**Development of IT-Based PAI Learning Media**

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**Abstract:**

This article aims to enable more advanced and developed learning so that learning becomes more effective and efficient. In addition, Islamic religious education aims to develop attitudes and characters that are loyal and pious to Allah SWT and in line with current reality. All educational institutions must be proactive, creative and productive in reading the phenomena that occur today. Therefore, the role of IT is very important here, creating good designs as a foundation for the advancement of information and communication technology, as well as adding Islamic religious education learning activities with materials and skills and practicing religion including learning activities and mastery. However, we must also be able to use a technical approach with a learning method using the "Moodle" internet program. Furthermore, the researcher will provide information regarding the type of research to be conducted, the planned time for implementing the research, and the class that will be the subject of the research. The results achieved are the process of developing IT-based PAI learning media, starting from the initial identification stage or implementation of preliminary research to the final revision stage.

**Keywords:** *Internal quality assurance system; Islamic boarding school; education*

**INTRODUCTION**

The dynamics of growth and change from one day to the next have a negative impact on the growth of technology and information that is adjusted to the needs and desires of the general public. Growth and change from day to day have a negative impact on the growth of technology and information that is adjusted to the needs and desires of the general public. The technology developed by technocrats has also been proven to make a significant contribution to education, ranging from biotechnology, multimedia technology, and communication technology (Ngura & Fono, 2023) (Nur & Jidan, 2024). Therefore, the development of this technology is also expected to improve the quality of education in Indonesia. As a strategic element of human education in future development (human resources) and national development (Isti'ana, 2024).

Islamic education as an integral part of the national education system, in addition to advancing and developing religious values, aims to improve the science and technology of students so that Islamic education can prepare and develop complete human resources and master science and technology (Mazrur, 2023). We must also emphasize the acquisition of skills, techniques, faith and being able to practice religion well.

Information technology, sometimes known as IT, is a field, of study and a set of processes designed to improve human well-being in several domains, including education. In theory, the use of IT in education can increase student motivation, which in turn can improve learning outcomes themselves (output) (Hamdan Suyuti, 2022).

In today's era of globalization, IT (Information Technology) has become a basic need to determine the quality and effectiveness of the learning process. Dryden and Vos (2003) concluded from their research that self-image is more important than subject matter in an education system that has proven successful (Rodiya et al., 2022). Therefore, the concept of future education aims to arouse students' enthusiasm for learning in a fun way (the way students learn). One approach and method that can improve this aspect is by utilizing information technology (IT) in the learning process. As explained by Suryadi, the need for society to utilize technology in learning is part of learning reform (Silalahi et al., 2023).

The important role of information and communication technology in the learning process, in addition to creating pleasant learning conditions for students, also provides various media and tools to facilitate and speed up their work. This means that communication between students and learning resources can take place anytime and anywhere without being limited by space and time, so that the process of providing and presenting learning materials and ideas becomes more interesting and enjoyable.

Islamic Religious Education (PAI) is a secular business enterprise that includes teaching and learning activities or tutoring that are carried out seriously and with dignity while still paying attention to the expected results. which consists of teaching, learning, and/or tutoring activities that are carried out seriously and with full respect while still paying attention to the expected results. In the context of the elderly population in Indonesia. Religion can function as a single integrative entity and also a disintegrative entity. Religion can function as a single integrative entity and also as a disintegrative entity. Therefore, Islamic Religious Education education in schools needs to emphasize its contribution. need to emphasize its contribution. Many criticisms have been made regarding the state of religious education in schools. in schools. The last but not least is the defeat of traditional teaching methods. teaching. (Silalahi et al., 2023).

Lectures tend to be monotonous, the texts are static, prescriptive, detached from history, increasingly academic, and teachers are (and are expected to be) experts. Thus, the presence and progress of IT. In today's era that is fully IT-based, it has created opportunities and expanded interactions between teachers and students. Because interactions are not only limited to the classroom and students can also review materials at home, Islamic Religious Education teachers can simultaneously use several types of media in the form of learning multimedia.

**RESEARCH METHODS**

This research approach is qualitative in nature, which aims to see the development of IT-based PAI learning media. The data used in this study are primary data and secondary data. Primary data is obtained directly from the original source with data collection techniques, namely observation, in-depth interviews. Secondary data is data obtained from documentation. The informants studied consisted of 3 (three) teachers who teach Islamic Religious Education (PAI) subjects.

