

Review Article

# Inquiry Learning as an Effort to Improve Results

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## Abstract

The inquiry learning process should be seen as a stimulus that can challenge students to feel involved or participate in learning activities both in digesting, observing, analyzing, responding and answering problems that are being experienced. Any learning carried out by a teacher has the aim of achieving maximum learning outcomes, so he must master the material taught using a variety of learning methods in general (lectures, discussions, questions and answers, giving assignments) and specifics such as effective and fun inquiry (PAIKEM) in order to boost student learning outcomes. The condition of students when learning Islamic Religious Education subjects (not serious about carrying out assignments, reluctant to ask questions, argue, connect subject matter with the real world, students' ability to accept lessons is low) so that learning outcomes are not optimal. The various obstacles above can be found alternative solutions with the creativity of the teacher to package Islamic Religious Education subject matter using the inquiry method in the hope that learning outcomes will improve better than before.

## Keywords

Learning Outcomes, Inquiry Learning, Islamic Religious Education

## 1. Introduction

The success of achieving quality in learning depends on several aspects. One aspect that greatly influences the success of its achievement is the way the teacher carries out learning. The tendency that occurs in the learning process in Indonesia is that learning activities are still centered on the teacher, namely the teacher tells more stories or lectures. Students are not actively involved in the learning process, teachers do not / rarely use learning media, so the learning process becomes passive and less useful. Therefore, the old paradigm where the learning orientation is more teacher-centered must begin to be abandoned, and replaced with a more student-centered learning orientation [1].

Learning is a process of interaction between various com-

ponents, including goals, materials, tools-media-resources, methods and evaluation, so that teachers can make positive activities to revive intellectual (provide ample opportunities for students to seek and find for themselves what they want to know through their observations) is expected to improve student learning outcomes. Guided inquiry learning is expected to improve students' scientific attitudes and critical thinking skills [2] and build active communication between teachers and students so that student development is as expected [3].

Teaching and learning activities generally tend to be monotonous and uninteresting, so some lessons are feared and considered difficult by students. This is indicated by several

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things, including a positive correlation with the acquisition of the Minimum Completion Criteria (KKM) which always ranks lowest. In addition, children's motivation to learn is low due to uninteresting learning models. The low student learning outcomes are inseparable from the learning process carried out by the teacher, therefore it is necessary to make efforts to improve student learning outcomes which include cognitive, affective and psychomotor domains.

Another problem is that during the teaching and learning process, students tend to be only objects in learning and the teacher becomes the learning center in the learning process, especially in PAI subjects at SMP Sunan Ampel Sumberrejo Banyuputih Situbondo, the tendency of the teacher as a learning center, has an impact on students' ability to improve their higher order thinking skills in order to make student center learning.

Islamic education learning is a teacher's effort to implement learning that aims to provide students' understanding, ability, capacity in the field of Islamic sciences. To achieve this goal, it is important for teachers to facilitate the learning process by using models, methods, media that are in accordance with the learning objectives of Islamic Education (Martinus Yamin, 2008).

In the Islamic perspective, education is intended to produce human beings who worship Him, and are able to carry out their duties as servants of Allah and khalifah Allah on earth. Both aspects of the purpose of Islamic education are expected to produce knowledgeable and skilled servants of Allah, with which he can prosper the earth and provide benefits to all inhabitants of the earth, which requires serious efforts in reforming Islamic education in all its aspects, systematically, institutionalized and planned, while maintaining the values and teachings of Islam that are hanif and universal [4].

To make learning activities in the classroom active and effective, a teacher needs to apply a learning model. A learning model is defined as a conceptual framework that outlines systematic steps in structuring learning activities to achieve learning objectives. Through the learning model, students are required to participate actively in learning and are expected to implement all higher order thinking skills and cooperation in groups. One of the models that can be applied is the inquiry learning model.

