



From teaching strategies to school systems: enhancing higher-order questioning skills in islamic religious education

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ABSTRACT

Islamic Religious Education (IRE) in secondary schools is often implemented in a normative and text-oriented manner, limiting dialogical learning and the development of students' questioning skills. Existing studies largely view questioning skills as outcomes of individual teachers' pedagogical practices, paying little attention to school-level managerial factors. Addressing this gap, this qualitative descriptive study examines students' questioning skills in IRE and the pedagogical and managerial factors supporting their development at SMP Negeri 1 Asembagus. Data were collected through classroom observations, in-depth interviews, and document analysis, and analyzed using the Miles and Huberman interactive model with triangulation. The findings show that students' questioning skills developed from LOTS to HOTS levels. Importantly, this development is supported not only by interactive pedagogy but also by instructional leadership, continuous academic supervision, curriculum guidance, and a sustainable evaluation culture, indicating a synergistic interaction between pedagogy and school management. The synergistic findings of teacher and managerial pedagogy of teachers and principals are the theoretical contribution of this research, which practically has implications for the need for visionary, progressive, and innovative school principals to improve teacher pedagogics that can improve the quality of the learning process.

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INTRODUCTION

Islamic Religious Education (PAI) learning has a strategic position in shaping students' religious understanding, attitudes, and characters. However, in school learning practice, PAI is still often positioned as a normative and textual subject that emphasizes memorization, so it does not provide space for dialogue, critical questions and answers, and active student participation. This condition has an impact on the low quality of students' questioning skills, both in terms of quantity and cognitive depth. In fact, the latest literature confirms that students' questioning skills are the main indicators of cognitive engagement and a prerequisite for developing high-level thinking skills (Walsh & Sattes, 2022).

Theoretically, the skill of questioning has long been discussed in classical pedagogic studies. Ramayulis distinguishes questions into two main forms, namely memorization questions and reasoning questions that require deep thinking (Ramayulis, 2008). This classification has a strong wedge with the Bloom Taxonomy which was later revised by Anderson and Krathwohl into the categories LOTS and HOTS (Lorin W. Anderson and David R. Krathwohl, 2001). In recent developments, various studies confirm that the quality of students' questions is positively correlated with the ability to analyze, evaluate, and conceptualize reflection, which is at the core of HOTS in 21st century learning (Anat Zohar and Yehudit J. Dori, 2003).

However, there is a fairly real theoretical-practice gap. A number of previous studies on students' questioning skills have placed learning success as the result of individual teacher initiatives, such as the use of question-and-answer methods, group discussions, or problem-based learning, without linking them to the school's managerial system. Widodo and Kadarwati's research, for example, confirms that the increase in HOTS through questioning skills is largely determined by teachers' strategies in the classroom, but has not reviewed the role of school leadership in supporting this practice (Tri Widodo dan Sri Kadarwati, 2013). Similarly, Nurhayati and colleagues' research shows that students' courage to ask questions is greatly influenced by teachers' teaching styles and classroom climate, without placing academic supervision or curriculum mentoring as important variables (Xiong, 2025).

The limitations of this perspective show that students' questioning skills are often understood as a purely micro-pedagogic product, not as a result of the school ecosystem. In fact, recent research in the field of educational leadership confirms that learning practices in the classroom are greatly influenced by the instructional leadership of principals, evaluation culture, and a sustainable teacher professional development system (Matthew Ohlson, 2009). Principals and curriculum managers not only function as administrators, but also as key actors in shaping the academic and learning climate (Leithwood et al., 2004), pedagogic discipline and consistent professional culture development of teachers (Beatriz Pont, Deborah Nusche, 2008), and specifically UNESCO reports that the leadership of school principals determines the quality of curriculum, learning, and school climate (UNESCO, 2024).

Based on this gap, the novelty of this research lies in the integration between the study of students' questioning skills in PAI learning and the school managerial function. Unlike previous research that placed teachers as the sole determinant of success, this study shows that students' questioning skills – both at the LOTS and HOTS levels – develop significantly when supported by the synergy of the principal's leadership, the active role of the Curriculum Department, academic supervision, a culture of routine evaluation, and professional mentoring of teachers. Thus, this research makes a new contribution to the study of PAI by emphasizing that students' questioning skills are not solely the result of teachers' creativity, but the product of a learning system that is managed in a managerial and sustainable manner.