Data analysis uses descriptive qualitative techniques such as statements from informants and documentation results related to the development of IT-based PAI learning media. Qualitative data is interpreted according to the research objectives, then continued with analysis of the problems found in the field, so that a clear picture of the object being studied is obtained and then conclusions are drawn.

**RESULTS AND DISCUSSION**

**Definition of Learning Media**

The word media comes from the Latin word medius, which literally means "middle", "intermediary", or "deliverer". In Arabic, media refers to an intermediary or messenger from sender to recipient. The term "media" is often associated or replaced with the word "technology", which comes from the Latin words "language" (art) and "logos" (science) (Lailiyah & Mardliyah, 2021).

In the context of teaching and learning, the definition of media in the teaching and learning process tends to be interpreted as a graphic, photographic, or electronic tool to obtain, process, and reconstruct visual or verbal information. According to Gerlach and Ely, media is a graphic, photographic, electronic, or mechanical device to display, process, or explain verbal or visual information (Pambudi & Makhrus, 2022). Meanwhile, according to Irpan Ghaffar and Muhammad Jamil, learning is an effort that gives rise to teaching and learning efforts, and learning is also an effort to educate students (Anwar et al., 2021). Ahmad Zayadi also expressed the same thing, that learning is an effort to teach something to a person or group of people, but this effort is carried out through different strategies, methods and approaches to achieve a planned goal, he added (Assadi & Ubabuddin, 2023).

Learning can also be viewed as a teacher's programmed activity in a learning design that focuses on providing learning resources and involving students in active learning. In contrast to Mr. Shaikul Sagara who said that learning is a two-way street because learning is teaching students to apply educational principles and learning theories, and this is the main determinant of the success of education (Siregar, 2020). The teacher himself is an educator, and learning is carried out by students or learners. While in the learning process, two activities are carried out simultaneously: educational activities (teachers) and student activities (students).

The learning process is a process of interaction between teachers and students and between students. Through the learning process, students grow towards human education as stated in the objectives of education. In order for learning to take place effectively, teachers must be able to organize the learning process in a pleasant atmosphere. On the other hand, according to (Qamariyah & Nurhadi, 2021) learning media can be used to convey messages, stimulate students' thoughts, emotions, attention, and will, and encourage the learning process consciously, on target, and in a controlled manner.

Islamic Religious Education Learning Media (PAI) is a media that can be used to convey messages from the sender to the recipient in order to stimulate the thoughts, feelings, interests, and desires of students in the manner required in the teaching and learning process. Refers to anything. Focus and effectively achieve learning objectives in Islamic Religious Education (PAI).

**Definition of Information Technology**

Richard W expressed his opinion regarding the importance of information technology and stated that information technology is "the processing and distribution of data through a combination of computers and communications" (Mazrur, 2023). Meanwhile, Eko Ganis said that IT is busy collecting and storing data. This technology uses a series of computers to process data and uses a network system to connect one computer to another as needed. Telecommunication technology is used to make data more widely distributed and accessible (Khojir et al., 2022).

Information This technology collects information for personal life, including information about health, hobbies, leisure, and spirituality, including professions such as science, technology, trade, news, business, and professional associations. The development of information technology has encouraged a new way of life and e-life, a phenomenon where the many electronic needs have a negative impact on everyday life, a negative impact on everyday life appears. The Internet and information technology have become embedded in our daily lives, and further development is expected to increase our productivity and work efficiency by enabling us to carry out various tasks quickly, accurately, and easily. have become embedded in our daily lives, and further development is expected to increase our productivity and work efficiency by enabling us to carry out various tasks with speed, accuracy, and ease.

The importance of information technology in modern life cannot be overstated, with the information and communication technology sector being the main one. Advances in information technology have given rise to several types of activities based on information technology such as e-governance, e-commerce, education, and so on, all of which are electronic. Information technology has given rise to several types of activities based on information technology, all of which are electronic. (Lailiyah & Mardliyah, 2021). Although the Internet was originally used in English to facilitate research, correspondence, communication, and electronic information among students, faculty, and staff, it has now developed into a primary communication tool used by almost all members of society and has become a worldwide communication system that was initially only used to facilitate research, correspondence, communication, and electronic information between students, faculty, and staff, it has now developed into a primary communication tool used by almost all members of society and has become a worldwide communication system.

**Use of Information Technology in Education**

Information technology (IT) in education refers to the availability of channels and equipment that can be used to broadcast educational programs. The use of IT in education has become commonplace in the United States over the past decade (Suyuti, 2022). This is one of the main proofs that Indonesia is a backward country compared to other countries in the world. Information provided through computers connected to the internet as the main media can make a significant contribution to the education process.

