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Alternative Approach Techniques to Support Home Islamic Boarding Schools Using Virtual Learning Technology

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Abstract---Digital technology-based learning or virtual learning is a method of learning in schools and an alternative learning method for Islamic boarding schools, including Islamic education boarding schools from house to house. Previous findings have proven the effectiveness of using a virtual learning approach for university and boarding schools. However, few people know that this virtual approach can also be used for alternative home-to-house learning for the younger generation who want to study religion. For this reason, we have carried out data collection and in-depth analysis involving a coding system and high data interpretation under a phenomenological approach that we have resulted out with very valid and reliable findings. The data we use comes from a database of technology and learning journal publications, books, and educational technology development websites, all of which have become the primary data for this study. It is hoped that this finding is a valuable input in efforts to solve the problem of learning Islamic religion from house to house apart from pesantren and Islamic schools.

Keywords---pesantren, publication review, technique alternative, virtual learning.

Introduction

It turns out that the development of communication and information technology has benefited the world of general education, especially in western countries, and benefits for the development and Islamic education in some Asian countries (Azra, 2019; Nugraha et al., 2021; Manullang et al., 2021). In Indonesia today, the degree and achievement of education, both general and religious, is very slow compared to the development of general science in modern countries and especially Europe and parts of Asia (Altbach & Selvaratnam, 2012). Likewise, in the learning tradition in Muslim societies, learning is usually carried out with a boarding school system with a face-to-face learning method which is the most crucial method that has been carried out, and it cannot be denied that the results are good and also less promising (Banerjee et al., 2015).

So Islamic scientists, based on these data facts, slowly propose that Islamic religious learning involving technology should be encouraged to all students and clerics who teach both in modern Islamic boarding schools and traditional Islamic boarding schools (Keppell et al., 2011; Liliana et al., 2021; Syamsuri et al., 2021; Hendriarto et al., 2021). On the other hand, we see the fact that not 100% of the Indonesian Muslim generation has the opportunity to study religion, both from Islamic schools and from modern pesantren and even traditional pesantren (Daneshgar, 2019). Some children are only part of the community who only receive education in public schools, universities, and the park for religious education. Some of them only get from their families and places of worship such as mosques and recitations in places that do not have a learning system such as formal education (Wekke & Hamid, 2013).

Seeing this reality from the success of the west in carrying out education and technology, then also seeing some of the success achieved by public schools and modern Islamic boarding schools (Kosheleva, 2013). Then, the author believes that if this virtual technology can be used by some Indonesian Muslim children who happen not to have the opportunity to go to Islamic school and study at Islamic boarding schools, they can also be assisted with an alternative education system, namely religious learning using virtual methods (Irgashevich, 2020; Putra et al., 2020; Suroso et al., 2021).

The methods and approaches usually used in modern and traditional Islamic boarding schools are how to learn the traditional method, namely face to face. If they have only carried out their learning tasks in traditional method cottages, then in the future, they will open Islamic religious broadcasting programs via radio. This model is a good thing, meaning that religious learning opportunities are not only enjoyed by students in Islamic boarding schools but also enjoyed by the younger generation of Muslims who happen to be not registered as a member (Hanafi et al., 2021). Seeing the effectiveness of religious broadcasting through radio and television is less convincing because the method occurs only in one-sided communication, namely one-way communication from teacher to student (Desmet et al., 2015).

However, with online or virtual-based learning methods and approaches and learning, the conditions and appearance of learning will undoubtedly make a

difference (Muneer & Munir, 2020). The reason is that virtual learning is undoubtedly different from learning such as radio and television broadcasting where virtual learning (Adistana & Karim, 2020). This method occurs interactively between two directions and even three directions where the teacher or ustadz with students and students and students with teachers, and that is how the practice is rather than having social media connected to all members wherever they are (Sudarmo et al., 2021). By exemplifying the development and link model rather than social media, it would not be wrong if the same system was also applied and innovated for virtual learning for the Islamic generation who happened not to be santri in Islamic boarding schools (Kusnadi et al., 2017).

The author believes that although most Muslim children do not have the opportunity to study in Islamic boarding schools and Islamic religious schools, they are only general students through virtual Islamic learning methods (Muazza et al., 2018). This is very transformative where Islamic education is no longer seen as a traditional learning system that does not use technology, but modern education involves communication media in communication and professional learning services (Tan, 2014). With the hope of getting learning outcomes that are not much different from what has been achieved by the global community (Bielefeldt, 2013), especially from developed countries, modern countries where they apply technology in their children's learning are very great competition. Senge et al. (2012), because technology has become something innovative, ready to revolutionize learning competently both nationally, globally, and internationally (Richardson et al., 2017).