Research conducted by Mochammad Bagas Prasetyo suggests that learning models have an important role in the success of learning, and the use of the right model will determine the effectiveness of the learning process. There is some learning that can help students in developing mastery of concepts and critical thinking skills so that students become active and learning that was originally teacher-centered becomes student-centered is an inquiry learning model [5].

Inquiry learning requires experimentation, reflection, and recognition of the strengths and weaknesses of the methods used. Budnitz in Heru Kusmaryono and Rokhis Setiawati also said that inquiry means asking questions that can be answered through justification and verification [6]. Learners take the

initiative to question phenomena, propose temporary answers, make observations in the field, analyze data and conclude, and explain their findings to the teacher. This study aims to provide solutions to improve student PAI learning outcomes at SMP Sunan Ampel Sumberejo Banyuputih Situbondo by applying the Inquiry Learning model.

## 2. Materials and Methods

Research location at SMP Sunan Ampel Sumberejo Banyuputih Situbondo, qualitative approach with phenomenological analysis, data collection by means of: Observation, Documentation and Interview [7], strengthened descriptive analysis in the form of words or oral from people processed using triangulation, not forced or not affected by anything [8]. This study aims to determine the learning activities and learning outcomes of students using the inquiry method.

## 3. Results

### *Definition of Inquiry Learning*

In order to understand the difference between "teaching and learning", the following terms are first explained: a) Teaching means: instructions given to people so that they know. b) Teaching means: something that is taught, advice, advice. c) Lesson means: what is learned or taught. d) Teaching means: the process, action of teaching or teaching; about teaching, everything about teaching; reminders about experiences; events experienced or seen. e) Learning means: trying to gain intelligence or knowledge; reading; practicing; changing behavior or responses caused by experience. f) Learning means: the process, method of making people or living things learn (Desi Anwar, 2003).

Inquiry comes from the Greek heuristic to *heuriskein* which means "I find" is a series of learning activities that emphasize the critical and analytical thinking process to seek and find answers to a questionable problem. Joyce in Gulo, that the emergence of inquiry, a) free-open and permissive conditions make students eager to discuss, b) focus on hypotheses that need to be tested, and c) the use of facts as evidence and in the learning process discussed the validity and reliability of facts, as usual in hypothesis testing [9]. Inquiry means engaging in questions and answers, seeking information and conducting investigations in its implementation students are responsible for providing ideas, proposing hypotheses to drawing conclusions [10].

### *Purpose of the Inquiry Learning Method*

The purpose of the inquiry learning method is to involve active students from the start of learning, namely to: a) ensure and ensure that students can find their own answers to problems related to learning so that students will continue to remember learning material easily, b) the activity process is carried out in pairs in order to increase familiarity between fellow students and c) to facilitate learning of applicative

(psychomotor) material.

#### *Benefits of the Inquiry Method*

##### a. Being a "warm-up for the brain before learning"

Before starting the discussion, use a "warm-up" by playing a video or providing primary source documents such as posters or storybooks on a new topic that interests students, then the teacher asks open-ended questions to be answered either individually or in groups.

##### b. Cultivate curiosity

Start the lesson by asking open-ended questions that arouse curiosity and stimulate hypothesizing.

##### c. Deeper understanding of learning

The inquiry method encourages students to be more empowered in learning because: 1) it encourages children to understand concepts thoroughly and deeply, 2) children actively find out information related to the topic being studied to answer their curiosity, 3) collaboration, children can get new knowledge from various points of view.

##### d. Improve critical thinking skills

The inquiry method can encourage children to think critically to solve problems by finding their own strategies.

##### e. Make learning more interesting and valuable

Many children learn to get recognition from parents and teachers, so they tend to fear failure (focus on results). Whereas learning is a process where mistakes can also be a learning moment. Inquiry learning makes children value learning and makes the discovery of new knowledge a valuable achievement for themselves.

