The Effectiveness of E-Learning Madrasah in English Teaching and Learning

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Abstract

Covid-19 pandemic is consider as global pandemic since February 2020 by World Health Organization (WHO), it forces education system shifted into online learning. E-learning madrasah as a tool for online teaching and learning process issued by Ministry of Religion Affairs are considered very effective and useful as online learning and teaching during Covid-19 pandemic. This study investigated students' and teachers' perceptions, and the effectiveness of e-learning madrasah in English teaching and learning. A mixed qualitative and quantitative methods was used to reveal 362 students' and 13 teachers' perceptions and the effectiveness of e-learning madrasah at Islamic state junior high schools (MTSN) in Lamongan regency, East Java, Indonesia. The finding revealed that e-learning madrasah as a tool in teaching and learning process is considered useful during Covid-19 pandemic outbreak, students are motivated to join their English class, and students perceived that this learning tool is ease to utilize as well. In term of teachers' perceptions indicates the same way as students'. They perceived that this e-learning system as a tool of teaching and learning was very useful and ease to use. Also, they perceived that the system of this e-learning madrasah in term of system was not difficult to be implemented in teaching and learning process.

I. Introduction

The online learning is something new for Indonesian education, especially E-Learning Madrasah that can be used in Madrasah only. According to (O'Connor and Andrews, 2018) online learning or blended-learning method can improve learning outcomes; also is effectives in teaching English grammar for foreign English learners (Pinto-Llorente et al., 2016). The most common form of teaching is direct information transfer from the teachers to the students (Maruf & Anjely, 2020). However, when conventional teaching methods are used, students often lose interest, engage less during lessons, or miss class. Online learning creates a relaxed and enjoyable environment where students can learn anytime, anywhere (Maruf & Anjely, 2020).

Collaborative learning and interactions between teachers and students (Blaine, 2019) is a vital successful online learning. Chuang (2017) reported that good collaborative between e-learning and pedagogical method helps to improve students' perceptions of classroom participation and in-class interaction. Collaborative learning in blended learning is widely used in academic fields to know the level of knowledge building and perception level on usefulness for online and mobile collaborative learning environments (Sun et al., 2017).

Researches regard to E-learning Madrasah are still rare, and this topic is something unique and novel specially the target particularly students' and teachers' Madrasah. This study intends to investigate the level of effectiveness and teachers and students' perception through the use of E-Learning Madrasah to optimize the student's ability of learning English Language. Therefore, the researcher conducted a case study in regard to investigate the effectiveness of E-Learning Madrasah in English Learning and Teaching at Madrasah Tanawiyah Negeri Lamongan city, East Java, and to find out teachers and students' perception toward the use of E-Learning Madrasah.

Many applications were developed during the COVID-19 pandemic in order to support people activity during technology or online era (Maruf & Anjely, 2020). Previous studies showed that Corona Virus surely has accelerated the process of online learning. All for instant, e-application called Zoom is making a lot of news lately because of its viable features. It allows conducting live online classes, web conferencing, webinars, video chats, and live meeting. At most of the schools, colleges, universities, companies, are closed due to lockdown and most of the people are working from home (Maruf & Anjely, 2020). The COVID-19 lockdown has significantly hampered the teaching-learning process and changes the face-to-face class to online class by use of Zoom app, YouTube live, Skype, Google meet, Team Link, or other (Qazi et al., 2020). According to Dwivedi et al., (2020), Zoom is one of LMS types that are popular recently.

Zuhri, Agung & Ramdhani (2020) has been identify the effectiveness of the use e-learning Madrasah applications and determine the inhibiting and supporting factors of the implementation of e-learning applications as learning media. Data collected through questionnaires, interviews, and observations, then the data were analyzed descriptively. Respondents from this study were teachers and students of Madrasah Aliyah Negeri 2 Bandung, who were directly involved with learning to utilize e-learning applications. The results showed that the affective component of the use of e-learning madrasas tended to be less effective. It was shown from the view of the students 'activeness in utilizing e-learning madrasas in learning which showed an average of 76.46 less effective, students' understanding of teaching materials after using the application that is, 35.7% never understood, 55.6 sometimes understood, and only 7.1% understood the material taught through the madrasah e-learning application. Overall it can be concluded that the implementation of e-learning Madrasah as e-learning media in MAN 2 Bandung is less effective, but MAN 2 Bandung is very effective in online learning using other applications besides e-learning Madrasah such as google classroom, Google form, zoom, Whatsapp Group, kahoot, and Quizizz.