It is undeniable that today all young people, especially millennials, are close to technology and change; if this is not utilized by incorporating religious and moral content and cultural values and local wisdom through these means of communication and technology, awareness will have traditional and conservative values. This will slowly get redaction even though it will slowly fade (Habibi & Pitana, 2018). Back to the problem of the study of how Islamic religious learning for generations who do not have the opportunity to sit in boarding schools or boarding schools but they can also obtain Islamic religious education rights which are run online under good supervision by educational institutions that are protected by the state and are also supported by the state (Zuhdi, 2006). So that the younger generation of Islam can enjoy the benefits of technology, especially educational multimedia that is ready to revolutionize Islamic boarding school learning from conventional methods to ways that are innovative, attractive, and even competitive orientations, not only local, national but global (Torres, 2015).

Looking at the problems and challenges that exist today, the researcher wants to present data and arguments related to the learning problems of the Muslim generation by utilizing virtual technology (Krawczyk, 2016). For learning sourced from various databases of field findings, both the advantages of virtual learning in the context of modern or Western learning (Lee et al., 2001; Pan et al., 2006). However, Islamic religious learning has also been carried out in various developed countries and institutions that pay attention to the development of Islamic religious education by utilizing communication and information technology or multimedia learning technology (Ismail, 2016).

It is hoped that these findings will become the most valuable input for the parties, especially the development of the Islamic education curriculum, especially for Islamic boarding schools (Ilyasin, 2020; Rohman, 2017). Likewise, boarding schools from house to house accommodate interest in learning and equal distribution of religious learning opportunities (Kanca et al., 2021), which are a mandate or cat in Islam where every individual Muslim is entitled or obliged to acquire Islamic religious knowledge (Haddad et al., 2009), before they get general knowledge, Islamic religious knowledge is obligatory or said to be fard or obligatory.

Method

This method section will describe a series of steps and procedures for studying learning technology studies and Islamic boarding school students, from the initial process of data formulation to the final stage of reporting project results (Scheurich, 2014). As we mentioned above, it was aimed and wanted to understand and discuss alternative learning approaches to support home-style Islamic boarding school learning with the help of virtual technology or online learning (Pabbajah et al., 2021). Automatically to complete this study, we need the latest data, so for that, we have gone through a series of search data collection on the Google Search database engine, which we show to several database sources such as publications of journals, books, proceedings, and other online website sources that actively voice technological developments and learning (Hyett et al., 2014).

This is not only by general education but also by religious education or pesantren (Fauzan & Rohmadi, 2021). However, this study is more directed to online boarding schools, namely learning in a virtual system where students are located (Scheurich, 2014). The lesson is that they are the millennial generation who do not have the opportunity to study in schools or Islamic boarding schools, so they are ordinary young people who study in public places and live with their parents so to help parents introduce and hone religious knowledge and its applications (Kidron, 2013). So the presence of this virtual boarding school will provide a new vehicle and enlightenment to provide opportunities and opportunities for the Muslim generation who do not have the opportunity to sit with other friends in Islamic schools or Islamic boarding schools (Yavuz, 2013).

Of course, the data that we find must be seriously examined by involving a phenomenological approach to obtain valid findings, for example, we use the coding system for in-depth evaluation so that we gain understanding and can have a conclusion that has been able to correctly answer the questions of this study (Small, 2011). In designing this study, we chose a descriptive qualitative approach in which we report after analyzing the data by exploring as many relevant findings as possible to answer this question so that this discussion will be more exciting and up-to-date (Yost, 2015). As for the format of the study, we report it in the form of obtaining epithelial evidence that has quite a lot of fieldwork so that this discussion is supported by research data that was recently carried out because this study focuses on secondary data which we limited publication of 10 years pass starting from 2010 to 2021 (Kerr et al., 2010; Ioannidis et al., 2014).

Discussion

Virtual learning and its impact

Experience when a COVID pandemic hit the world, all parties were surprised by how the outbreak had disrupted all sectors of life, health, business, and education (Chauke & Chinyakata, 2020). However, following the direction of the World Health Organization (WHO) in collaboration with the International Agency for Education and Culture (UNESCO), world leaders, including Indonesia, agreed to serve or continue learning remotely by facilitating students with the convenience of technology such as smartphones, laptops, and tablets (Manullang & Satria, 2020). Indeed, at that time, as was the case in Indonesia, parents and schools only mentioned online learning, but in reality, this was a concept based on the concept of virtual learning (Putri et al., 2020), if this concept has given birth to the effectiveness and innovativeness of education if previously used by schools to accompany and complement face-to-face learning since this view distance learning methods or other virtual systems have become increasingly popular (Sulasmi, 2021).