#### *Steps of the Inquiry Learning Method*

The inquiry learning process can follow these steps:

- a. Orientation, is a step to foster a conducive learning climate so that it can be responded to invite thinking about solving problems.
- b. Formulating a problem, is a step to bring students to a problem that contains a puzzle.
- c. Propose a hypothesis, which is a temporary answer to a problem that is being studied and needs to be tested.
- d. Collecting data, is the activity of capturing the information needed to test the hypothesis proposed by collecting data including from observations, interviews, or documentation.
- e. Testing the hypothesis, is the process of determining the answer that is considered according to the data or information obtained based on data collection.
- f. Formulating conclusions, is the process of describing the findings obtained based on the results of hypothesis testing [11].

#### *Pros and Cons of Inquiry*

##### a. Advantages

1. Inquiry gives students the space to learn according to their own learning style.
2. Inquiry is a learning model that emphasizes the development of cognitive, affective, and psychomotor aspects in a balanced manner so that learning will be more meaningful.

3. Inquiry is a model that is considered in accordance with the development of modern learning psychology which considers learning to be a change in behavior.

4. This learning can serve the needs of students who have more abilities. That is, students who have good learning abilities will not be delayed by students who are weak in learning.

##### b. Disadvantages

1. If inquiry is used as a learning method, it will be difficult to control student activities and success.

2. Inquiry is difficult in planning lessons because it is hampered by students' habits in learning.

3. Implementing inquiry requires a long time so it is often difficult for teachers to adjust to the allotted time.

4. All success criteria are determined by the students' ability to master the lesson so inquiry is difficult for teachers to practice.

#### *Islamic Religious Education (PAI) Learning Outcomes*

##### *Definition of Learning Outcomes*

Education is an effort to develop the potential of students by encouraging and facilitating learning activities [12].

Learning according to the perspectives of experts, among others:

##### a. Jean Piaget

Learning is knowledge formed by individuals who interact with the environment that undergoes changes so that intellectual functions are increasingly developed [13].

##### b. Skinner quoted Barlow

Learning is a process of behavioral adaptation that takes place progressively. Based on experiments, that adaptation process brings optimal results if given reinforcement (reinforcement).

##### c. Hintzman

Learning is a change that occurs in an organism (human or animal) caused by experience that can affect the behavior of the organism. That is: changes caused by experience, can only be said to be learning if it affects the organism.

##### d. Witting

Learning is a relatively stable change that occurs in all kinds or the whole behavior of the organism as a result of experience.

##### e. Reber

1) Learning is the process of acquiring knowledge

2) Learning is a relatively lasting change in reaction ability as a result of reinforced practice.

##### f. WJS. Poerwadarminta

Learning is trying (practicing and so on) in order to gain intelligence.

##### g. Oemar Hamalik

Learning is a form of growth or change within a person that is expressed in new ways of behavior due to experience and practice.

##### h. Dewan Ketut Sukardi

Learning is a change in behavior as a result of experience, except for changes in behavior caused by the process of be-

coming mature (temporary or instinctive changes).

i. Tadjab

Learning is any experience that causes positive behavioral changes intentionally given at school under the guidance of a teacher. This learning experience is often called the Teaching and Learning Process [14].

Thus, that learning is an activity carried out by individuals and results in changes in behavior or often known as learning outcomes both including cognitive, affective, and psychomotor. Learning outcomes are also the success of students in forming competencies and achieving goals as well as the success of teachers in guiding students during the learning process, (Nana Sudjana, 1989). The main purpose of learning is to determine the level of success achieved by students after participating in certain learning activities using the inquiry method which is marked by a value scale in the form of letters or word symbols.