Based on the above narrative, the question of this research is how are students' questioning skills and what are the factors that affect the success of the application of students' questioning skills at SMP Negeri 1 Asembagus?

RESEARCH METHODOLOGY

This research was conducted for 4 months at SMP Negeri 1 Asembagus as a pilot school in Asembagus district, Situbondo. The subjects of the study are the principal, PAI teachers and students at the school. The determination of informants is carried out randomly starting from the principal, PAI teachers and students until the information provided is nothing new. By comparing the information obtained from the informants, the validity of the data is maintained. The research method used is qualitative-descriptive by describing the expressions of the informants, the learning process or actions carried out by teachers and students in learning, as well as documents both belonging to students and teachers or belonging to schools related to PAI teachers' strategies in improving students' questioning skills (Tohirin, 2012).

To obtain the data, the researcher uses observational data collection techniques in order to get an overview of the learning process carried out by teachers and students (Wina Sanjaya, 2012), interview techniques in order to obtain information on the application of learning strategies applied by teachers and the application of questioning skills carried out by their students (Janu Murdiyatomoko, Citra Handayani, 2014 dan Nasution, 2012), and documentation techniques in order to collect students' personal records, learning tools or learning administration owned by teachers in relation to the strategies carried out (Trianto, 2011).

After the data is collected, the data obtained is gradually analyzed. This analysis activity includes organizing data, sorting relevant and non-relevant data that is not relevant and what is relevant is synthesized and patterned to be found, to written reporting activities that can be told to others (Miles and Huberman, 1994;

and Matthew B. Miles, A. Michael Huberman, 2014). To ensure the reliability of the data, the researcher uses data triangulation, either triangulation of sources or techniques, for example data obtained from teachers compared to data obtained from other teachers or their students and these data are also confirmed by the practice of teaching teachers directly in the classroom (Djama'an Satori dan Aan Komariah, 2009).

RESULTS AND DISCUSSIONS

Questioning Skills as an Indicator of Students' Thinking Level

To obtain an overview of the learning atmosphere of Islamic Religious Education (PAI) in the classroom, the researcher first explored information from the principal as the party who has authority and thorough observation of the learning process in schools. The results of this interview are important as an initial foothold to understand the macro conditions of PAI learning before being further analyzed at the level of learning practice in the classroom. Mr. Arif, the Principal of SMPN said,

“Suasana kelas di saat proses pembelajaran PAI bisa dikatakan berlangsung baik. Hal ini terlihat jelas ketika proses pembelajaran berlangsung, siswa tampak aktif bertanya dan memberikan umpan balik terhadap apa yang telah disampaikan oleh guru. Dan para siswa tampak bergairah dan antusias terhadap stimulus yang diberikan guru dan pembelajaranpun tidak berlangsung *facum* atau membosankan”.

The general description conveyed by the principal was further strengthened through direct information from the students taught by Mr. Badri, a PAI teacher. If the principal highlights the classroom atmosphere globally, then this student provides a more technical and operational description related to the learning strategies used by PAI teachers in the classroom. Thus, the following data serves to explain how the conducive and interactive learning atmosphere is built through concrete learning practices.

In the interview, an explanation was obtained about the learning methods and steps applied during the learning process, especially in encouraging student activity and enthusiasm. The following is the confession of Apink, one of the students,

“Ya, Pak Badri biasanya menayangkan power point yang ada kaitannya dengan pelajaran, kemudian dilanjutkan dengan tanya jawab untuk beberapa menit yang kadang-kadang pertanyaan itu diminta jawab ke teman-teman baru Pak Badri membetulkan dan menambah jawaban. Tanya jawab juga terlihat pada saat presentasi hasil kelompok. Di situ siswa yang menjadi pembicara mendapatkan pertanyaan-pertanyaan yang banyak dari teman-teman. Kalau tidak siap bisa-bisa tidak menjawab, gak. Saat itu, antara satu kelompok dengan kelompok yang lain saling melemparkan pertanyaan.”

The form of question words used by students when doing questions and answers or during class discussions is varied. Based on the results of observations when PAI teachers teach, students were found asking questions about what, how, and why. From the question words used by students, the questioning skills mastered by students are not only memory questions that are a benchmark indicator of their mastery of the subject matter based on memorization, but they are also able to ask deep questions that lead to understanding that has been successfully developed in students.

This finding corroborates Ramayulis' classical thinking which says that in the questioning skill there are two levels of question forms, namely memorized memory questions such as who, what year, and so on; and the question of the mind that is reasoning with the use of the question why and how (Ramayulis, 2008).