If public schools and universities around the world and other business activities can use the effectiveness of this technology-based learning, then now this exciting experience does not hurt if it is used as a learning model, say the selection of alternatives to help students or students who study Islam from home (Mayfield et al., 2013). Even though schools and families do not deliberately adopt the technology, technology is still familiar to today's young generation (Nyandra et al., 2018). It is none other than because technology is part of the lives of generations or what is called millennial youth (Szymkowiak et al., 2021). the life of the game and its payments cannot be separated from using technology because they are a generation born after technology; the adoption of Islamic religious content learning, say this boarding school from home, is a very innovative breakthrough that allows students at home to participate in learning provided online by sources actively—learning resources such as school boarding schools and also religious institutions that are faithful to continuing and advancing Islam (Boyd & Zubairi, 2020).

The adoption of technology or virtual learning in learning Islamic religious content is inseparable from the experience seen by its use by both schools and universities or schools abroad where the use of virtual learning systems is used (Danchikov et al., 2021). This is an innovative and practical way of learning which is the hallmark of 21st-century learning, namely efficiency in all sectors of life (Chu et al., 2021). It is repeated that it is bona fide than except that this is genuinely a breakthrough that is ready to help students to learn by using computer skills and technology in general actively; this is an enjoyable, innovative breakthrough and is also very proven to have been widely used throughout the world (Lee & Figueroa, 2012). So if it has been successfully implemented in the world of general education, there is nothing wrong with religious education being able to innovate and be inspired by the successful implementation of virtual payments outside (Wong, 2017).

Virtual learning is also a very compatible learning model because they allow students to learn with a more personal, more personalized system, how not to be tied to time and place and like conventional learning where teachers and students have to gather at the same time (Ahmad et al., 2020). So, this virtual lesson was created for online-based education because today there are almost no people who are not related to the use of activities using the internet or online where the advantage is that it cannot only serve local and national learning, but this method also serves to learn that is its nature between countries which is physically impossible, but virtually it is an effortless and very effective and essential combination (Swan et al., 2015).

Pesantren and virtual learning

There is various Islamic boarding school education; some are modern, and some are traditional (Amri et al., 2018; Lukens-Bull, 2004; Ziemek, 1986). Our study will explore how virtual learning can support the third alternative learning. These namely pesantren is carried out at home with the help of digital technology, which we call the alternative name of virtual learning for Islamic students or young people who happen not to have the opportunity for religious education in Islamic boarding schools, either traditional and modern (Zuo et al., 2020). Indeed, some community groups still view that the education system in pesantren is ideally implemented Face to Face like learning in ancient times (Fauzi et al., 2018). The author believes that Islam is a religion that is very open and innovative to the times; in other words, Islam should not be perceived in the form of a narrow understanding but must be in the context of civilization and adjustment to technological advances (Ryan, 2014).

Thus the Muslim thought community can continue to be updated with all the changing times because the goal is to accelerate the improvement of the quality of learning that is more competitive (Syahputra, 2013). When viewed from the learning output using the Sony method, virtual learning or e-learning or digital learning has proven to be very effective because, with its global scope, it is not limited to one model of learning materials but rather to a genuine understanding from various sources. Database science and various model approaches are carried out in various parts of the world (Sarker et al., 2019).

When viewed from the learning output using virtual methods, this learning, also called e-learning or digital learning, has proven very effective (Clark & Mayer, 2016). Due to its global nature, it is not limited to one model, learning materials, but more open to various database learning resources and various models of scientific approaches and disciplines of expertise shared by experts in their respective fields in various institutions. Islamic education in other parts of the Islamic world (Wilson, 2012). Thus, it is believed that there will be no more gaps between the understanding by the pesantren management and santri as well as modern education providers such as madrasa schools and universities (Wekke & Andriansyah, 2016). In other words, if modern education can achieve extraordinary effectiveness, there is nothing wrong with Islamic boarding schools or alternative learning at home; religious content is also enjoyed from innovation and creativity produced by adaptation of educational technology or virtual learning or online learning (Nursyahidin et al., 2021).

According to [Reimers et al. \(2020\)](#), the younger generation has an interest in something technological in nature with the innovative and interactive power possessed by technology ([Douglas, 2012](#)). This is very interesting and curious by the students who are the younger generation born in the era of technology that has developed or also called the millennial era where a generation that lives and learns and also enjoys life fast-paced is helped by this technology continues to grow to infinity ([Burstein, 2013](#)). In addition, another reason why virtual learning is prevalent among the younger generation or Islamic boarding schools is that the learning experience presented by virtual learning is, in addition to being very practical, entertaining ([Wagner, 2010](#)). It seems that there is no millennial generation who is not interested in being tempted by the sophistication presented by learning by technology compared to traditional learning capacities, namely using face-to-face and whiteboards, involving e-learning or virtual learning is something significant ([Franetovic, 2012](#)).

