Digital Technology and Literacy: Teachers and Students' Perception Towards E-Learning Madrasah

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ABSTRACT

This study aimed to evaluate the performance of e-Learning Madrasah and the constraints while using e-Learning Madrasah at MIN 1 Kota Malang (Islamic State Elementary School) during the Covid-19 pandemic. This research was conducted by applying a phenomenological approach which is naturally qualitative. Thus, in collecting the data, the researchers did an unstructured interview with six participants, who were purposively selected. The result from the interview, then analyzed by some existing evaluation, Learning Management systems, online learning theories, and student's literacy. The researchers found that e-Learning Madrasah needed several improvements based on the problems faced by the teachers and students. An online meeting feature called video conference should be upgraded. Hence, the number of users of the video conference feature will increase significantly and support the online learning process. Moreover, the learning and scoring system need an integrated advancement. Hence, it will ease the teachers' and students' work. The teachers often face some significant problems, whereas the students only need a CBT's feedback, in general. A theoretical analysis represented that e-Learning Madrasah was an effective media to support online learning during the Covid-19 Pandemic at MIN 1 Kota Malang. Nonetheless, some constructive evaluations and student's literacy are considered to make e-Learning Madrasah proper to use, whether in a pandemic or normal situation.

Keywords: E-Learning Madrasah, Digital Technology, Literacy, Online learning, Perceptions.

1. INTRODUCTION

Due to the Covid-19 pandemic, the Ministry of Religious Affairs, in circular letter 2020, urged all Islamic schools level, from *Rodlotul Athfal* (RA) (Islamic Playground or Kindergarten) to the *Madrasah Aliyah* (MA) (Islamic Senior High School) in Indonesia can use e-Learning Madrasah for online learning. This unpaid platform was made by the Directorate of Madrasah and aimed to support the learning process in Islamic schools. e-Learning Madrasah can be accessed 24 hours anywhere by the users as long as they have a stable internet connection. In addition, it has various features to support an online learning process, such as video conference features, online classes, computer-based tests, assignments, and daily exams [1].

It is discernible that e-Learning Madrasah implementation has been researched widely. E-Learning Madrasah is helpful to enhance the students' motivation to learn and the teachers' motivation to teach [1]. Moreover, e-Learning Madrasah is quite adequate, due to

80% of teachers and students claimed that e-Learning Madrasah helps them in doing online learning process even there is ineffectiveness in the evaluation process [2]. On the other hand, e-Learning Madrasah is less effective due to several factors, including network problems in some remote Indonesian areas and how to use e-Learning Madrasah that is not socialized widely. Hence, it made some teachers unable to operate e-Learning Madrasah [3][4]. In addition, e-Learning Madrasah actually has not been maximized in providing the platform/facilities support [5]. Some pedagogical, technological, and economical problems need to be improved [6]. Furthermore, e-Learning Madrasah features are hypothesized to influence the effectiveness of e-Learning Madrasah. However, none of the earlier studies deliberated the evaluation of E-Learning Madrasah implementation.

Accordingly, this study would like to display the performance of e-Learning Madrasah and the constraints of e-Learning Madrasah implementation by using a

phenomenological approach that is naturally qualitative. The study used a case study at MIN 1 Kota Malang. This research is expected to give constructive suggestions in improving e-Learning Madrasah to support an online learning process and develop student's literacy.

2. METHODS

A phenomenological approach was conducted in this research since it describes what all participants have in common as they share a phenomenon [7]. This study employed unstructured, open-ended interviews and took interview notes [8]. The researchers purposively selected three teachers and three students as the participants based on the specific criteria. First, the researcher considered participants' experience and frequency in using e-Learning Madrasah during the Covid-19 pandemic. Second, those teachers and students have been using E-Learning Madrasah for two years. In addition, those participants have represented the e-Learning Madrasah's users' population because of the criteria required.

2.1. Research Instruments

The researcher used the three main guiding questions as the foundation of the interview session, 1) their opinion towards e-Learning Madrasah features based on their experiences; 2) their constraints in using E-Learning Madrasah; 3) how the e-Learning Madrasah should be implemented in online learning. The researcher did a direct and indirect interview session with the participants. In detail, three participants of teachers were interviewed directly. Whereas the researcher interviewed two students via online platform meetings, and one student was interviewed by call. Nonetheless, to avoid subjectivity in gaining the data, the significant statements from the participants were validated by the existing theories related to the study.

2.2. Data Analysis

The data from the interview were coded manually by descriptive and analytical coding [9]. The researcher also validated the data from the interview by employing specific procedures. First, from the interview, descriptive coding was used to summarize the significant statements from the participants to establish a framework of a general idea [10][11]. Then, the meaningful messages were analyzed and juxtaposed by using the existing theories related to the study [12].