Ramayulis' version of memory questions, if confirmed in Bloom's cognitive domain, fall into the categories of knowledge, comprehension, and application, while thought/reasoning questions fall into the category of analysis, synthesis, and evaluation. In the next development, the six levels are classified simply by Lauren B Resnick (1987) in his book entitled *Education and Learning to Think* becomes routine and mechanical thinking and complex thinking. This is where the concept of higher-order thinking began to be known and popularized by Lewis and Smith, and massively used by Anderson and Krathwohl in their book which revised Bloom's cognitive domain into remembering, understanding, and applying in the lower-order thinking category as well as analyzing, evaluating, and creating in the higher-order thinking category (Lorin W. Anderson and David R. Krathwohl, 2001).

In the article written by Lewis and Smith, it is explicitly mentioned about thinking skills. This means that thinking that enters the cognitive domain according to Bloom needs to be trained and developed so that these two people add the word skill behind the phrase *lower/higher-order thinking* and since then the acronyms LOTS and HOTS have been known and become mainstream in global educational discourse, especially in curriculum development, learning, and assessment (Lewis, 2015). Meanwhile, in Indonesia itself, the idea of high-level thinking skills began to surface in the world of education since the implementation of the 2013

Curriculum where inductive and deductive thinking skills in inference need to be integrated into learning, especially in the 4th M stage of the 5M Scientific Approach, namely Associating (Menteri Pendidikan dan Kebudayaan, 2013). From here, the socialization of the 2013 Curriculum was carried out everywhere and there LOTS and HOTS were introduced massively by the resource persons and the Ministry of Education through a guidebook (Sofyatinigrum, 2018), Teacher Training Module (Widana, 2017), and technical guidelines on the preparation of questions HOTS (Asrijanty, 2019).

Based on the discussion above, students' questioning skills in PAI subjects at SMP Negeri 1 Asembagus as a best practice from the implementation of the 2013 Curriculum and the Curriculum after that which are genealogical in achieving the learning goals of the cognitive domain introduced by Bloom with its six levels and simplified into two categories by Anderson and Krathwohl and strengthened by Lewis and Smith.

The practical implications of the successful application of questioning skills as a form of student thinking skills according to research conducted by Walsh and colleagues are that when students are actively involved in the student-generated questioning process, the quality of the questions that arise increases from a low level to a high-level thinking question that demands analysis and synthesis of concepts. The open space for students to ask simple questions and opinions gradually improves the quality of their questions and opinions at a high level. Cutting-edge literature confirms that the high-quality questions students ask demonstrate deeper cognitive engagement, including analytical, evaluative, and reflective abilities (J. A. Walsh & B. D Sattes, 2022).

In addition, from the results of the observations carried out, it was also found that there was a learning phenomenon where students not only asked, but also responded to their friends' questions and expressed their ideas related to the questions asked by their other classmates. This cannot be separated from the role of PAI teachers who do not dominate learning, but facilitate active interaction between fellow students. What Munawar is saying is that questions are not only expressions in the form of question words, but they can also be in the form of statements that require a response (Moh. Munawar, 2022). What Munawir said was explained at length by Kurniasih and his friends in the context of the implementation of the 2013 Curriculum, one of the stages in which is the activity of asking questions (Imas Kurniasih dan Berlin Sari, 2014).

Further explored about the questioning skills of students at all levels, apart from the openness of PAI teachers in learning, it was found that they were facilitated by media and supportive learning resources. In addition to the student books in the hands of each student, among them there are also Islamic reference books that are relevant to PAI subject matter, internet access is also open for them in learning. However, when given internet access, PAI teachers increase their control and monitoring. So, PAI teachers only allow internet access through laptops, while students' cellphones are still not allowed to be brought to their respective desks. This is done because in the early days of learning internet access was opened which occurred which was a noise that was difficult to control due to the misuse of mobile media by students.

Some of the above supporting factors that are very decisive according to PAI teachers are the ease of access to learning resources, either internet or other references other than student books that are taken home. Students confirmed what the PAI teacher said that the ease of access to learning resources really helped him to elaborate his knowledge with various learning resources, but according to the students, the most dominant was the democratic attitude of the PAI teacher who facilitated easy access to rich learning resources, provided freedom of opinion and argument, and respected students' opinions.

