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## ISLAMIC RELIGIOUS EDUCATION LEARNING STRATEGY (REVIEW OF INFORMATION TECHNOLOGY-BASED PAI LEARNING IN MADRASAH

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### Abstract:

Learning strategies are a crucial step in achieving learning objectives in every field of study, including in Islamic Religious Education (PAI). This process requires structured stages starting from planning, organizing, to evaluating learning outcomes. In today's digital era, the use of information technology greatly supports the effectiveness of learning activities. Various means and communication platforms such as telephones, computers, the internet, electronic mail, and other digital media can be used as educational aids. The issue of the application of information technology in PAI learning is an important topic to be studied in depth, especially in its implementation in the madrasah environment. This paper reviews the basic concepts and application of PAI learning based on information technology in madrasahs. At the end, conclusions and suggestions or recommendations are presented that are theoretical and practical in nature to improve the quality of PAI learning based on information technology in madrasahs.

**Keywords:** Learning, Islamic Religious Education, Information Technology.

### INTRODUCTION

Learning is a process that aims to achieve certain learning outcomes. In this process, many stages are required that are quite long, starting from planning, organizing, to evaluation. The planning stage includes determining the

goals to be achieved, achievement strategies, and allocation of time and human resources needed. Meanwhile, organizing involves dividing

tasks to related parties, coordination, direction, and monitoring of activity implementation. Evaluation is carried out to assess the extent to which learning objectives have been achieved, as well as to identify supporting and inhibiting factors in the process. In achieving learning objectives, information technology plays an important role as an educational tool. This technology is utilized through various communication media such as telephones, computers, the internet, email, and others. In general, information technology in education can be categorized into three main types. First, audio media including radio, telephone, and pagers. Second, visual media such as slides, newspapers, and magazines. Third, audio-visual media including television, computers, and the internet.

Self-learning is a conscious process carried out by individuals to bring about changes in attitudes and behaviors, such as from ignorance to knowledge, from having no attitude to having the right attitude, and from having no skills to being skilled. The learning process involves active interaction between individuals and their environment, which has an impact on relatively permanent changes in cognitive, affective, and psychomotor aspects, as explained in Bloom's

Taxonomy. These changes can be in the form of new knowledge or skills, or improvements to previously possessed knowledge. Learning is not only absorbing information, but also processing, revising, and making it into personally useful experiences and skills. Therefore, learning must be viewed as a system that facilitates individuals in the learning process and in establishing interactions with various sources and learning environments.(Wahab and Rosnawati 2021) Various information technologies can be classified into interactive and non-interactive media. Media such as slides, newspapers, magazines, and television fall into the non-interactive category because users have no control over changing the content or presentation; changes can only be made to the quality of the production. In contrast, computers and the internet are classified as interactive media because they allow students to be directly involved and change the order of the material presented. Through the internet, teachers can provide learning without having to meet students face to face. On the other hand, students can access a variety of information from all over the world through cyberspace using computers and the internet.

One of the latest innovations in the world of education is the emergence

of the "cyber teaching" method or online teaching, namely the learning process carried out by utilizing the internet network. Currently, the term e-learning is also popular, namely a learning model that utilizes information and communication technology, especially the internet (Iskandar, 2010: 15). E-learning has developed into various forms of technology-based learning such as CBT (Computer Based Training), CBI (Computer Based Instruction), Distance Learning, CLE (Cybernetic Learning Environment), Desktop Videoconferencing, ILS (Integrated Learning System), LCC (Learner-Centered Classroom), Teleconferencing, and WBT (Web-Based Training), among others.

With these conditions, it can be concluded that one of the causes of the less than optimal Islamic religious education (PAI) is the learning approach that is still traditional and normative and the use of methods that are less appropriate to the character of today's students. One solution that can be applied is to utilize the development of science and technology, especially the internet, in managing learning. There are several reasons that support the use of the internet in PAI learning. First, the internet is a medium that is currently popular with students and is effectively

used in learning. Second, the internet provides very broad information including information related to Islamic teachings. Third, students become more skilled in finding and understanding Islamic information so that their insights become more comprehensive.

