather than simply memorization.(Gillies 2007)

Thus, group presentations in PAI learning at SMPIT Al Haraki can be understood as a constructivist practice that strengthens student collaboration. Presentations not only assess speaking skills, but also represent a social learning process that involves role sharing, unification of understanding, and collective responsibility. Through this activity, PAI learning is directed towards the formation of communicative, meaningful, and jointly constructed religious understanding in accordance with the principles of social constructivism.

Cross Curricular

From a constructivist perspective, learning is understood as a process of constructing knowledge through meaningful and interconnected learning experiences. Knowledge is not organized separately based on subjects, but rather constructed through the interconnection of concepts and real contexts encountered by students. Therefore, cross-subject collaboration can be seen as a concrete form of applying constructivism's principle of " " because it provides space for students to build understanding in an integrative and holistic manner. (Richardson 2003)

The cross-curricular approach places students in learning situations that require the integration of various scientific perspectives into one meaningful activity. In PAI learning, this approach allows Islamic values to be understood not merely as normative concepts, but constructed through their connection with language, art, and practical skills. This process is in line with constructivism, which views knowledge as the result of active interpretation of learning experiences. (Jonassen 1999)

Cross-subject collaboration also reflects the principle of social constructivism, which places interaction at the heart of learning. When students engage in joint projects that incorporate contributions from various subjects, they engage in discussion, role negotiation, and the integration of perspectives. Through this process, ideas are exchanged and a collective understanding is formed, allowing learning to evolve from individual activities into a collaborative social process.

A number of previous studies support the effectiveness of interdisciplinary learning in improving depth of understanding and higher-order thinking skills. Drake and Reid emphasize that integrated learning helps students see the connections between concepts more holistically, while Bell shows that cross-subject Project Based Learning encourages collaboration and active student engagement. **John R Savery, "Overview of Problem-Based Learning: Definitions and Distinctions," *Interdisciplinary Journal of Problem-Based Learning* Volume 1, no. 1 (2006): 9–20.** In the context of PAI at SMPIT Al Haraki, this approach can be understood as a constructivist practice that positions PAI as a source of values integrated into the learning ecosystem. Through cross-subject learning, religious understanding is built contextually, applicatively, and collectively in accordance with the principles of constructivism.

Teacher Concept Related to Communication in Islamic Education Learning Discussion

Within the framework of information theory, learning communication is understood as a process involving the delivery of information, negotiation of meaning, feedback, active response, and reciprocal sharing of ideas. Discussion in PAI learning represents all of these elements in an integrated manner. Through discussion, communication does not take place in a one-way manner, but rather develops into a dialogical process that allows students to build religious understanding through meaningful verbal interaction. (Tubbs and Moss 2006)

Negotiation elements appear when students are faced with differences in views and interpretations of religious material. In the process of dialogue between

students, meaning is not accepted singularly, but is constructed through argumentation and exchange of perspectives. This is important in PAI learning because understanding Islamic values requires a contextual and reflective approach, while fostering mutual respect in communication. (Mulyana 2017)

Feedback and response are also prominent aspects of discussion dynamics. Through question-and-answer patterns, students learn to listen, respond, and revise their understanding based on input received from peers and teachers. This active response plays a role in improving the clarity of ideas, the accuracy of arguments, and the courage of students in expressing and defending their opinions responsibly. (DeVito 1983)

The subsequent discussion featured sharing as the core of educational communication. The process of sharing ideas enabled social learning, in which religious knowledge was built collectively through communicative interaction. Gillies pointed out that group discussions could improve the quality of interaction, confidence in speaking, and the ability to convey ideas in a structured manner. (Gillies 2007)

A number of previous studies also reinforce the position of discussion as an effective learning communication strategy. Mercer asserts that dialogic discussion contributes significantly to the development of students' oral communication and reasoning skills. (Mercer 2008) In the context of Islamic Education at SMPIT Al Haraki, discussion can be understood as a learning communication practice that aligns with information theory, as it trains students to convey information, negotiate meaning, respond actively, and build religious understanding through participatory and meaningful dialogue.

Presentation

From an information theory perspective, communication is understood as the process of conveying messages through certain channels with the aim of achieving a common understanding between the sender and the receiver. The success of communication is determined by the clarity of the message, the structure of the delivery, the choice of media, and the audience's ability to process information. Presentations in PAI learning represent this principle in concrete terms, as students act as communicators responsible for managing and conveying religious information so that it can be understood by other students. (Shannon and Weaver 1998)

Through presentations, students are placed in an active position as communicators. Within the framework of information theory, this activity involves the process of *encoding*, which is the packaging of religious knowledge into language, symbols, and a systematic arrangement of material. Preparing a presentation requires students to select relevant information, organize it coherently, and maintain accuracy of meaning, so that learning communication does not take place spontaneously, but is designed as a conscious process of information processing. (Severin and Tankard 2014)