Research conducted by Chin and Osborne confirms that students' questioning skills depend on six things, namely classroom situations, teacher responses, learning strategies and methods, the question models that teachers use can provoke students to ask questions or respond, social interactions, and students' initial knowledge (Chin & Osborne, 2008). The role of teachers in SMP Negeri 1 Asembagus above is related to the role of teachers, which in the context of Chin and Osborne's thinking is closely related to the teacher's response not only to students' questions but also to the creation of a democratic classroom situation and the facilitation of open learning resources. With the role of facilitator of this learning resource, students' initial knowledge of the PAI subject matter taught to them is quite adequate and even more adequate when they discuss it with their classmates. From here, they learn to build arguments, elaborate findings into one complete knowledge systematically, help discussion partners find ideas, and so on (Robyn M. Gillies, 2019).

A student named Farah when met on the sidelines of a break in the classroom said, "Learning, PAI takes place in a fun, active, non-monotonous way, exciting, fun, and not boring." The use of these interactive strategies has many benefits for students. They are trained to dare to express their opinions, improve communication skills, and so on. Mr. Badri when asked about the usefulness of the question and answer method applied to interactive strategies answered,

“Banyak sekali manfaat dari pembelajaran tanya jawab yang menyenangkan, antara lain, siswa semangat mengikuti pembelajaran, siswa tidak canggung dalam menyampaikan pendapatnya dalam kata lain siswa aktif di dalam kelas, juga akan mudah dalam memahami materi yang disampaikan oleh guru, sehingga hasil dari evaluasi bagus”.

The results of the interview with a student named Farah showed that the learning of Islamic Religious Education (PAI) took place in a fun, active, non-monotonous, and not boring atmosphere. This positive perception of students indicates that the interactive learning strategies implemented by teachers have succeeded in creating affective and cognitive learning engagement. This finding was strengthened by Mr. Badri's statement which emphasized that the question and answer method used was able to increase students' enthusiasm for learning, reduce awkwardness in expressing opinions, encourage class activity, facilitate material understanding, and have a positive impact on learning evaluation results.

Theoretically, the findings are in line with the concept of **active learning**, which emphasizes direct student engagement through dialogue, questions and answers, and meaningful interactions in the classroom. Recent research shows that active learning contributes significantly to increased motivation, verbal participation, and students' conceptual understanding.¹ In addition, interactive question and answer strategies reflect a **social constructivism approach**, in which the learning process is seen as the result of social interaction and communication between teachers and students (Robyn M. Gillies, 2019).

Viewed from the perspective of thinking skills, the question and answer method applied not only functions at the **LOTS (Lower Order Thinking Skills)** level, but also encourages the development of **HOTS (Higher Order Thinking Skills)**. The courage of students to express their opinions and be actively involved in discussions shows the existence of an analytical and reflective thinking process. Recent research confirms that students' questioning skills are an important indicator of the development of HOTS, because students' questions reflect the process of analysis, evaluation, and interpretation of learning materials (Tri Widodo dan Sri Kadarwati, 2013). A safe and fun classroom environment has also proven to be important in fostering students' courage to ask questions and opinions without fear, so that learning interactions become more productive (Frazier & Klinger, 2017).

Thus, the findings of questioning skills with learning situations as described above support and confirm theories and findings of previous research, as well as strengthen empirical evidence that question-and-answer based interactive learning strategies in PAI learning contribute significantly to students' learning activeness, questioning skills, and HOTS development.

Determining Factors for PAI Teachers to Improve Students' Questioning Skills

a. Principal Instructional Leadership

The success of PAI teachers in improving students' questioning skills at SMP Negeri 1 Asembagus received direct recognition from the principal. In an interview, the principal stated,

“Strategi guru PAI dalam proses pembelajaran yakni lumayan baik, artinya guru PAI dalam menyiapkan prangkat dan mengimplementasikan pembelajaran sudah baik, namun bukan berarti tidak memerlukan suatu pembinaan, sebab pembinaan akan selaku dilakukan guna mencapai hasil yang optimal.”