One example of a madrasah that has succeeded in integrating the internet in learning is Madrasah Tsanawiyah Negeri Sabungan located in Langgapayung, North Sumatra Province. Based on initial data obtained by the author, MTS NEGRI Sabungan showed outstanding academic achievements, especially in English, Mathematics, and technology-based Islamic Religious Education subjects.

MTS Sabungan is a high school that is able to make a major contribution in the implementation of PAI learning based on information technology. Thanks to the implementation of this method, students have succeeded in winning various awards both at the local (Sabungan), provincial, national, and international levels, both in academic and non-academic fields.

Seeing this achievement, it is important to conduct an in-depth study of PAI learning based on information technology. This study aims to explore the concept and application of PAI learning based on information

technology in the madrasah environment. This is interesting and important to study as a contribution to the development of science, both

theoretically and practically. (Suwartiningsih 2021)

## **RESEARCH METHODS**

This study uses a qualitative method with a case study approach. The qualitative approach was chosen to gain a deep understanding of the implementation of Islamic Religious Education (PAI) learning strategies based on information technology at MTs Sabungan. The case study provides a comprehensive and contextual picture of the learning practices that take place in the real madrasah environment.

The research location is at MTs Sabungan located in Langgapayung. The research is adjusted to the teaching and learning activity calendar at the madrasah.

The data of this study came from primary and secondary sources. Primary data were obtained through direct interviews with the head of the madrasah, PAI teachers, and students. Meanwhile, secondary data were collected from supporting documents such as syllabus, lesson plans, digital teaching materials, student evaluation results, and documentation of technology-based learning activities owned by the school.

Data collection was conducted through three techniques, namely in-depth interviews, direct observation of learning activities, and documentation studies. Interviews were conducted openly and flexibly to dig deeper information. Observations aimed to directly observe how technology is used in the learning process. While documentation was used as a complement and support for data from interviews and observations.

In this study, the researcher acts as the main instrument (human instrument) who is directly involved with informants and research situations. The researcher uses interview guidelines, observation sheets, and document checklists that are developed according to field needs and adjusted dynamically.

Data analysis was conducted using an interactive model from Miles and Huberman which includes three main stages: data reduction, data presentation, and drawing conclusions. Data reduction is done by selecting and simplifying the data that has been collected. The data is then presented in the form of narratives, tables, or diagrams to facilitate analysis. Drawing conclusions is done in stages

and will continue to be reviewed based on additional data obtained.

To ensure the validity of the data, triangulation techniques are used, both source and technique triangulation. This is done by comparing data from various sources and matching interview results with observation and documentation data. With this approach, the results of the study are expected to provide an accurate picture of the PAI learning strategy based on information technology at MTs Sabungan

## **DISCUSSION**

### **The concept of technology-based pie learning**

#### **1. Understanding Learning**

The term learning has become increasingly widely known by the public, especially since the enactment of Law of the Republic of Indonesia Number 20 of 2003 concerning the National Education System. This law officially provides a definition of learning. Pedagogically, learning can be interpreted as a process carried out systematically and comprehensively to create a conducive learning environment, with the aim of encouraging the occurrence of a learning process that is able to develop the potential of individuals as learners.

