

## E-LEARNING IN ISLAMIC BOARDING SCHOOL; PERCEPTIONS OF DAYAH STAKEHOLDERS IN ACEH TAMIANG, INDONESIA

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### **Abstract**

The industrial revolution 4.0 brought many changes in various sectors, including education. Information technology is increasingly being applied by educational institutions, including Islamic boarding schools, to support the teaching and learning process. Some Islamic boarding schools in Java have begun to utilize information technology by applying online learning or e-learning. For this reason, this article wants to examine Islamic boarding schools that exist outside Java, namely in Aceh Tamiang. Islamic boarding schools throughout Aceh are called Dayah. This paper explores stakeholders' perceptions regarding the application of e-learning in the Pesantren environment. After exploring their perception of the application of e-learning, it can then be analyzed about the opportunities and challenges of implementing it.

Keywords: E-learning, Stakeholders, Islamic Boarding School/Dayah

### **1 INTRODUCTION**

Pesantren is a traditional Islamic educational institution and one of the milestones of Islamic education in Indonesia that still survives today. Pesantren produces human resources who understand religious science and can be experts in other sciences. Islamic boarding schools are spread throughout the country in urban and rural areas and Aceh. Pesantren in Aceh is called "Dayah" Aceh cannot be separated from Dayah. Dayah is an Islamic identity and authenticity (indigenous) Aceh. However, its spirit and spirit still come from the Islamic education system practiced by the Prophet Muhammad during the early Islamic period (Suyanta, 2012).

The role of Dayah in Aceh is significant, including in producing old u that maintains and guides the government and society to stay within the corridors of Islamic teachings, as well as giving birth to human resources with religious science and other sciences that can be useful for the community and the country. Therefore, it can be said that Dayah is one of the lives of Aceh. Dayah is spread throughout Aceh Province, one of which is in Aceh Tamiang Regency, the eastern part of Aceh directly adjacent to North Sumatra Province. The number of Dayah/Pesantren in Aceh Tamiang Regency is 25 Dayah consisting of 16 traditional Dayah and 9 modern/integrated Dayah (Dinas Pendidikan Dayah Aceh, 2018). The two types of Dayah are characteristic of Islamic boarding schools in Aceh, especially in Aceh Regency.

Traditional Dayah is also called Dayah Salafi because its scholarship refers to and is based on books written by Salafi scholars called the yellow book. The Salafist Dayah retains its traditional elements, such as huts, mosques, Tengku/Kyai, Santri, and classical books. All of the parts are complementary and interrelated. So it is called a society with a distinctive culture of traditional

people in rural areas, characterized by the embedding of a collective way of life, which is one of the manifestations of the spirit of cooperation joint in rural communities (Suyanta, 2012).

Traditional Dayah's teaching and learning curriculum differ from one Dayah to another. Furthermore, modern or integrated Dayah is Dayah which implements a current education system, such as several Islamic boarding schools in Java whose curriculum and education system are based on the National education system. Along with the times where openness and speed of access to information are the main characteristics in the current era of the industrial revolution 4.0, many changes are happening quickly in various sectors, including education. *Dayah*, as one of the essential educational milestones in Aceh, should also be able to accept and adapt to these changes by sticking to these religious and *Dayah* values.

These changes, for example, include using information technology as a learning medium or a medium for da'wah *Dayah* to the outside world or society. This information technology is a modernization product that can be utilized in the form of innovation to improve and improve the effectiveness, efficiency, and quality of the teaching and learning process and the role of *Dayah* in society. One of these innovations is the application of *distance* learning through electronic learning or *E-learning* as a new means in Islamic boarding schools' teaching and learning process. Therefore, it is essential to examine E-learning development opportunities in the *Dayah* / Pesantren environment, especially in the Aceh Tamiang Regency area.

Based on this background, this article aims to show the perceptions of *Dayah* stakeholders of Aceh Tamiang Regency regarding *E-learning* in the *Dayah* / Pesantren environment and the opportunities and challenges of its implementation.