This statement shows that the principal not only assesses teacher performance, but also places ongoing coaching as part of instructional leadership. The practice of direct-to-classroom monitoring and inspection of learning tools reflects the character of instructional leadership that is oriented towards improving the quality of the teaching and learning process, as affirmed in Hallinger's study that effective principals play an active role in strengthening teachers' learning practices (Hallinger, 2018).

b. Academic Supervision and Continuous Coaching

Academic supervision and continuous coaching by the school head is not only for PAI teachers, but for all teachers at SMP Negeri 1 Asembagus. Supervision and coaching at SMP Negeri 1 Asembagus is carried out through workshops, *peer teaching* training, mentoring, and routine evaluation meetings. Teachers are monitored directly by the principal in making (RPP) and its application in learning. Furthermore, a regular evaluation meeting is held every month in order to continuously improve. Furthermore, SMP Negeri 1 Asembagus revealed,

“Ada beberapa upaya yang telah dilaksanakan dalam meningkatkan kompetensi guru PAI, diantaranya yakni: mengadakan workshop atau pelatihan *peer teaching*, mengadakan pendampingan, artinya guru mendapatkan pantauan langsung kepala sekolah meninjau kinerja guru dalam menyampaikan pelajaran di dalam kelas, mengadakan rapat evaluasi guna mengevaluasi pembelajaran dan merencanakan strategi pembelajaran yang lebih baik. Hal tersebut saya lakukan

bahkan sering, guna menindak lanjuti hal apa yang sekiranya perlu diadakan perbaikan dalam kegiatan belajar mengajar."

These findings show that supervision is not purely administrative, but is directed at the professional development of teachers. This pattern is in line with modern supervision theory that emphasizes collaborative and reflective coaching as a means of improving the quality of learning (Glickman & Gordon, 2013).

c. The Strategic Role of the Curriculum Head in Technical Assistance

In addition to the persistence factor for schools in carrying out their managerial functions, another factor that supports PAI teachers to be able to carry out learning well is the assistance of the Curriculum Staff to teachers, including PAI teachers. The Curriculum Head carries out what has been outlined by the principal. If the principal only monitors the creation of the device and its implementation in the classroom, then the Curriculum Officer directly assists him in improving learning. The Curriculum Head conducts supervision, direction and training in implementing the curriculum properly.

"Melakukan pengawasan, pengarahan dan pelatihan terhadap para guru PAI dalam menyiapkan perangkat pembelajaran, agar dapat mengimplementasikan kurikulum dengan baik di saat proses pembelajaran, dengan begitu apa yang menjadi tujuan pembelajaran PAI bisa tercapai dengan baik."

The efforts made by the principal and the Curriculum Officer have a positive impact on teachers, "Yes, the direct monitoring from the principal makes me feel bad if I don't implement learning properly. Therefore, I must try to correct the mistakes I made when teaching." When Mr. Badri was asked about the role of the Curriculum Officer, he also admitted that he monitored and mentored the teachers as a continuation of the principal's wishes. The compact action between the principal and the curriculum head produces enthusiastic teachers. PAI teachers at SMP Negeri 1 Asembagus have to rack their brains to create learning according to the wishes of their leaders. One of the ways that PAI teachers do is,

"Yang kami lakukan yaitu; dengan mengadakan pembinaan, sebelum masuk ke materi terlebih dahulu kami menyampaikan manfaat tentang sesuatu yang berhubungan dengan materi yang akan diajarkan dan menyampaikan kepada murid bahwasanya apabila murid ketika ujian akhir semester mendapatkan nilai bagus tapi tidak aktif di dalam kelas, baik dalam hal bertanya, menyanggah dan mengemukakan gagasan maka nilainya akan dikurangi dan karena ada murid di SMP Negeri 1 Asembagus suka nonton film, jadi kami mempertontonkan film di tengah-tengah berlangsungnya pelajaran yang sesuai atau yang berhubungan dengan materi yang diajarkan".

The synergy between the principal and the Curriculum Leader shows the implementation of effective education management, where leadership and technical functions are complementary (Tony Bush, 2003).

d. Culture of Evaluation and Reflection through Monthly Meetings

The monthly meeting held at SMP Negeri 1 Asembagus became a general evaluation event for the principal. The evaluation carried out at the monthly meeting also reviews the learning carried out by teachers, either a review of the learning tool as preparation or a review of the implementation of learning. The meeting forum is a place to correct shortcomings to be corrected. This monthly meeting is a connecting step between the learning that has been carried out and the future agenda that will be planned by the principal, including those that need to be planned directly by the teachers. PAI teachers here can gain experience from other teachers in the implementation of learning, and vice versa. This kind of evaluative culture supports the improvement of teacher professionalism and contributes to the consistency of active learning in the classroom, as Darling-Hammond affirms that teachers' collective reflection is key to improving the quality of learning (Darling-Hammond et al., 2017).