Changes in behavior in an individual are an indication that the learning

process has occurred. The relationship between learning and teaching is functional, where learning is done intentionally to trigger the learning process. In other words, the learning process is a measure of learning success. However, it is important to understand that not all learning processes are a direct result of learning activities. Therefore, the responsibility or accountability of the learning process is personal or individual, while learning accountability is more public or open. (Pane and Darwis Dasopang 2017)

Learning cannot be separated from the meaning of learning, because both are a series of interrelated activities. The results of the learning process will be the basis for subsequent learning. Learning itself includes learning activities that involve students and educators. The learning process is an integral part of the learning system. In this system, there are various components that interact with each other to create effective interactions. The concept of learning is the main basis in the world of education that describes how someone acquires knowledge, skills, attitudes, and values through experience and interaction with their environment. Learning does not only mean conveying information from teachers to students, but also involves the active role of students in forming their

own understanding. In this case, students function as the main actors in the learning process, while teachers act as guides and supporters. The optimal learning process emphasizes the importance of motivation, active involvement, providing feedback, and creating a conducive learning environment. Learning also needs to consider the differences in characteristics of each individual, such as learning style, background, and ability level. This concept is influenced by a number of learning theories, including behaviorism which focuses on behavioral change through stimulus and response, cognitivism which emphasizes mental processes, and constructivism which views that knowledge is formed through experience. In its application, learning can be done through various strategies and methods, such as active learning, problem-based learning, and collaborative learning. The main objective of these various approaches is to hone critical thinking skills, foster creativity, and encourage students' learning independence so that they are able to face various challenges in the future. Therefore, the concept of learning is dynamic and oriented towards developing the potential of students as a whole. (And and Pd nd)

There are various learning concepts applied in Indonesia, one of which is contextual learning. This concept is seen as a strategy that is in line with the principles of effective learning. Contextual learning involves active interaction between teachers and students in the learning process. In this approach, there are several important elements, namely constructivism, inquiry, questioning, learning communities, and others. An expert named Carl R. Rogers put forward a learning concept that is different from contextual learning, namely "Student Centered Learning" or student-centered learning. The essence of this concept includes: 1) Direct teaching is not possible, what can be done is to facilitate the student's learning process. 2) A person will only learn deeply if the material is closely related to their self-development. 3) Learning will not be effective if done under pressure. 4) The educational process will be more meaningful if students do not feel pressured and differences of opinion or point of view can be accepted and facilitated. 5) Learning is a relatively permanent change in behavior as a result of experience. (Salsabila Salsabila, Arya Bisma Nugraha, and Gusmaneli Gusmaneli 2024)

## **1. Definition of Islamic religious education**

Education is a process to prepare the younger generation to be able to live life and achieve their life goals in a more effective and efficient way. This process includes the transfer of knowledge, changes in values, and character formation. When the word "education" is combined with "Islamic Religion", then Islamic Religious Education can be interpreted as a learning process that covers all aspects of Islamic teachings as a whole.

Several experts have defined Islamic Religious Education. First, Islamic Religious Education is understood as an effort to provide guidance and direction to students so that after completing their education, they are able to understand, practice, and make Islamic teachings a guide to life. Second, Islamic Religious Education is also interpreted as an effort carried out in a planned and systematic manner to help students live a life in accordance with Islamic values. From these definitions, it can be understood that learning Islamic Religious Education is a process of instilling the values of Islamic teachings in students, with the aim that these values can be deeply

absorbed, used as a foundation for life, and reflected in daily attitudes and behavior.

However, in the context of formal secondary education in Indonesia, Islamic Religious Education refers to subject matter that includes the Qur'an-Hadith, Aqidah, Morals, Fiqh, and History of Islamic Civilization. This is in accordance with the provisions contained in the Regulation of the Minister of National Education Number 22 of 2006 concerning Content Standards and the Regulation of the Minister of National Education Number 23 of 2006 concerning Graduate Competency Standards. Islamic religious education experts have tried to formulate

understanding of Islamic education, among the very varied definitions are: (1) Al-Syaibany stated that Islamic religious education is a process of changing the behavior of individual students in their personal lives, society and the surrounding environment. This process is carried out through education and teaching as a basic activity and profession among the many basic professions in society. (2) Muhammad Fadhil al-Jamaly defines Islamic religious education as an

effort to develop, encourage and invite students to live more dynamically based on high values and life. With this process, it is hoped that students will grow into more complete individuals, including the development of aspects of reason, emotion and action.