The use of e-learning or electronic-based learning is not something new to the ears. What happens in the field, the use of e-learning media has not been effective, there are still many teachers who use conventional classes. There are several reasons educators have not implemented it. It could be, as educators are also still stuttering about virtual technology, or we are adept at still reluctant to teach, or we have taught but the way is not right so the results are not optimal. Therefore, our awareness and enthusiasm is needed to improve the quality of learning so that our students become graduates who are ready to face the world of work in the Industrial Revolution 4.0 era (Sagita and Khairunnisa, 2020).

E-Learning Management System (LMS) plays a central role in any online environment very popular to improve teaching-learning processes and incorporating tools (Dias et al., 2017) and the most popular educational technology system used in distance learning (Almarashdeh, 2016). Since the entire teaching and learning experience is only delivered online, the use of a traditional LMS is required for students (Han & Shin, 2016).

Although using LMS in teaching is relative to teachers using LMS in their classes which often does not have many opportunities to follow what exactly is occurring in their online courses, how students behave in them, how they approach studying online materials, or how to proceed when engaging in learning activity (Juhanak, Zounek & Rohlikova, 2019). In particular, during the COVID-19 pandemic, the sudden shift to online learning has presented new opportunities and unexpected challenges to the affected teachers-students relationship (Dong, Chao & Li, 2020).

There are many kinds of LMS which use in online learning mode amid this pandemic i.e. Zoom, MS Team (Dwivedi et al., 2020; Qazi et al., 2020), Google Form, Google Classroom and others. These tools can successfully be used as an alternative for face-to-face classes (Dhawan, 2020). Similarly, e-learning Madrasah is one of the online learning tools which is created by the Ministry of Religion Affairs especially for online teaching and learning in Madrasah. Term of Madrasah are same with school, but it is different in meaning. Madrasah is public schools characterized by Islamic religion.

E-learning madrasah is an application which released by the Ministry of Religion Affairs of the Republic of Indonesia from the Roudlotul Athfal (RA) level to the Madrasah Aliyah (MA) level. E-Learning could be accessed 24 hours anywhere by the user, as long as the user has stable internet access and can use a password to access E-Learning Madrasah to facilitate the implementation of distance learning in order to answer the challenges of increasing technological advances. E-learning Madrasah was made by the Directorate of Madrasah KSKK to be used by teachers and students in carrying out distance learning, during the Covid-19 pandemic and later after the pandemic ended. The Educational institutions must log into the Official E-learning Madrasah website by using the Madrasah Statistics Number (NSM) of each institution to be able to access E-Learning Madrasah. Then the Madrasah will be asked to upload an Operator Decree as a condition for approving the use of the E-learning application by the Madrasah. The verification process for the operator's decree takes about one to two weeks to pass and then you can download the E-learning application, both the installer and other versions.

II. Research Methods

2.1 Research Approach

This research adopted the mix methods approach, namely descriptive qualitative approach and descriptive quantitative approach. The researchers administered descriptive qualitative research method to measure the effectiveness of E-Learning Madrasah, meanwhile the descriptive quantitative method applied to investigate teachers and students' perception.

2.2 Context and Participants

This mixed –methods study aims to investigate the effectiveness of e-learning madrasah, as well as students and teachers perceptions in utilizing e-learning madrasah as a tool in teaching and learning English during the Covid-19 pandemic outbreak at Islamic state junior high schools (MTSN) in Lamongan regency, East Java, Indonesia. The data were taken from English Language teachers and eighth grade students of MTSN 1 and MTSN 2 Lamongan, East Java, Indonesia. They were in the second semester since the eighth grader are more focused in teaching and learning. The among of participants were 222 eighth grade students and 8 teachers of MTSN 1 Lamongan and 140 eighth grade students and 5 teachers of MTSN 2 Lamongan who join an interactive and collaborative English Language teaching and learning using e-learning Madrasah during Covid-19 pandemic outbreak.

2.3 Instruments

A qualitative open-ended interview was administered to address students' and teachers' perceptions on utilizing the e-learning madrasah. Meanwhile, quantitative method was proceed with a questionnaire. This questionnaire has been developed using relevant theories and administered with 36 questions, students and teachers were required to respond using a likert scale from strongly disagree to strongly agree.