In terms of communication channels, presentations utilize verbal media that is often combined with visual media. The use of more than one communication channel strengthens the effectiveness of message delivery because it can reduce distractions and improve audience understanding. In PAI learning, the use of presentation media helps students explain religious concepts more clearly, in a structured manner, and in a way that is easily understood by their classmates.(Littlejohn, Foss, and Oetzel 2917)

Presentations also involve a *decoding* process through the audience's response to the message being conveyed. Interactions in the form of questions, responses, and clarifications serve as feedback to ensure that the meaning of the message is in line with the communication objectives. In information theory, feedback is an important indicator of communication effectiveness, as it allows communicators to assess the extent to which messages are received and understood correctly.(West and Turner 2014)

Prince's research shows that group presentations encourage the development of oral communication skills, clarity of argumentation, and responsibility for the message being conveyed.(Prince 2004) These findings confirm that presentations are in line with the principles of information theory. In the context of PAI learning, presentations serve not only as an evaluation tool, but also as an educational communication process that trains students to convey Islamic values in a focused, reflective, and responsible manner.

Student Lead Conference

Within the framework of information theory, communication is understood as a systematic process involving the sender, message, channel, receiver, and feedback in order to achieve a common understanding. *Student Led Conferences* (SLC) represent comprehensive learning communication because students act as the main communicators who convey their learning progress, self-reflections, and interpretations of their learning experiences to teachers and parents.

Through SLC, students carry out the *encoding* process by processing information about academic achievements, learning processes, and attitude development into narratives that can be understood by the audience. This process requires the ability to sort information, select relevant data, and organize it logically and systematically.(McQuail 2010) In PAI learning, this is important because religious values need to be explained through experience, attitude, and internalization processes, not just the end result.

The use of portfolios in SLC serves as a communication channel that reinforces the clarity of messages. Portfolios help minimize ambiguity and communication disruptions because the messages conveyed are supported by concrete evidence in the form of work, documents, and written reflections. Thus, communication takes place not only verbally, but also visually and contextually, thereby increasing the chances of achieving mutual understanding.(Tubbs and Moss 2006)

SLC also provides immediate and interactive feedback. In information theory, feedback is an indicator of communication effectiveness because it allows the sender to ensure that the meaning is consistent with the original intention. Interaction between students, parents, and teachers creates opportunities for clarification, reinforcement, and reflection, thereby developing communication into a dialogue that deepens understanding of PAI learning.

A number of previous studies have confirmed that student involvement as the main communicator in learning conferences improves communication skills, responsibility, and metacognitive awareness. Epstein emphasizes that SLC strengthens student control over their learning narratives and communicative relationships between schools and families. Student-based conferences encourage more authentic reflection and communication than conventional reporting. In the context of PAI, SLC expands the meaning of communication to include the process of reflection and accountability for values, so that it can be understood as a learning communication practice that is in line with the principles of information theory.

CONCLUSIONS AND SUGGESTIONS

Based on the research objectives and discussions that have been carried out, this study concludes that Islamic Religious Education (PAI) learning at SMPIT Al Haraki has developed as a pedagogical practice that places students as active subjects in the process of constructing religious meaning. The integration of collaborative learning strategies, dialogic discussions, presentations, cross-curricular learning, and *Student Led Conferences* shows that PAI is no longer positioned as merely a transfer of normative knowledge, but rather as a process of communication and social interaction that encourages a contextual, reflective, and applicable understanding of Islamic values.

The findings of this study confirm that learning communication in PAI is in line with the principles of information theory and social constructivism, in which students act as communicators who manage, convey, and account for the meaning of their learning. Through the process of *encoding*, the use of diverse media, dialogic interaction, and continuous feedback, students not only develop cognitive understanding but also communication, collaboration, and self-reflection skills based on Islamic values. This shows a new contribution that the strengthening of 21st-century competencies (especially communication and collaboration) can be internalized meaningfully in PAI learning without eliminating its spiritual and moral character.

Conceptually, this study contributes to the development of religious education by showing that PAI can function as a space for the formation of dialogical and social religious awareness. Socially and culturally, these findings show that communicative and participatory PAI learning practices have the potential to shape an inclusive, responsible learning culture and encourage the active involvement of students, teachers, and parents in a value-based educational ecosystem.

Based on these conclusions, it is recommended that PAI educators continue to develop learning designs that emphasize dialogic communication, collaboration, and conscious and structured reflection on values. Schools can adopt practices such as *Student Led Conferences* and cross-curricular learning as sustainable pedagogical policies to strengthen the synergy between academic learning and character building. For future researchers, it is recommended to further examine the implementation of this PAI learning communication model in different school contexts and education levels in order to expand the validity and contribution of the findings to the development of religious education in Indonesia.

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