## **2 LITERATURE REVIEW**

### **2.1 E-learning**

Learning anywhere and anytime is the central concept of e-learning. Now that the development of information technology allows us to access e-learning easily through various kinds of gadgets with the internet network. *E-learning* is alternative learning that can make it easier for someone who wants to learn but does not have the time and opportunity to come to college. Some literature, in general, suggests that *e-learning* or *electronic learning* is learning through computer technology or the internet. One of them, as Epignosis LLC argues (2014);

*"E-learning is a computer-based educational tool or system that enables you to learn anywhere and at any time."*

Permendikbud No. 109 of 2013 concerning the Implementation of Education Distance in Higher Education also defines e-learning;

*"Electronic learning (e-learning) is learning that utilizes information technology-based information packages and communication for the benefit of learning accessible by learners anytime and anywhere."*

Some of the trends and trends of e-learning globally (ITB, 2017) include:

a. *Massive Open Online Course (MOOC)*

*Massive Open Online Course (MOOC)* is an online course with an open learning system that aims to unlock unlimited participation that can be accessed via the *web*. MOOCs have interactive user forums that help build for teachers and learning participants and provide conventional course materials such as videos, readings, and discussion of issues. MOOCs are the latest developments in terms of distance education (e-learning).

b. *Cyber University*

*Cyber University* is a college model with a very different method from traditional universities in teaching and learning. This form of the university has been applied by the Open University in Indonesia. Lecturers do not have to teach and attend directly in front of the class as in general face-to-face learning, but lecturers can teach in front of a video camera or through an electronic page. A model of the teaching and learning process requires high motivation from students and lecturers.

c. *Micro-Learning*

*Micro-Learning* is learning carried out with a concise duration. The content is limited to 1 subject or sub-subject per learning session and learning resources (modules/literature/slides) that are easy to learn. *Knowledge Nuggets* or *Learning Snacks* is another term for *Microlearning*. It is called simple because it can take the form of infographics, daily broadcasts, and short videos, which support the implementation of the main learning program.

The three forms of e-learning trends above can be applied according to the needs and goals of an organization utilizing this learning mode.

Rohmah (2016) stated several benefits of *e-learning*, including, namely; First, *e-learning* can shorten learning time and make study costs more economical. Second, students can share information and access materials at any time and repeatedly, with such conditions, and they can further strengthen their mastery of learning materials. Third, *e-learning* can further facilitate the interaction between students and material materials. Fourth, students can be actively involved in

the teaching and learning process that does not only occur in the classroom but with the help of computer equipment and internet networks.

According to Munir (2009), the first step is needed to develop and implement e-learning-based learning, namely a need analysis. Users are the main determinants of the benefits of e-learning, meaning that the effectiveness and output of e-learning depend primarily on the user in viewing or assessing the e-learning. The application of *e-learning* is essential when it is already a necessity. A needs analysis is needed to determine whether a person or educational institution needs e-learning. The need for e-learning can be studied by whether the supporting facilities are adequate. Is there any support from policymakers? If, based on the needs analysis, the decision is that *e-learning* is needed, then a feasibility *study* needs to be held. There are several components of assessment in a feasibility study that need to be considered, including:

1. Technical matters, for example, the internet network, can or cannot be installed along with supporting infrastructure, such as computer networks, electrical installations, telephone lines, etc.
2. Human resources with knowledge and abilities or skills are needed *to* operate and understand e-learning.
3. Economically whether the activities carried out with e-learning are profitable or not, whether it will cost a large or small amount.
4. Socially, whether people's *attitudes* can accept or reject e-learning as part of information and communication technology. Therefore, it is necessary to create a positive attitude towards information and communication technology in general, as well as *e-learning* in particular, to understand its potential and impact on learners and society.

### 3 METHODOLOGY

The research used is qualitative by collecting data through interviews. According to Moleong (2002), an Interview is a conversation with a specific intention, which is carried out by two parties, namely the interviewer (researcher) who asks the question and the interviewee (informant) who answers the question that has been given. Interviews in this study will be conducted with *Dayah* stakeholders, consisting of the *Dayah* Education Office, leaders, managers, *Dayah* students, and the community around *Dayah*. The interviews in this study aimed to obtain data in the form of understanding and opinions of pesantren stakeholders regarding *e-learning* as a learning medium. Data analysis of this study was carried out with 3 steps of qualitative research analysis according

to Miles and Huberman in Moleong (2002), namely by reducing, presenting data, and drawing conclusions.