This interactive technology is a catalyst for a fundamental change in the role of teachers, from information to transformation. It helps students learn faster, better, and smarter. Information technology is the key to a better future school model. Many aspects can be used as reasons to support the development and application of IT in education with the aim of improving the quality of national education in Indonesia. One aspect is Indonesia's geographical location, with many scattered islands and often unfriendly terrain, which is usually proposed to support the development and application of IT in education.

Because IT is so great and based on distance learning capabilities that are not separated by space, distance and time, it is said to be the main driver of equal education in the archipelago. To accelerate regional development, especially in the field of education, it is necessary to immediately introduce IT which has been recognized for its effectiveness. Krapyak settlement is one of the most advanced settlements in Pangunharjo Village. This progress is supported by several factors, including the strategic geographical location of Yogyakarta, close to the city center and education centers. Conditions can affect the socio-cultural attitudes and economic status of the community. The majority of Krapyak residents are Muslim (Hamidi, 2018).

At that time, before Mujahada was established, there were several pengajian activities attended by the young generation, mothers, and fathers, but the pengajian failed to unite the group. Seeing this situation, there was a desire from Gus Hendal to unite them in a forum called Jamiya Tarim Wal Mujahada "Padan Jagad" (Finance Director of JTMJP Shaikhul Fattah) (Interview with, January 6, 2013). Information Technology (IT) in the world of education must mean the availability of channels and equipment that can be used to broadcast educational programs. The use of IT in education has become commonplace in the United States over the past decade (Ananda & Maemonah, 2022).

This is one of the main pieces of evidence that Indonesia is a backward country compared to other countries in the world. Information provided through computers connected to the internet as the main media can make a significant contribution to the education process. This interactive technology is a catalyst for a fundamental change in the role of teachers, from information to transformation. This helps students learn faster, better, and smarter.

Information technology is the key to a better future school model. ICT, or better known as ICT (Information and Communication Technology), is technology, engineering, and technology related to the mastery and processing of information and its use, the relationship between computers and humans, as well as social, economic, and community problems, and various aspects of processing technology (Suyuti, 2022).

Information technology includes everything related to the process, use as a tool, and manipulation and management of information. Communication technology now includes everything that involves the use of tools to process and transfer data from one device to another. Therefore, information and communication technology has a broad definition and includes all activities related to the processing, manipulation, management, and transmission of information between media.

In using ICT, the benefits of this technology in terms of effective learning must be considered, such as the acquisition of knowledge, convenience, and affordability in terms of both time and cost. At least, learning is more valuable with ICT than without ICT. The added value provided by ICT is its breadth of coverage, timeliness, contemporary, and openness. This means that classroom learning based on this principle becomes more interesting and more arousing of curiosity. Learning that is not interesting and stimulates curiosity is boring and has the opposite effect on learning. It is not surprising that the use of ICT maximizes student creativity. Children who are very creative are certainly different from children who are less creative. Therefore, the purpose of ICT is in line with the goals of education itself when used for learning.

The use of ICT does not actually hinder learning, but provides additional learning benefits. IT or ICT includes all technologies that can be used to store, process, display and transmit information in the communication process (Assadi & Ubabuddin, 2023). Examples of the application of this technology include: Computer Technology, Multimedia Technology, Telecommunication Technology, Computer Network Technology.

Judging from the development of the situation, IT-based media was initially only used as an educational tool for teachers. However, the use of IT in the world of education is currently experiencing rapid progress. This development actually began around 1923 with the first discovery of the concept of visual education or teaching aids. Over time, the visual concept developed into audiovisual aids that appeared on the market around 1940. In 1945, several variations of the name appeared, including "Audio". Video materials and audiovisual equipment. Further developments occurred around 1960 (Hayani et al., 2023). This conceptual shift was made possible by applying a systems approach and development concept to educational activities. This development continues to this day, and ICT technology continues to change for the better.

In the era of globalization, the use of IT media is actually increasing rapidly. This plays an important role in this development, especially with the emergence of computers and the widespread use of laptops. In addition, the presence of the internet network facilitates access to the internet. It can be said that the current learning process cannot be separated from IT. For example, searching for learning materials on the Internet, discussion processes using PowerPoint, and even communication using ICT such as email, Twitter, and Facebook can be done (Nuswowati, 2018).