2.4 Data Collection and Analysis

The data was collected through Questionnaire and interview. The questionnaire used to collect data to measure the effectiveness of E-Learning Madrasah. It included 36 questions which require teachers and students to respond using a Likert type scale from strongly disagree=1 to strongly agree=5. All the items on the questionnaire were reviewed by the researchers as self-validation. Then the items were given to the experts to ensure the content validity of the test. While, the reliability of the questionnaire were estimated using Cronbach Alpha reliability test. The test instrument is declared to be valid based on the reliability index if the value of Cronbach Alpha > 0,07, which tested as many as 12 questions and tested on 62 students. Based on the result, if the value of α is more than 0.07, it means the test are reliable. The reliability of this test was estimated between .96 to 1.00.

Regards to analyzing the data, the researchers conducted qualitative analysis and quantitative analysis. Qualitative analysis defined to address the research objective of the effectiveness of e-learning Madrasah. Qualitative analysis data toward non numerical data. The researchers collected the data and reducing the answer of open-ended interview means summarizing, then display the data uses narrative text or can be serve in tables to explain the data. The researchers applied Miles and Huberman model to analyze the data namely data reduction, data display, and drawing conclusion. Meanwhile, quantitative analysis regards analyzed the data with descriptive statistics using *SPSS software*.

III. Results and Discussion

3.1 Effectiveness toward Using E-learning Madrasah

In order to address the first research question, an analysis participant's interview was conducted. The survey data show how the students perceived E-learning Madrasah experiences.

The survey data revealed that 217 out of 362 (60%) students responded with *like* or positive responds when asked regards to their opinion on online learning system. However, 149 students out of 362 (40%) prefer with offline learning. Thus, the teachers should clearly inform students regard to the learning objectives and explain about the material. Some of them were more like just sitting and listening their teachers explained the material. Another reason was because they did not like about E-learning Madrasah due to the lack of internet connection and the lack internet credit in their mobile phones.

In terms of English learning, the students were asked how they would rate about E-learning Madrasah as English learning tool. This result shows that most students (85%) gave a positive rate for E-learning Madrasah as English learning tool. While 15% of them prefer gave a neutral rate. When students asked about their learning experience use E-learning Madrasah to solve their problem, most students (70%) share their positive experiences. While, 30% of them respond otherwise. In other hand, when the students asked which one they choose between traditional class and online class, 94% of them prefer choosing the traditional class. Meanwhile, they prefer choosing the traditional class, but the students (77%) agree that use E-learning Madrasah during this pandemic could be

better to assist their English learning be more successful in their study. Most students were very interested in the E-learning Madrasah and provided good response. In other word, E-learning Madrasah as an effective tool that motivates them to learn English better.

3.2 Student's Perception

Accordig to Entika (2019) the learning motivation signified students" self-worth or self-concept that reflected their goals, beliefs, attitudes, involvement, approach on learning experiences that in the end it leads to the emergence of a group of "mastery-oriented" students that are very interested to learn and master new knowledge. Paying attention and exploring the philosophical understanding can be traced in terms of language, philosophy means "falsafah" in Arabic), philosophy (in English) whose origin is from Greek, which consists of the word "philein" means love and "sophia" means wisdom (Elisa, 2019).

Student's perceptions were investigated in terms of four aspects: perceived motivation, perceived usefulness, perceived ease to use, and perceived behavior intention. There are 16 questionnaire items administered to the 222 students. The data were analyzed using quantitative methods with SPSS software to descriptive statistic. The calculation of central tendency each item on motivation aspect were described as follow:

Table 1. The Calculation of Central Tendency of Motivation Aspect

No	Motivation	Frequency					CT	Interpretation
		SD	D	N	A	SA		
1	*I feel confident using the E-learning Madrasah*	0.6	4.4	57.5	29.8	7.7	3.40	Moderate tent to agree
2	*I feel confident operating the E-learning Madrasah function*	0	4.7	50.6	37	7.7	3.48	Moderate tend to agree
3	*I feel confident using E-learning Madrasah content*	0.6	9.4	54.7	31.2	4.1	3.29	Moderate tent to agree
4	*I enjoy learn use E-learning Madrasah system*	3.6	14.4	39.2	33.7	9.1	3.30	Moderate tent to agree
5	*I feel motivated to learn English using E-learning Madrasah*	5.5	25.4	43.6	22.1	3.3	2.92	Moderate tent to neutral
						Average	**3.28**	Moderate tent to agree

Table 1 shows the average central tendency of motivation is 3.28 and categorized as a moderate tent to agree. The highest mean falls to statement 2 (3.48), that students feel confident operating the E-learning Madrasah function. While, the lowest mean falls to statement 5 (2.92). The Students feel motivated to learn English using E-learning Madrasah was categorized as a moderate tent to neutral.