#### 4 FINDINGS AND DISCUSSION

##### 4.1 Perceptions of *Dayah* Stakeholders in Aceh Tamiang Regency regarding *E-learning* in the *Dayah* / Pesantren Environment

Perceptions of *Dayah* stakeholders in Aceh Tamiang Regency regarding the introduction of e-learning in *Dayah* are very diverse; based on extracting the views of *Dayah* stakeholders, there are several of their perceptions regarding the application of *e-learning* in the *Dayah* environment.

Table 1. Perception of *Dayah* Stakeholder about *E-learning*

<i>Dayah</i> Education Office	Modern <i>Dayah</i> (Unified)	Traditional <i>Dayah</i> (Salafi)
just heard the term	I have heard of the term online learning (e-learning), even some teachers have used e-learning for their subjects.	Never heard of e-learning, but learning via electronic, such as Facebook or video call, know and never follow.
It is challenging to implement due to <i>Dayah</i> rules that restrict and prohibit the use of electronics	Very good and helpful for teachers, students, and people outside <i>Dayah</i> (community)	Strongly agree that there is <i>Dayah</i> online learning for the community because sometimes people are embarrassed to come to <i>Dayah's</i> minder because of their age of one of them.
Less effective, internet negative reviews are difficult to control	Students are happy and enthusiastic about doing assignments through e-learning	The students and Tengku here are outstanding if you can study or study online while still not leaving <i>Dayah</i>
Inadequate facilities and infrastructure, as well as human resources	Obstacles must have a solution, and internet network problems sometimes go down	The problem is that the human teaching resources are <i>Dayah</i> , who does not understand IT, but if there is cooperation, we are ready to learn.
There is an instruction from the regent to advance science and technology in Dadah, but the official decree does not yet exist.	It doesn't hurt to try to apply	-

### **1. *Dayah* Education Office Perception's**

The *Dayah* education office, as the government, is a *Dayah* stakeholder responsible as a facilitator and coach of all types of *Dayah* in Aceh Tamiang. Trying to explore the views of these stakeholders regarding the application of e-learning, the party representing the education office of *Dayah* Aceh Tamiang stated that *e-learning* is a new and new term to hear. A brief explanation of e-learning is presented to explore their perceptions when e-learning is applied in the *Dayah* environment. Informant H representing the head of the *Dayah* Aceh Tamiang Education Office, revealed:

*"E-learning, as you said, seems to be implemented here due to Dayah rules that restrict and prohibit the use of Electronics."*

Besides expressing the difficulty of implementing e-learning in the *Dayah* environment due to the *Dayah* rules regarding restrictions on the use of electronic and communication devices, Informant H also stated that the negative impact of the internet on students would be difficult to control. Considering that the number of students and teachers is very different, the control over them will certainly not be optimal. The second reason informant H is pessimistic about implementing e-learning in *Dayah* is that the infrastructure and human resources in *Dayah* are inadequate, making it challenging to develop. Informant H expressed doubts about whether or not the implementation of e-learning in *Dayah* could be implemented but expressed his support for the development of science and technology in *Dayah* as conveyed by the Regent of Aceh Tamiang. Based on the story of informant H, the regent wanted *Dayah* to progress in science and technology. Still, the official policy to support this did not yet exist.

### **2. Integrated *Dayah*/ Modern Sabi'ul Ulum Perception's**

*Dayah* Sabi'ul Ulum is the only integrated *Dayah* with type A in Aceh Tamiang Regency. *Dayah* is from the morning to noon, and students enter formal classes of MTS (Madrasah Tsanawiah, which is at the junior high school level) and MA (Madrasah Aliyah, which is SMK), then in the afternoon until evening is a religious activity as in *Dayah-Dayah* generally. In this *Dayah*, some teachers or teachers do not live in *Dayah* or go home, and there are also teachers called Tengku who live in *Dayah*. The author explores perceptions about the application of *e-learning* in the *Dayah* environment from several stakeholders in *Dayah*, namely managers as representatives of *Dayah* leaders, teachers, Tengku, and *Dayah* students. The management, teachers, and Tengku

stated that they had heard about electronic learning; even one of the teachers, namely Informant R, said:

*"If you use web-based e-learning, Edmodo is one of them. We use the Edmodo system; in learning, we share the material, there is a division of questions, and students immediately answer and get a score there 24 hours. The time limit is there".*

One of the teachers of *Dayah Sabi'ul Ulum* has been applying *e-learning* to the subjects he has been studying for one year. The teacher stated the great benefits he felt while using e-learning, namely:

*"For example, if a student can't attend for a week, he can access lessons through e-learning at home or wherever it can be accessed. There he also learned the lesson without having to ask different words because if we ask friends, sometimes say this is the case, but if it is with e-learning, he can immediately see the real material there. For his duties, he can direct access, and cheating can also be reduced".*

The next stakeholder is the religious teacher, namely Tengku. There are two Informants who are *tengku*, namely informant D and informant N. They are *Ustadzah* or known as *Tengku*, and have served for about 10 years in the *Dayah*. Although both are unfamiliar with e-learning, they believe that e-learning, if applied in *Dayah*, can provide many benefits to all parties.

*"In our opinion, it's good because it can be useful not only within the scope of Dayah but also for people. Sometimes people are busy with work and can only see electronic devices, so recitation is electronic, for example, on Facebook. Sometimes it doesn't have time, so there are many benefits".* (Informant N)

*"It helps; proselytizing from electronics can help."* (Informant D)

Furthermore, the *Dayah* manager expressed an opinion on the application of *e-learning* in the *Dayah* environment.

*"if the term is learning through a cellphone, now it's already easy, yes, rame, you don't have to be far2, my son, he is the same as far away, if he wants to learn to use a cellphone, wants video calls, wants to record the voice earlier, anyway, he is younger. It's easier for us to understand, sometimes we're embarrassed if we meet in person, but if we get o, then if we need, we can repeat it, replay it again. It's better to see, thank God".*

Stakeholders from the management expressed personal experiences regarding some of the benefits of using electronics and information technology in supporting the teaching and learning process. Therefore, they are optimistic about trying to apply *e-learning* in *Dayah* Sabi'ul Ulum both as a medium for learning students and as a medium for proselytizing to the broader community.

*"Insya Allah, we can apply it because if we haven't tried it, we don't or, if the term vegetable has not been entered, it is not good, but if we have run it, every problem must have a solution. We're looking for the same; if the term is to be better, what's wrong with us trying".*

Another Perception of *e-learning* in the *Dayah* environment is that the students as one the stakeholders in *Dayah*.

*"It's better, mom. If I don't attend or come home from Dayah, I can still study, do assignments, and not be left behind. The spirit also learns through the Edmodo. Hopefully, other lessons will also be used".*

The student's statement above shows *Dayah* students' enthusiasm for using *e-learning* because they feel the benefits and expect other subjects also to start using *e-learning*.

### **3. Traditional *Dayah* Mi'rajul Ulum Diniyah Islamiyah (MUDI)**

*Dayah* Tradisional Mi'rajul Ulum Diniyah Islamiyah (MUDI) is one of the oldest traditional Islamic boarding schools in Aceh Tamiang Regency that still survives today. The students who studied in *Dayah* came from various regions, not only from Aceh but from several neighboring provinces and countries, such as Malaysia. Traditional *Dayah* does not have a formal level like modern *Dayah*, so some of its students in the morning some leave *Dayah* to attend formal school or study at university. In addition to the students who are accepted to study, people also usually come to study in this *Dayah*. Tengku M, the leader of *Dayah* Mi'rajul Ulum, responded positively about open learning with *e-learning* in *Dayah*.

*"I agree because when they are old, people are shy and lack the confidence to go to dayah to study. If it's possible remotely, it's better, but you can't directly ask; that's just the drawback. If something is written in the comments, it cannot be answered immediately because the recitation is taking place. I think it's good, and it's just better to meet the teacher face to face. If you want to make it possible here, a good method, technology where everyone is there". (Informant M )*

Tengku M, one of the stakeholders in *Dayah*, showed an open attitude and positively welcomed if there was distance learning with *e-learning* in *Dayah*. According to him, there are shortcomings and obstacles, but there is nothing wrong with applying them in *Dayah*.