Ahmad D. Marimba stated that Islamic Religious Education is a process of providing direction or guidance carried out consciously by educators, in order to support the physical and spiritual development of students towards the formation of an ideal personality (*insan kamil*). Meanwhile, Ahmad Tafsir defines Islamic Religious Education as a process of guidance given to a person so that he can develop optimally in accordance with the principles of Islamic teachings. (Dudy Meinura 2022)

Based on the description above, the author concludes that Islamic education is a system designed to guide students in directing their lives so that they are in harmony with the outlook on life and ideological principles of Muslims while living their lives in the world.

### **3. Understanding Technology and Information**

The term information technology consists of two words, namely "technology" and "information". Technology refers to all tools or means used to support the continuity and comfort of human life. Meanwhile, information means notification, news, or news about something. Thus, information technology can be interpreted as a means or tool used to convey news, information, or certain news.

In simple terms, information technology is the result of human engineering to streamline the process of delivering information from sender to recipient, so that the process becomes faster, its reach is wider, and information can be stored for a longer period of time.

information comes from a combination of two words, namely "technology" and "information". The term "technology" itself has several meanings. First, technology is the application of science that focuses on the development of engineering capabilities through certain steps and techniques in a field. Second, technology can also be interpreted as the application of science and engineering to create machines and



procedures that aim to expand, improve, or at least improve human efficiency in various aspects of life.

Information can be defined in several ways. First, as data that is stored, processed, or sent. Second, as knowledge gained through learning, experience, or guidance. Third, as the result of processed data that has been packaged in a more meaningful form, namely in the form of knowledge or information that is useful for the recipient in supporting decision making, both for now and in the future. Thus, information technology can be defined as the result of human engineering in managing the process of delivering information from the sender to the recipient, so that the process becomes faster, has a wider reach, and allows information to be stored for a longer period of time. (Rianto and Dozan 2020)

### **Implementation of Technology-Based Islamic Religious Education Learning in Madrasahs**

Learning that utilizes information technology is an approach that is combined with various learning theories, such as behaviorism, cognitivism, constructivism, and

humanism, all of which play an important role in supporting the success of the learning process, especially those based on information technology. In this study, we will discuss in depth how to implement Islamic Religious Education (PAI) learning based on information technology; including the planning, implementation, and evaluation stages of the learning process. In addition, we will also analyze various obstacles or problems that may arise in the implementation of PAI learning with the support of information technology.

#### **1. Forms of Technology-Based Islamic Religious Education Learning in Madrasahs**

Education plays a crucial role in shaping a competent, dedicated, and noble-minded (characterized) generation of the nation. Various approaches and strategies can be applied to make the learning process more effective and efficient. Education is expected to reach all regions of the archipelago, including remote areas. Every generation of the nation should not experience gaps or inequalities in accessing education just because they live far from the city center, have limited transportation

facilities, or lack of competent educators.

The rapid development of information technology has brought about major changes in various aspects of life. This technology has removed geographical boundaries between educational institutions, including madrasahs, thus enabling the creation of inter-institutional connectivity in a global network known as the global village or world village. Through the use of information technology, anyone can now access educational services from various institutions, anytime and anywhere as desired. Specifically, the use of information technology in the learning process is believed to be able to: (1) improve the quality of learning, and (2) develop skills in the field of information technology. (3) Provide wider opportunities to access education and the learning process, (4) Respond to the demands of the times in terms of active involvement in the development of information technology, (5) Reduce expenses or costs required in organizing education,

and (6) Increase efficiency and effectiveness in the use of educational resources.(Yumarni 2019)

## **2. Planning, Implementation, and Evaluation Process in Information Technology-Based Islamic Education Learning**

The implementation of Islamic Religious Education (PAI) learning based on information technology at MTS Negeri Sabungan includes at least three main stages, namely planning, implementation or organization, and evaluation in the learning system. These three stages have a very important role in supporting the sustainability and effectiveness of the learning process. The stages of planning, implementation, and evaluation in Islamic Religious Education (PAI) learning based on information technology are a series of processes that are interconnected and cannot be separated from each other. Planning is a crucial initial step, where teachers develop learning strategies by considering aspects of objectives, teaching materials,

methods, and technological media that will be utilized. In this case, teachers also need to ensure the availability of supporting facilities such as internet networks, technological devices, and appropriate learning applications.