Table 2. The Calculation of Central Tendency of Usefulness Aspect

No	Usefulness	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*E-learning Madrasah makes my English improves*	5.0	30.9	48.1	14.4	1.7	2.77	Moderate tent to neutral
2	*E-learning Madrasah makes my learning easy*	3.0	18.0	43.4	24.9	10.8	3.22	Moderate tent to agree
3	*E-learning Madrasah facilitated interaction and communication between teacher and student*	1.7	9.4	42.3	38.7	8.0	3.42	Moderate tent to agree
4	*E-learning Madrasah makes me convenient in learning*	3.6	14.4	49.7	24.6	7.7	3.19	Moderate tent to agree
5	*E-learning Madrasah enables me to takes test and submit assignment*	1.1	2.8	32.6	39.5	24.0	3.83	Moderate tent to agree
						Average	**3.29**	Moderate tent to agree

Table 2 indicates the average central tendency of usefulness is 3.29 and categorized as moderate tent to agree. The highest mean falls to statement 5 (3.83) it shows students are strongly moderate tent to agree that E-learning Madrasah enables them to take tests and submit their assignments. While, the lowest mean falls to statement 1 (2.77), E-learning Madrasah was enough improve their English ability.

Table 3. The Calculation of Central Tendency of Ease to Use Aspect

No	Ease to Use	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*I believe E-learning Madrasah are user friendly*	2.5	3.9	37.6	41.7	14.4	3.62	Moderate tent to agree
2	*With E-learning Madrasah it would be easy me to find information*	2.2	8.3	47.5	35.9	6.1	3.35	Moderate tent to agree
3	*The set up of the E-learning Madrasah is compatible with my learning style*	3.9	20.2	49.2	22.4	4.1	3.03	Neutral
						Average	**3.33**	Moderate tent to agree

Item of ease to use aspect were shows in Table 3. From the calculation shows the average central tendency of ease to use is 3.29 and categorized as moderate tent to agree. The highest mean falls to statement 1 (3.62) it shows students are strongly moderate tent to agree that they believe E-learning Madrasah are user friendly. While, the lowest mean falls to statement 3 (3.03), that the set-up of E-learning Madrasah is compatible with their learning style.

Table 4. The Calculation of Central Tendency of Behavior Intention Aspect

No	Behavior Intention	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*I intend to use E-learning Madrasah to assist my learning*	2.2	5.8	38 4	42.8	10.8	3.54	Moderate tent to agree
2	*I intend to use E-learning Madrasah to get update my English knowledge*	3.3	21.8	50.3	29.4	4 1	3.00	Neutral
3	*I intend to use E-learning Madrasah as free learning tool*	1.4	14.4	36.5	34.5	13.3	3.44	Moderate tent to agree
						Average	3.32	Moderate tent to agree

Table 4 shows the average central tendency of behavior intention is 3.32 and categorized as moderate tent to agree. The highest mean falls to statement 1 (3.54) it shows that students are strongly moderate tent to agree to intent use E-learning Madrasah to assist their learning. While, the lowest mean falls to statement 2 (3.00), the students intend to use E-learning Madrasah to get update their English knowledge.

3.3 Teachers' Perceptions

There were four aspects that concern in teachers' perceptions namely usefulness, ease to use, behavior intention and system use. Thirteen teachers involved in this quantitative method, in which the results revealed that there were statistically significant differences between aspects of the p value $< .05$ level. The finding indicated that aspect of ease to use was in 17.54, aspect of usefulness was in 16.15, behavior aspect was in 15.62, and the aspect of system use was in 15.08.

Here below table 5 the description of central tendency of usefulness aspect.

Table 5. The Calculation of Central Tendency of Usefulness Aspect

No	Usefulness	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*E-learning Madrasah make me performance improves*		30.8	23.1	46.2		3.15	Moderate tent to agree
2	*E-learning Madrasah makes learning effective*		38.5	30.8	30.8		2.92	Moderate tent to neutral

No		SD	D	N	A	SA	CT	Interpretation
3	*E-learning Madrasah make learning become easier*		30.8		61.5	7.7	3.46	Moderate tent to agree
4	*E-learning Madrasah is useful for teaching*		15.4	7.7	76.9		3.62	Moderate tent to agree
5	*E-learning Madrasah makes me convenient in teaching*	7.7	46.2		30.8	15.4	3.00	Neutral
						Average	**3.23**	Moderate tent to agree

Table 5 illustrates the average central tendency of usefulness is 3.23 and categorized as moderate tent to agree. The highest mean falls to statement 4 (3.62) it shows that teachers are moderate tent to agree that E-learning Madrasah is useful for teaching. While, the lowest mean falls to statement 2 (2.92), that the use E-learning Madrasah makes learning effective enough.