## **4.2 Opportunities and Challenges for the Implementation of E-learning in *Dayah*/Islamic Boarding Schools in Aceh Tamiang District**

### *4.2.1 Opportunities*

The development of opportunities and the application of e-learning-based learning in the *Dayah* environment in Aceh Tamiang Regency can be carried out in two main steps (Munir, 2009), namely by a needs analysis and feasibility studies. Analysis of needs (Need Analysis) of users as the primary determinant of the use of e-learning. The effectiveness and output of e-learning depend highly on the user's assessment and assessment of the e-learning. The application of e-learning is essential when it is already a necessity. A needs analysis is needed to determine whether a *Dayah* educational institution requires e-learning. Analyze needs in the implementation of e-learning can be studied by, among others;

- Are the supporting facilities sufficient?
- Is there any support from policymakers?

If based on the needs analysis, e-learning is needed, then a feasibility study needs to be conducted. There are several components of assessment in the study that need to be considered, including:

1. Technical issues include whether or not the internet network can be installed and its supporting infrastructure, such as computer networks, electrical installations, telephone lines, etc.
2. Human resources; have the knowledge and ability or technical skills related to e-learning.
3. Economically whether the activities carried out with e-learning are profitable or not, and whether it will require high or small costs.
4. Socially, whether the attitude (attitude) of the community can accept or reject the use of e-learning as part of information and communication technology. Therefore, it is necessary to have a positive attitude towards information and communication technology in general, as well as e-learning in particular, to understand the potential for students and society.

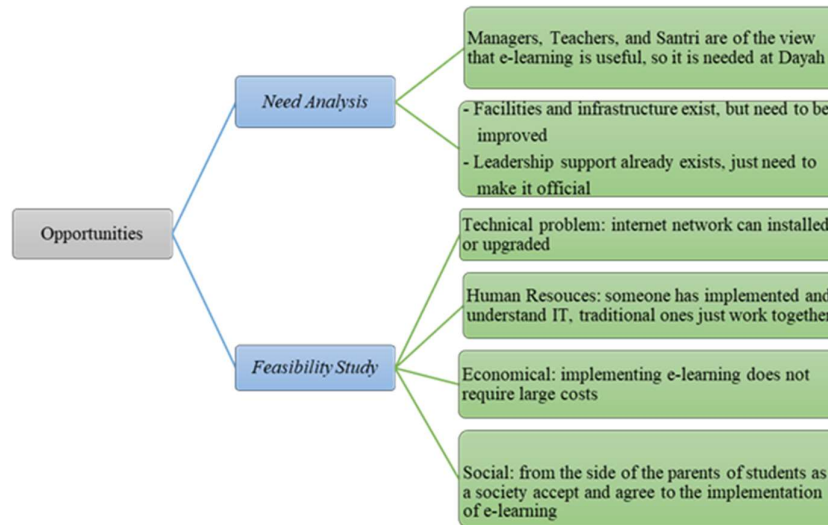


Figure 1. Analysis of Implementation of E-learning *Dayah/Islamic*

#### 4.2.2 Challenges

There are several challenges faced in implementing e-learning in the *Dayah* environment in Aceh Tamiang District, namely:

1. Local government policy support that does not yet exist
2. Procurement of supporting facilities
3. Internet stigma keeps students away from religious lessons in *Dayah*
4. The belief is that meeting directly with Tengku will be better and get blessings in learning.

## 5 CONCLUSION

The perceptions of *Dayah* Stakeholders in Aceh Tamiang Regency about the implementation of E-learning are:

- E-learning is needed to support student learning in *Dayah*, Aceh Tamiang Regency. The Aceh Tamiang Regional Government must fully support the *Dayah*, especially in need of science and technology equipment and teaching human resources.
- Socialization of learning models in the industrial revolution 4.0 era to all stakeholders, including government officials, leaders, management staff, teachers, *Dayah* students, parents, and all levels of society, needs to be done.

- Making one of the integrated and traditional *Dayah* as a pilot project to implement e-learning in Aceh Tamiang Regency.
- MOOCs, as one form that needs to be developed in *Dayah* as a medium of da'wah and the existence of *Dayah's* role in the education of Aceh Tamiang.

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