*Definition of Islamic Religious Education (PAI) Learning Outcomes*

Learning outcomes are obtained during the learning process in knowledge, understanding, skills, value areas and attitudes. The ongoing learning process produces changes in students. The changes are abilities in various fields such as knowledge, understanding and skills, especially Islamic Religious Education (PAI). The learning outcomes of Islamic Religious Education both (Al-Qur'an Hadith, Arabic Language, Tauhid or Akidah Akhlak, Fiqh or Shari'ah, History of Islamic Development) are the results achieved by students during learning by scoring numbers or letters obtained from the final exam. The learning outcome assessment indicator used in determining the success of using the inquiry method to improve Islamic Religious Education learning outcomes is in the form of test scores obtained by students from individual scores in Islamic Religious Education lessons at SMP Sunan Ampel Sumberejo Banyuputih Situbondo.

By knowing the indicators of learning success achieved by students, teachers and students can improve and optimize teaching and learning activities if they are considered not achieving the desired learning outcomes.

*Islamic Religious Education and Learning*

In general, Islamic Religious Education is a subject that is developed from the basis of Islam found in the Qur'an and hadith and through the *ijtihad* process of the scholars'. So, Islamic Religious Education is an effort directed towards the formation of a child's personality in accordance with the teachings of Islam.

Islamic Religious Education lessons are a process of transferring values, knowledge and skills which includes two things: a) educating students to behave in accordance with Islamic values, b) educating students to learn subject matter in the form of knowledge about Islamic teachings. So, learning Islamic Religious Education is teaching students using the principles of education and learning theory which is the main determinant of the success of Islamic Religious Education in which there is a two-way communication process carried out

by the teacher to students using Islamic Religious Education subject matter, namely:

- a. The problem of faith (Aqidah) is an inner *I'tikad*, teaching the Oneness of Allah.
- b. Islamic issues (Shari'ah) are relations with the external world in order to obey all the rules and laws of God, to regulate the relationship between man and God and regulate the association of life and the life of the nation.
- c. The problem of *ihsan* (Akhlak) is a practice that is complementary to the two above and teaches the way of human life.

## 4. Discussion

*Inquiry Learning.*

Inquiry is learning by engaging in questioning, searching for information and conducting investigations in which students give ideas, propose hypotheses and conclude.

The objectives of the inquiry learning method are: a) to ensure that students are able to find answers to problems, b) to work in pairs to increase familiarity and c) to make it easier to learn applicative (psychomotor) material. The benefits are as a "warm-up" for the brain before learning by playing videos or providing documents such as posters or storybooks about new topics that students find interesting, using the steps: orientation, formulating problems, proposing hypotheses, collecting data, testing hypotheses, concluding.

The advantages of inquiry a) emphasise cognitive-affective-psychomotor development in a balanced manner, b) students learn according to their own learning style, c) learning is a process of changing behaviour. While the shortcomings of inquiry a) difficult to control the activities and success of students, b) difficult to plan learning because it collides with students' habits in learning, c) requires a long time, d) success is determined by the ability of students to master the subject matter, then the inquiry method will be difficult to implement by every teacher.

*Islamic Religious Education (PAI) Learning Outcomes using the Inquiry method*

Based on the results of interviews with teachers, it shows that Inquiry Learning can improve PAI learning outcomes at SMP Sunan Ampel Sumberejo Banyuputih Situbondo, there is significant progress where teachers in guiding students during learning can be achieved by doing activities: a) listening, b) seeing or looking, c) reading, d) writing, e) thinking, f) remembering, g) practice or practice.

Learning with the Inquiry method received positive student responses. This response shows that this paradigm shift can be well received by students and makes teachers more creative-innovative in managing learning.

PAI materials on Faith (Aqidah), Islam (Shari'ah) and Ihsan (Akhlak) contain the transfer of values, knowledge and skills that include two things: a) educating students to behave in accordance with the values of Islamic teachings, b) educating students to learn subject matter in the form of knowledge



about Islamic teachings.