e. Teachers' Professional Motivation

Supervision and assistance from school leaders has a direct impact on the professional motivation of PAI teachers. The PAI teacher admitted, "*the direct monitoring from the principal makes me feel bad if I don't apply learning well, so I must try to correct mistakes when teaching.*" This motivation encourages teachers to implement interactive learning strategies, such as conveying the benefits of the material at the beginning, assessing the activeness of students' questions, and showing films that are relevant to PAI materials. This strategy creates a dialogical learning atmosphere that encourages students to actively ask questions and opinions, in line with Gillies' research findings that interactive learning contributes significantly to students' questioning and critical thinking skills (Robyn M. Gillies, 2019)

Based on the presentation of the results of interviews and theoretical analysis, it can be emphasized that the findings of this study strengthen and enrich the results of previous research on the role of school leadership and teacher professional development in improving the quality of learning. If previous research generally placed instructional leadership, academic supervision, and teacher professional development as stand-alone factors, then the findings at SMP Negeri 1 Asembagus show that the effectiveness of PAI learning –

especially in improving students' questioning skills – was born from the strong synergy between the principal, the Curriculum Manager, and PAI teachers in one integrated managerial system. The principal does not only act as a supervisor, but as a driver of a culture of discipline and reflection, while the Curriculum Officer becomes a technical facilitator who ensures that the implementation of the curriculum and learning strategies runs consistently.

Furthermore, this finding also expands the study of active and dialogical learning which has been more associated with teachers' pedagogic competence alone. This study shows that students' courage to question, refute, and express opinions is not only influenced by the interactive learning methods applied by PAI teachers, but also by positive pressure in the form of supervision, routine evaluation, and professional demands from school leaders. Thus, the position of the findings of this study is in the realm of strengthening the argument that the improvement of students' questioning skills is the result of the interaction between pedagogical factors and school managerial factors. These findings are in line with, but complement to, research by Hallinger, Glickman, and Gillies that emphasized the importance of instructional leadership, academic supervision, and dialogical learning, showing that all three elements become more effective when implemented in an integrated manner in a school context (Hallinger, 2018; Glickman & Gordon, 2013; Robyn M. Gillies, 2019).

Table 1. of research findings on students' questioning skills and their factors

No.	Aspect	Previous Studies & Literature	Findings of This Study	Novelty
Pedagogical Practices of Islamic Religious Education Teachers				
1	Role of teacher pedagogy	Students' questioning skills are mainly influenced by teachers' instructional strategies	Pedagogical practices foster both LOTS- and HOTS-level questioning	Demonstrates that effective IRE pedagogy can develop higher-order questioning
2	Analytical focus	Teacher-centered and individual-based	Teachers positioned within a broader school system	Shifts analysis from individual pedagogy to a systemic perspective
Instructional Leadership of the School Principal				
1	Role of the principal	Principals' roles are largely administrative or normative	Principals actively engage in instructional guidance and monitoring	Provides empirical evidence of instructional leadership in IRE contexts
2	Impact on learning	Rarely linked to students' questioning skills	Contributes to students' confidence and quality of questioning	Establishes a direct link between leadership and cognitive learning outcomes
Continuous Academic Supervision				
1	Supervision model	Formal, administrative, and episodic supervision	Reflective and continuous academic supervision	Reframes supervision from compliance control to pedagogical development
2	Influence on teachers	Focused on accountability	Encourages pedagogical innovation	Demonstrates supervision as a driver of dialogical learning
Curriculum Management and Guidance				
1	Function of curriculum	Viewed primarily as a normative document	Functions as an operational guide for classroom instruction	Shows curriculum as a living framework in classroom practice
2	Managerial role	Rarely associated with questioning skills	Ensures consistency of dialogical pedagogy	Links curriculum management with classroom interaction quality
School Evaluation Culture				

1	Evaluation practices	Incidental and outcome-oriented	Continuous and reflective evaluation culture	Positions evaluation as a sustainable learning ecosystem
2	Educational impact	Not connected to questioning skills	Sustains active and inquiry-based learning	Extends the function of evaluation to HOTS development