Implementation is the stage of implementing the plan that has been made, where the teacher carries out the learning process using information technology as a supporting tool. At this stage, the teacher functions as a guide who helps students understand Islamic Religious Education material through the use of various digital media, such as learning videos, visual presentations, online learning platforms, and interactive applications. The use of this technology aims to increase student engagement while strengthening their understanding of the material. In addition, teachers are also required to have the ability to manage digital learning and maintain active interaction with students.

Evaluation is an important step to assess student

learning outcomes. In the context of technology-based Islamic Religious Education learning, evaluation can be done through various methods such as online tests, technology-based projects, or digital portfolios. This assessment is not only used to measure student learning outcomes, but also as a reflection tool for teachers to evaluate and improve the learning process in the future. Therefore, the application of information technology in the entire series of Islamic Religious Education learning is expected to create a more interesting, efficient, and modern learning process. (Ghufron, Ikramina, and Anbiya 2023)

### **3. Problems in Implementing Information Technology-Based Islamic Religious Education Learning**

In the implementation of technology-based Islamic Religious Education (PAI) learning, there are various challenges faced. One of the obstacles is that technological advances are often misused for things that are less useful, even for negative activities. In

addition, the use of technology as a learning medium also has the potential to make teachers less than optimal in carrying out their roles. This means that teachers may no longer be active in teaching because students can already learn independently through the help of technology.

The implementation of Islamic Religious Education (PAI) learning with the support of information technology faces various quite complex challenges. Although information technology is able to provide convenience and flexibility in the teaching and learning process, in reality there are still many obstacles that reduce the effectiveness of its implementation in the field.

One of the main obstacles often encountered is the misuse of technology by students. Technology that should be used to deepen Islamic Religious Education material is often diverted to less productive activities, such as playing social media, opening sites that are not in line with Islamic values, or even falling into negative activities. This action is certainly

contrary to the main objective of Islamic Religious Education learning, which is to form good character and morals.

On the other hand, the use of technology also has the potential to reduce the active involvement of teachers in the learning process. There is a tendency for some teachers to rely too much on technology, thus reducing direct interaction with students. Because learning materials are now widely available digitally and can be accessed at any time, some teachers feel that students can learn independently without intensive guidance. As a result, two-way communication that is important in religious education, such as dialogue and role models, is less than optimal.

Another problem is the unequal access to technology devices and the internet, especially for students who live in remote areas or come from underprivileged families. Many of them do not have facilities such as smartphones, computers, or stable internet connections, which creates inequality in obtaining a decent education.

In addition, there are still many teachers who do not have adequate skills in utilizing technology optimally. Lack of training and support makes a number of teachers find it difficult to adapt to digital learning patterns. As a result, the PAI material delivered is less interesting and does not match the needs and challenges of the times.

Another important aspect that needs to be considered is the validity of the digital content used in the learning process. Not all information available online can be used as teaching materials, because some of it is not necessarily valid or reflects moderate and contextual Islamic teachings. Without a strict selection process, students can receive a wrong understanding of religious teachings.

Therefore, although information technology has great potential in supporting Islamic Religious Education learning, these various problems must be addressed immediately. Active involvement of all elements is needed, including teachers, students, parents, and

educational institutions, so that the use of technology truly supports the achievement of effective, relevant, and meaningful religious education goals.(Tsanawiyah 2024)

## **CONCLUSION**

Islamic Religious Education (PAI) learning based on information technology at MTS Negeri Sabungan reviewed in terms of data and discussion shows positive results. In this context, the research findings related to how the madrasah manages, designs, and develops strategies for organizing PAI learning that utilizes information technology will be concluded. This includes the role of madrasah management in supporting and directing the implementation of digital-based learning effectively. Evaluation of Islamic Religious Education (PAI) learning based on information technology includes identification of various supporting and inhibiting factors, as well as how the madrasah management responds to and overcomes these obstacles.