## 5. Conclusions

Inquiry learning is a learning approach that emphasizes the process of investigation, exploration, and discovery of understanding by students. It encourages students to ask questions, research, and seek answers to their own questions through data collection and analysis. When applied in Islamic Religious Education (PAI) learning, inquiry learning has the potential to improve students' PAI learning outcomes in the following ways: 1) Motivating Students Through the inquiry learning approach, students are encouraged to explore and discover knowledge about PAI through their own research and exploration process. This can increase students' motivation to learn as they feel in control of their learning and feel challenged to seek answers to their own questions; 2) Increasing Engagement. By inviting students to actively participate in the learning process, inquiry learning can increase the level of student engagement in PAI learning. Students are more emotionally and cognitively engaged as they play an active role in seeking answers and understanding of religious concepts; 3) Deeper Understanding: Through the process of investigation and exploration, students have the opportunity to build a deeper understanding of religious concepts and the meanings contained therein.

They learn by doing, and this tends to result in stronger and more lasting understanding, 4) Development of Critical Thinking Skills: Inquiry learning encourages students to think critically and analytically in search of answers to their questions. They need to evaluate information, construct arguments, and make conclusions based on the evidence they find. These critical thinking skills also contribute to a better understanding of PAI; 5) Meaningful Learning Experience: By engaging students in the process of investigation and discovery of knowledge, inquiry learning creates meaningful learning experiences for students. They learn not only to achieve high grades, but to understand and apply religious values in their daily lives.

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## Conflicts of Interest

The authors declare no conflict of interest.

## References

- [1] Aransyah, A., Herpratiwi, H., Adha, M. M., Nurwahidin, M., & Yuliati, D. (2023). Implementation of the Evaluation of the Free School Movement Curriculum Module for High School Students Perintis 1 Bandar Lampung. *Journal of Educational Technology: Journal of Learning Research and Development*, 8(1), 136-147.
- [2] Suriadi, S., & Supriyatno, T. (2020). Implementation of contextual teaching and learning approach in learning Qur'an Hadith. *Educative Journal: Journal of Educational Studies*, 5(1), 84-99.
- [3] Dewi, H. (2016). Guided inquiry model learning combined with STAD type cooperative learning to improve science learning outcomes. *Pros. Semnas Pend. IPA Postgraduate UM*, 1.
- [4] M. M. Solichin, (2017) "Application of Inquiry Discovery Learning Model in Islamic Religious Education".
- [5] M. B. Prasetyo and B. Rosy, (2021) "Inquiry Learning Model as a Strategy to Develop Students' Critical Thinking Ability," vol. 9, pp. 109-120.
- [6] Alhakiki and T. Taufina, (2020) "The Effect of Quantum Teaching TANDUR Framework on Mathematics Learning Outcomes in Primary Schools," *J. BASICEDU*, vol. 4, no. 3, pp. 534-540, 2020, <https://doi.org/10.31004/basicedu.v4i3.395>
- [7] Kusmaryono, Heru and Rokhis Setiawati, (2013). The Application of Inquiry Based Learning to Determine Student Learning Response to the Concept and Management of Cooperatives, (*Journal of Economic Education Educational Dynamics*, Vol. VIII, No. 2, December.
- [8] Jannah, M. (2020). The role of learning aqidah akhlak to instill the value of student character education. *Al-Madrasah: Journal of Madrasah Ibtidaiyah Education*, 4(2), 237-252.
- [9] Bali, M. M. E. I., & Fadilah, N. (2019). Internalization of Religious Character at Nurul Jadid Junior High School. *MUDARRISUNA Journal: Media for Islamic Education Studies*, 9(1), 1-25.
- [10] Gulo, (2005) *Research Methods* (Jakarta: PT. Grasindo).
- [11] Nasution, S. *Various Approaches in the Teaching and Learning Process*, Jakarta: Bumi Aksara, 2000.
- [12] Sanjaya, Wina, (2007) *Learning Strategies Oriented Educational Process*, (Jakarta: Kencana Prenada Media Group.
- [13] Syah, Muhibbin, (2006). *Psychology of Learning*, (Jakarta: Raja Grafindo Persada.
- [14] Dimiyati and Mujiono, (1999). *Learning and Learning*, Jakarta: Rineka Cipta.