CONCLUSION

Based on the results of the discussion, it can be concluded that students' ability to ask questions in Islamic Religious Education (PAI) learning at SMP Negeri 1 Asembagus has developed positively, not only at the level of memorization (LOTS), but also at the level of reasoning (HOTS). Students are able to ask questions with a variety of what, how, and why questions, which indicate the existence of an analytical and reflective thinking process. This development is supported by the implementation of question-and-answer-based interactive learning strategies that create a fun, active, and dialogical classroom atmosphere, so that students feel safe and confident to ask, answer, and express their opinions. The success of PAI learning is not only determined by the pedagogical competence of teachers, but also by the strength of school management factors. The principal's instructional leadership, ongoing academic supervision, technical assistance from the Vice-Principal for Curriculum, a culture of evaluation through regular meetings, and the professional motivation of teachers form an integrated coaching system. This synergy between pedagogical and managerial factors results in consistent and continuous active learning, so that students' ability to ask questions develops as part of a learning culture, not just the demands of momentary learning methods. Practically, the results of this study have implications for: (1) strengthening instructional leadership, increasing continuous academic supervision, and creating a culture of continuous evaluation to create an institutional environment that supports dialogical learning, and (2) pedagogical enhancement of teachers to foster student confidence such as questioning skills. Theoretically, however, this research has implications for the development of dialogical learning studies by highlighting the central role of instructional leadership and school management as an integral component of pedagogical effectiveness, rather than as a peripheral factor. However, this study is limited to one school context and relies on qualitative-descriptive data and cannot be generalized. Therefore, the next research is recommended: (1) to utilize the results of this study in order to improve the monotonous learning process so that it increases more actively through classroom action research or experiments in various school environments that need improvement, and (2) to test these findings in order to determine the percentage level of variables that affect students' questioning skills.

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References

- Anat Zohar and Yehudit J. Dori. (2003). Higher Order Thinking Skills and Low-Achieving Students: Are They Mutually Exclusive? *The Journal of the Learning Sciences*, 12(2), 145-181. https://doi.org/https://doi.org/10.1207/S15327809JLS1202_1.
- Asrijanty (Ed.). (2019). *Panduan Penulisan Soal HOTS*. Pusat Penilaian Pendidikan Badan Penelitian dan Pengembangan Kemendikbud.
- Beatriz Pont, Deborah Nusche, H. M. (2008). *Improving School Leadership Volume 1: Policy and Practice* (Vol. 1). OECD website at www.oecd.org/edu/schoolleadership. https://www.oecd.org/content/dam/oecd/en/publications/reports/2008/07/improving-school-leadership-volume-1_g1gh8f44/9789264044715-en.pdf?utm_source=chatgpt.com
- Chin, C., & Osborne, J. (2008). *Studies in Science Education Students' questions : a potential resource for teaching and*