Another advantage possessed by the learning leader is where the learning approach is. This is more about personal learning, where students can use this technique anytime and anywhere without having to go along with it like a face-to-face learning system ([Dhawan, 2020](#); [Merino et al., 2017](#)). Where there is one place to gather and the same time, but what is done is given by virtual learning, on the other hand, students can choose the time, place, and way of learning according to their wishes rather than the students themselves in other words autonomous and personal learning ([Algahtani, 2011](#)). Besides that, a very rational reason for rituals with this technology for students is where the work system, the work of students and students can be appropriately monitored so that these methods will make it easier for the coordinators and the teachers to see what activities are being carried out—carried out by students ([Csizmadia et al., 2015](#)). So that no learning content is simply released, in other words, technology allows teachers and students to work together to monitor and evaluate each other if there is a technical monitoring nature and also student progress can be easily seen on the monitor, monitored and guided so that any content that is produced is monitored. They learn objects under the supervision of coordinators and managers rather than virtual ([Borup et al., 2019](#)).

Another bonafide from the point of view of spending funds, this virtual method has proven to be a very effective technique because it can provide very cheap price options ([Carrozzino & Bergamasco, 2010](#)). When compared to, for example, hiring human resources for education to provide home-to-house learning, this is possible ([Ahearn & Bumochir, 2016](#)). However, it is straightforward for technology to help to come, door to door, head to head; these computers are one of the efficiencies technology provides so that education providers get an advantage compared to conventional methods things that are very true and efficient in the end both students and teachers become very productive activities ([Picard, 2010](#)). From the learning content, this issue allows teachers and students to have a database that is specifically devoted to learning; in other words, students and teachers have a database that has one goal, is monitored measurably and systematically ([Saw et al., 2016](#)). It can also be evaluated if in the future we want to exchange revisions and additions and subtractions so that this database system allows both parties to have mutual preparation and focus on structured

and measurable learning and with the principle of one goal, one model (Cook et al., 2013).

Conclusion

We can reiterate that this study aims to discuss alternative Islamic boarding school sports techniques using learning technology. Through an electronic search for data in several databases of publications, journals, books, and other sources of teaching information, we finally got material to answer the problems of this study by adhering to the principles of data validity and reliability. We believe that the discussion of this study has answered the questions we proposed with evidence from the field studies that have previously been carried out from various fires and the context of the discussion so that these findings provide an essential input in efforts to improve studies on alternative techniques in good school teaching public and Islamic schools.

Likewise, we prove it with reality and factual data by searching for data that we specialize in on findings made within the past ten years. With the background of this data search and also followed by a systematic and in-depth discussion, we finally got the core findings that we can conclude, among others, that virtual-based learning for the Muslim generation can be done with the help of this technology considering that virtual learning and everything related to it is true. - has become an alternative that has had a significant impact on the learning of the young millennial generation with the content of Islamic religious lessons. It is interesting to remember and watch, and the millennial generation cannot be separated. It is proven, among others, when the closure of schools and universities, including Islamic boarding schools, is proven to be more effective than online learning technology or another term called the online system, which has proven to be a solution that is ready to invade and provide a very different impression so that concerns about the decline in education effects rather than responding to the coffee epidemic have been carried out by not only the Indonesian government but by confirmed world countries and by international bodies such as WHO and UNESCO.

Another very significant finding. We believe that the pesantren education system is still dominated by the old method where learning takes place in a boarding house or a building or a place of study using the traditional system, namely Face to Face learning where teachers and students have is a very convenient method applied in the world of Islamic boarding schools (Yusuf & Wekke, 2015; Patriadi et al., 2015). However, when this learning to students and at Islamic boarding schools can run, what about the rights of the younger generation of Islam who happened not to have the opportunity first in pesantren and then they can still gain knowledge of their religion through the help of virtual learning pesantren. Islamic boarding schools and virtual learning cannot be separated, considering that the generation of pesantren is young; virtual learning is one of the most exciting technologies, innovative and productive, and very economical. So we can conclude with details of essential points that are supported by previous findings in various contexts of technology applications and also learning, we can finally be sure with the hope that these findings will be helpful in efforts to develop learning studies to advance education both general and Islamic boarding schools,

especially the use of virtual technology in solutions, as an alternative to learning in times of crisis such as the education crisis during the COVID-19 crisis.

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