**The Role and Function of Information Technology in Islamic Religious Education Learning**

Technology in Islamic Religious Education learning refers to tools, methods used systematically in the Islamic Religious Education learning process by Islamic teachers or educators so that students can easily accept and learn Islamic religious education materials in their learning activities, or can be interpreted as a procedure. That's done, currently the use of information technology in Islamic Religious Education learning is starting to develop.

A variety of information technology systems can be used to improve learning, especially for Islamic Religious Education, although many Islamic Religious Education teachers are experts in ICT, their main use is for typing. Many Islamic Religious Education teachers are experts in ICT, but their main use is for typing. However, the use of ICT in education can be expanded to a wider level. The use of ICT in Islamic Religious Education education is from ICT in Islamic Religious Education education is (Mansir et al., 2020):

Utilizing the power point program in the Islamic Religious Education learning process in the classroom. With this program, teachers only need to write down important points from the material presented. In addition to teaching students to write, they can also watch audio and video that accompanies the material. For example, in the learning material themed "Faith in the Last Day", through this program students can not only gain knowledge of the material, but also be shown illustrations of the Apocalypse of Sugra and Kubra. Collecting assignments via email from students. Broadcasting class discussions using mailing lists. Through Zoom Meeting, teachers can create their own groups to communicate between classes or schools. Using live Youtube for learning inside and outside the classroom.

Using web vlogs for learning inside and outside the classroom. Compared to IT equipment, web video blogging is more complete. One of the advantages is that teachers can see their own work and ideas. Web vlogs can be considered as teachers' personal newspapers. It is up to the teacher what they want to include in the newspaper. Regarding learning, teachers can upload all PAI learning materials to the website. Through this media, students can learn without having to be confined in the classroom. Including lesson materials and practice questions, exam/retest results, or other materials related to PAI material.

Moreover, in terms of exam results, students and parents only know their own exam results, but do not know their friends' exam results. Students can see all exam results via weblog. This aims to allow students and parents to consult with subject teachers if they have questions (Mundiri & Zahra, 2017).

**IT Development in Islamic Religious Education Learning**

Development is the process of changing design specifications into a certain physical form. Overall, the orientation and learning activities must be designed in such a way as to achieve the expected goals. The design process begins with identifying problems or identifying learning needs and ends with identifying learning materials and strategies.

While the development process begins with the selection or development of learning materials and their integration into the designed learning strategy, followed by evaluation of strategies and strategies to conclude learning materials to increase effectiveness and efficiency (System et al., 2010). If we look closely at the various theories mentioned above, it becomes clear that learning development is a process that includes design, production, and evaluation.

The requirements for developing a learning program according to (Santoso, 2020) are: Allows students to feel the learning process related to the goals they want to achieve. Choose your learning materials and resources. Must be able to choose and develop learning media that can support a deeper understanding of concepts. We need to design a learning interaction model that makes students think and reflect. Design an evaluation program.

If we look closely at the various theories mentioned above, it becomes clear that learning development is a process that includes design, production, and evaluation. Educational media are used to convey messages and lesson content and stimulate students' thoughts, feelings, attention, and skills. Without educational media, learning effectiveness and educational quality cannot be achieved. Even with the availability of educational media, learning outcomes cannot be achieved without the ability to choose which media is the most effective and efficient.

Various research findings show that the use of information and communication technology (ICT) is the most effective media to achieve quality education at the beginning of the current era of globalization. ITC is a general term that refers to technology used to collect, process, and retrieve information in various forms. There are five perspectives on the role of ICT as a learning medium (Nuswowati, 2018): Media as Technology, Media as a tool, tutor, and teacher, Media as a Socialization Agent, Media as learning motivation, Media as a mental tool for thinking and solving problems.

**CONCLUSION**

In developing an IT-based PAI learning model, several steps are taken, including initial identification or conducting preliminary research. The next step is product planning. Then try to develop the product, provide instructions and guidance, and evaluate until the last step, namely the final revision of the test results. For the purpose of testing the PAI-IT model, training is carried out in accordance with the syntax of the PAI-IT model.

This includes communicating learning objectives and preparing students with clear instructions in the Moodle program. Demonstrating knowledge or skills (students carefully read and study the material provided in the Moodle program. If students have difficulty understanding the material, they can be supported through direct teaching or discussion forums provided in the Moodle program (Students take quizzes and proficiency tests on the Moodle program) each electronic material provides opportunities for further training and application.

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