Table 6. The Calculation of Central Tendency of Ease to Use Aspect

No	Ease to Use	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*It is easy to operate an E-learning Madrasah*			23.1	69.2	7.7	3.85	Moderate tent to agree
2	*The interaction with the E-learning Madrasah is clear and understandable*		30.8	23.1	46.2		3.15	Moderate tent to agree
3	*The E-learning Madrasah is flexible to interact with*	7.7	30.8	7.7	53.8		3.07	Neutral
4	*It would be easy to be competent in the use of E-learning Madrasah*		23.1	23.1	30.8	23.1	3.54	Moderate tent to agree
5	*I consider that E-learning Madrasah are easy to use*			30.8	46.2	23.1	3.92	Moderate tent to agree
						Average	**3,51**	Moderate tent to agree

Table 6 shows the average central tendency of ease to use is 3.51 and categorized as moderate to agree. The highest mean falls to statement 5 (3.92), it shows that teachers are strongly moderate tent to agree that E-learning Madrasah is easy to use. While, the lowest mean falls to statement 3 (3.07), that the E-learning Madrasah is flexible enough to interact with.

Table 7. The Calculation of Central Tendency of Behavior Intention Aspect

No	Behavior Intention	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*I will use E-learning Madrasah in my English subject even after the pandemic of Covid-19*		38.5	30.8	30.8		2.92	Moderate to neutral
2	*It is important to use E-learning Madrasah and I will recommend its use*		23.1	53.8	23.1		3.00	Neutral
3	*I will modify the teaching activities of my English subject to take advantage of the capabilities of E-learning Madrasah*		23.1	46.2	30.8		3.07	Neutral
4	*I will encourage my students in the E-learning Madrasah*		15.4	30.8	53.8		3.38	Moderate tent to agree
5	*I would like to use E-learning Madrasah in the future if i had the chance*		23.1	30.7	46.2		3.23	Moderate tent to agree
						Average	3.10	Neutral

Table 7 indicates that there are 5 items, the average of central tendency is 3.10 and categorize neutral its mean teachers' perceived behavior intention were positive enough. Statement 4 is identified as higher mean (3.38) than other statement, then the lowest mean falls to statement 1 (2,92).

Table 8. The Calculation of Central Tendency of System Use Aspect

No	System Use	Frequency %					CT	Interpretation
		SD	D	N	A	SA		
1	*I spend a long time interacting the E-learning Madrasah*		46.2	23.1	30.8		2.84	Moderate tent to neutral
2	*I get involved with the E-learning Madrasah system*		38.5	30.8	30.8		2.92	Moderate tent to neutral
3	*I join the E-learning Madrasah to interact with the subject i teach at least once a day*		23.1	23.1	46.2	7.7	3.38	Moderate tent to agree
4	*I frequently connect to participate in interactive activities (forums) i have proposed in the E-learning Madrasah*		30.8	46.2	23.1		2.92	Moderate tent to neutral
5	*I frequently connect to E-learning Madrasah to display the degree of participation and progress the students*		30.8	38.5	30.8		3.00	Neutral
						Average	3,01	Neutral

Table 8 shows the central tendency of system use is 3.01 and categorized as neutral. The highest mean falls to statement 3 (3.38) it shows the teachers are state moderate tent to agree that join E-learning Madrasah to interact with the subject that they teach at least once a day. While, the lowest mean falls to statement 1 (2.84), that they spend a long time interacting the E-learning Madrasah.

IV. Conclusion

E-Learning Madrasah is function to facilitate the implementation of distance learning in order to answer the challenges of increasing technological advances. E-learning madrasah as a tool in teaching and learning process is considered useful during Covid-19 pandemic outbreak, students are motivated to join their English class, and students perceived that this learning tool is ease to utilize as well. Meanwhile, in teachers' perceptions indicates the same way as students'. They perceived that this e-learning system as a tool of teaching and learning was very useful and ease to use. Also, they perceived that the system of this e-learning madrasah in term of system was not difficult to be implemented in teaching and learning process.

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