- learning science. 7267. <https://doi.org/10.1080/03057260701828101>
- Darling-hammond, L., Hyler, M. E., & Gardner, M. (2017). *Efective Teacher Professional Development* (Issue June). Learning Policy Institute. https://learningpolicyinstitute.org/sites/default/files/product-files/Effective_Teacher_Professional_Development_REPORT.pdf
- Djama'an Satori dan Aan Komariah. (2009). *Metodologi Penelitian Kualitatif*. Alfabeta.
- Frazier, M. L., & Klinger, R. L. (2017). *Psychological Safety: A Meta - Analytic Review and Extension*. 70, 113–165. <https://doi.org/10.1111/peps.12183>
- Glickman, C. D., & Gordon, S. P. (2013). *The Basic Guide to SuperVision and Instructional Leadership* (Third). Pearson Education. https://ia801800.us.archive.org/21/items/educational-administration-concepts-and-practices/The_Basic_Guide_to_Supervision_and_Instructional_Leadership.pdf
- Hallinger, P. (2018). *Bringing context out of the shadows of leadership*. 46(1), 5–24. <https://doi.org/10.1177/1741143216670652>
- Imas Kurniasih dan Berlin Sari. (2014). *Sukses Mengimplementasikan Kurikulum 2013 Memahami Berbagai Aspek dalam Kurikulum 2013*. Kota Pena.
- J. A. Walsh & B. D Sattes. (2022). *Quality questioning: Research-based practice to engage every learner* (2nd ed.). Corwin Press.
- Janu Murdiyatmoko, Citra Handayani, P. N. F. (2014). *Advanced Learning Sociology 3 For Grade X11 Senior High School*. Grafindo Media Pratama.
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *Review of research How leadership influences student learning*. University of Minnesota and University of Toronto. https://wallacefoundation.org/sites/default/files/2023-07/How-Leadership-Influences-Student-Learning.pdf?utm_source=chatgpt.com
- Lewis, A. (2015). *Defining Higher Order*. 32(3), 131–137.
- Lorin W. Anderson and David R. Krathwohl. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives* (Lorin W. Anderson and David R. Krathwohl (Ed.); Abriger Ed). Longman.
- Matthew B. Miles, A. Michael Huberman, and J. S. (2014). *Qualitative Data Analysis* (Third Edit). SAGE Publications Ltd.
- Matthew B. Miles and A. Michael Huberman. (1994). *Qualitative Data Analysis* (p. 354). SAGE Publications. https://vivauniversity.wordpress.com/wp-content/uploads/2013/11/milesandhuberman1994.pdf?utm_source=chatgpt.com
- Matthew Ohlson. (2009). *Examining Instructional Leadership: A Study of School Culture and Teacher Quality Characteristics Influencing Student Outcomes*. 2(2), 102–113. <https://files.eric.ed.gov/fulltext/EJ930117.pdf>
- Menteri Pendidikan dan Kebudayaan. (2013). *PERATURAN MENTERI PENDIDIKAN DAN KEBUDAYAAN REPUBLIK INDONESIA NOMOR 81A TAHUN 2013 TENTANG IMPLEMENTASI KURIKULUM*.
- Moh. Munawar. (2022). Implementasi Kurikulum 2013 pada Mata Pelajaran Al-Qur'an Hadits di SMK Muhammadiyah 2 Blora. *Jurnal Ilmiah Pedagogy*, 20(1), 33–51.
- Nasution. (2012). *Metode Research* (Cet. Ke-13). PT Bumi Aksara.
- Ramayulis. (2008). *Metodologi Pendidikan Agama Islam* (Cet. Ke-5). Kalam Mulia.
- Resnick, L. A. B. (1987). *Education and Learning to Think*. National Academy Press.
- Robyn M. Gillies. (2019). Promoting academically productive student dialogue during collaborative learning. *International Journal of Educational Research*, 97, 200–209. <https://doi.org/https://doi.org/10.1016/j.ijer.2017.07.014>
- Sofyatiningrum, E. (2018). *Muatan HOTS Pembelajaran Kurikulum 2013 Pendidikan Dasar* (Mahdiansyah (Ed.)). Pusat Penelitian Kebijakan Pendidikan dan Kebudayaan, Badan Penelitian dan Pengembangan, Kementerian Pendidikan dan Kebudayaan.
- Tohirin. (2012). *Metode Penelitian Kualitatif dalam Pendidikan dan Bimbingan Konseling*. PT Raja Grafindo Perseda.
- Tony Bush. (2003). *Theories of Educational Leadership and Management* (Third). SAGE Publications Ltd. <http://diglib.globalcollege.edu.et:8080/xmlui/bitstream/handle/123456789/1311/28391.pdf?sequence=1&isAllowed=y>
- Tri Widodo dan Sri Kadarwati. (2013). Higher Order Thinking Berbasis Pemecahan Masalah untuk Meningkatkan Hasil Belajar Berorientasi Pembentukan Karakter Siswa. *Jurnal Cakrawala Pendidikan*, 5(1), 161–171. <https://doi.org/https://doi.org/10.21831/cp.v5i1.1269>
- Trianto. (2011). *Pengantar Penelitian Pendidikan bagi Pengembangan Proses Pendidikan dan Tenaga Pendidikan*. Kencana.
- UNESCO. (2024). *Leadership in education lead for learning*.

- <https://unesdoc.unesco.org/ark:/48223/pf0000391406/PDF/391406eng.pdf.multi>
- Walsh, J. A., & Sattes, B. D. (2022). *Questioning for Classroom Discussion*. ASCD. https://books.google.co.id/books/about/Questioning_for_Classroom_Discussion.html?id=oIkeDQAAQBAJ&redir_esc=y
- Widana, I. W. (2017). *Modul Penyusunan Soal Higher Order Thinking Skill (HOTS)*. DIREKTORAT PEMBINAAN SMA DIREKTORAT JENDERAL PENDIDIKAN DASAR DAN MENENGAH DEPARTEMEN PENDIDIKAN DAN KEBUDAYAAN.
- Wina Sanjaya. (2012). *Penelitian Tindakan Kelas*. Kencana Prenada Media Group.
- Xiong, X. (2025). Education for Chemical Engineers Influence of teaching styles of higher education teachers on students ' engagement in learning : The mediating role of learning motivation. *Education for Chemical Engineers*, 51(February), 87-102. <https://doi.org/10.1016/j.ece.2025.02.005>