3. RESULTS AND DISCUSSION

This study analyzed the implementation of E-Learning Madrasah and student's literacy at MIN 1 Kota Malang and the constraints faced by the users of E-Learning Madrasah at MIN 1 Kota Malang. In addition, the data collected from the unstructured interview and

observations would be considered in evaluating the implementation of E-Learning Madrasah at MIN 1 Kota Malang. Among six participants, three teachers and three students, all of them generally had the same problems. Nonetheless, some complex problems were dominantly faced by the teacher.

3.1. Teacher #1 (MTK)

"Yes, I had some difficulties in my first-time using E-Learning Madrasah, but I finally could adapt to this platform. E-Learning Madrasah helped me do online teaching, but I think E-Learning Madrasah is still in trial and not thoroughly socialized. Sadly, I never used the video conference feature, and I preferred to use another platform. I could not give a good score to my students. Their grade should be 95, but it has only written 9. My students also did not get an exam's feedback after doing CBT" (Source: MTK/Teacher1)

She has been using E-Learning Madrasah for two years. Her experiences had two main problems: (1) it was difficult to operate E-Learning Madrasah because it was not widely socialized and (2) the scoring system was not adequately implemented. As a teacher, during the Covid-19 pandemic, she indeed wanted to give a good learning service to her students. E-Learning Madrasah, unfortunately, was not socialized to all teachers. Whereas in the design of distance learning, online teaching and learning have emerged, a school with internet-based learning should have good preparation in operating a learning management system. Thus, intensive training to develop schools' communities operating E-Learning platforms should be held periodically. Therefore, the tutorial of using E-Learning Madrasah should be spread widely, and training should be adhered to intensively. From those procedures, the users of E-Learning Madrasah had a valuable competence in operating E-Learning Madrasah and teach or learn properly [13].

On the other hand, she found some constraints in grading students' work. She also could not give feedback after her students did a Computer Based-Test (CBT). Those problems affected the students' will to learn. The students, indeed, have different preferred ways to learn [12]. Some of them were very enthusiastic about their score, and some of them were not. The problem in grading students' work and unavailability of CBT's feedback will make them anxious. They need to know their mistakes to evaluate themselves and improve their score.

3.2. Teacher #2 (RID)

"There are many possibilities when the students get a good score after doing an English exam. If E-Learning Madrasah opened in a browser, the users could translate the language. Moreover, I deplored that the questions from CBT could not be downloaded. I had to export

manually to Microsoft word/excel and it still could not work properly. Some pictures from the questions were not copied. I also had a problem grading students' systems, and a video conference did not work well. There is no whiteboard facility in it." (Source: RID/Teacher2)

Based on the adaptive E-Learning concept, the platform should monitor the users' activities [14]. Character education is a national movement to educate learners on a critical core ethical value such as honesty and responsibility [15]. When the students were doing an online English exam, they could translate the questions into Indonesian. These crucial problems were related to character education and learners' competencies and develop student's literacy. Students became dependent on doing the task because they depended on the translation available on the website. Translating questions without permission indirectly decreased students' character. Thus, the main suggestion from this study is that e-Learning can non-activate the translation facility.

Furthermore, the CBT questions could not be downloaded. It was intended to complete school curriculum documents in order to support the school's accreditation. The teachers still needed to export the CBT questions manually, and it could not work properly. Hence, the CBT should be available in any other documents, and the teachers could access the questions easily [16]. Another problem he experienced in using video conference was slightly tricky. The unavailability of a whiteboard made him could not deliver the lesson properly. This problem was in stark contrast to the E-Learning standard, which requires excellent performance and features to facilitate learning [17]. Therefore, E-learning Madrasah still needs an improvement in some cases.

3.3. Teacher #3 (FTH)

"I frequently asked my students about the unavailability of feedback on CBT. Feedback is essential for them so they can learn from previous mistakes. I also had a problem with the grading system. I have a suggestion for E-Learning Madrasah improvement that the student's score can be automatically input to the Digital Madrasah Report (RDM)." (Source: FTH/Teacher3) –

Further, considering the effectiveness of E-Learning Madrasah implementation at MIN 1 Kota Malang, a new design is strongly needed. Learning Management System (LMS) should represent the approaches for planning, delivering, and managing learning in organizations. It included open access e-learning program [3], students and teachers' dashboard, progress tracking, mobility, supporting schools' features such as online test, module, materials, and final students reports [18]. E-Learning features and activities had to be carefully designed before implemented. It needed some main procedures to properly make an E-Learning platform, such as analysis, design, development, implementation, and evaluation. Then, the practical e-Learning course increased when an excellent program and feature were ministering the students or teachers in the teaching and learning process. A systematic and sustained service to the end of the year or semester of learning must be available in e-Learning [19]. It means that the series of teaching and learning processes should be applicable in E-Learning as well as the student's score can be automatically input in Digital Madrasah Report (RDM).