The implementation of PAI learning based on information technology at MTS Negeri

Sabungan includes the use of various digital media such as the internet, laptops, LCDs, blogs, emails, and other similar devices. The use of this media reflects a humanistic learning approach, namely learning that respects human values, because this technology has become an important part of everyday human life.

The stages of planning, organizing, implementing, and evaluating PAI learning that utilizes information technology are carried out based on an approach that is in line with the theory developed by Carl R. Rogers. This theory emphasizes the importance of a learning process that is contextual and relevant to the needs of students, including the application of technology as part of the learning process.

Regarding the challenges or problems in implementing PAI learning based on information technology, there are a number of obstacles faced, both in terms of technical aspects, availability of facilities, teacher and student readiness, and aspects of education management. This shows a relationship between the impact of information technology and the reality in the field, where

information technology does not entirely bring positive influences. In addition to the benefits offered, there are also negative aspects that accompany it. Nevertheless, the application of information technology in the learning process still has a significant role, especially in supporting the effectiveness of Islamic Religious Education (PAI) learning.

## REFERENCE

- Dan, Belajar, and M. Pd. n.d. *PEMBELAJARAN*.
- Dudy Meinura, Eka. 2022. "Konsep Pendidikan Islam Dalam Perspektif Ahmad Tafsir." *Jurnal Jendela Pendidikan* 2(03):413–22.
- Ghufron, David Maulana, Mahreshaibati Bilqis Ikramina, and Bakti Fatwa Anbiya. 2023. "Transformasi Pembelajaran Pendidikan Agama Islam Di Era Digital: Modalitas Belajar Dan Tantangan Pendidikan." *Jurnal Al Burhan* 3(2):40–50. doi: 10.58988/jab.v3i2.224.
- Pane, Aprida, and Muhammad Darwis Dasopang. 2017. "Belajar Dan Pembelajaran." *FITRAH: Jurnal Kajian Ilmu-Ilmu Keislaman* 3(2):333–52. doi:

- 10.24952/fitrah.v3i2.945.
- Rianto, Bayu, and Welly Dozan. 2020. *Dasar-Dasar Pengantar Teknologi Informasi*.
- Salsabila Salsabila, Arya Bisma Nugraha, and Gusmaneli Gusmaneli. 2024. "Konsep Dasar Belajar Dan Pembelajaran Dalam Pendidikan." *PUSTAKA: Jurnal Bahasa Dan Pendidikan* 4(2):100–110. doi: 10.56910/pustaka.v4i2.1390.
- Suwartiningsih. 2021. "Strategi Pembelajaran Pendidikan Agama Islam (Telaah Tentang Pembelajaran PAI Berbasis Teknologi Informasi Di Madrasah)." *Jurnal Paradigma* 12(01):h. 158.
- Tsanawiyah, D. I. Madrasah. 2024. "EPISTEMIC : JURNAL ILMIAH PENDIDIKAN PROSES PENGEMBANGAN MATERI PEMBELAJARAN PAI EPISTEMIC : JURNAL ILMIAH PENDIDIKAN." 3(1):149–65.
- Wahab, Gusnarib, and Rosnawati. 2021. *Teori-Teori Belajar Dan Pembelajaran*. Vol. 3.
- Yumarni, Asmara. 2019. "Simpulan, Mata Kuliah Pendidikan Agama Adalah Mata Kuliah Wajib Nasional Dengan Capaian Pembelajaran Terbentuknya
- Kepribadian Mahasiswa Secara Utuh (.” 2:112–26.