Those three analyses eventually came with a general idea. Most of the three teachers faced similar problems related to the grading system and requirements of CBT's feedback. These similar problems caused by those problems were primary problems that always happened during the learning process; the grading process was essential and impacted students learning outcomes reports [20]. Therefore, if the grading system had problems, it affected students learning outcomes, and the accuracy of grading by teachers would be doubted. Furthermore, the same problems occurred in the request for feedback by students on the result of CBT. This required them to learn from their mistakes. Therefore, those teachers believed that the availability of feedback was essential in order to improve the students' outcomes [21][20][22].

However, this analysis also showed several different problems the teachers faced, such as teacher MTK who had a problem operating e-learning for her first time. Teacher RID was disappointed that a foreign language question could be translated. Moreover, teacher FTH provided a solution if the scores on e-Learning Madrasah were automatically inputted into RDM. This was happening because the interests and needs of each teacher were different. So, it was necessary to optimize each feature in order to facilitate teachers well. The solution was also addressed to the application developers to do a trial before being used. There should be an intensive evaluation and technical guidance for the use of e-learning madrasah [19].

3.4. Student #1 (GHA)

"e-Learning has a file size limitation. I often got some difficulties in uploading assignment in the form of video/audio/image. I also need my exam's feedback after doing the CBT." (Source: GHA/Students 1). The constraint technique related to the assignment submission in the form of video/audio/image had been experienced by the students during online learning. Therefore, the size limit should be carefully considered in making an e-Learning Madrasah. E-Learning Madrasah as one of the Learning Management System should facilitate the students properly and be easy to use [23]. Furthermore, the users' age of e-Learning Madrasah at MIN 1 Kota

Malang still needed guidance. Henceforth, the availability of feedback from CBT was also expected for improving e-learning Madrasah.

3.5. Student #2 (CTA)

"I want my exam's feedback. That is very important for me because I need to learn more from my previous mistakes" (Source: CTA/Students 2). As experienced by GHA, CTA also wants feedback from CBT. He revealed that the feedback from CBT could help him learn from his mistakes. This is in line with the statement in a previous study that feedback can affect student's pedagogy [24]. From that feedback, they would understand their weakness and strength; from that feedback, they knew how to improve themselves from their mistakes [21][20]. As a result, they might change their learning style and focus more on the lacking material.

3.6. Student #3 (SH)

"I had no significant problem in using E-Learning Madrasah. But I hope the video conference feature and there will be a CBT's feedback." (Source: SH/Students 3). In contrast to GHA, apart from wanting feedback from CBT. SH also hoped that the video conferencing feature could be improved. This was related as experienced by teacher 2 (RID), where the video conference feature operated less than optimal. Thus, the e-learning madrasah users preferred to choose other video conferencing platforms. E-Learning Madrasah, as one of the LMS platforms, should have served primary things like this to support online learning. Hence, there were no more problems while using it. E-learning madrasah was undoubtedly more efficient to use without involving other platforms in online learning [25].

Generalizing from the students' interviews, they rarely had a significant problem in using E-Learning Madrasah. Commonly, they needed a well-performed video conference feature similar to the teachers' issues and CBT's feedback to know their mistakes. An input in education referred to any information that a student was given about their performance. For example, the gap between what the student currently knew or could do and the expected goals should be made explicit to understand the goals and appropriate actions to close the gap [26]. However, in the typical situation, the teachers usually gave marks of correct ticks as the primary form of feedback to indicate this gap. Although the final feedback information might motivate some students, it was not particularly helpful to promote further learning because there were no clear directions of what to do next [21][20][27]. Thus, clear, descriptive feedback should be available in e-Learning Madrasah CBT's feature to support online learning.

On the other hand, the students frequently got some problems uploading assignments in the form of image/video/audio because of their limited size. Therefore, e-Learning Madrasah needed several considerations in the making, including providing unlimited size to ease students in submitting their assignments [28]. There were two possibilities; when uploaded assignments, there were some problems from the e-Learning Madrasah users (students) who could not resize/compress the file because not everyone understood it. Moreover, when it comes to resizing/compressing the file; they were still confused about uploading and operating e-learning madrasah and need assistance. The solution was that the e-learning madrasah manager at MIN 1 Malang increased the file size that students could send. That is why there is a need for thorough socialization related to the use of e-learning. Not only through video tutorials on how to use it but also technical guidance. Therefore, if there is a problem, students can solve it quickly [29] [30] [31] [32].

The problem faced by the teacher had an impact on students; problems faced by students had an impact on teachers; when the teacher had problems with the video conference feature, the learning material was not be able to be delivered properly. If the teacher had problems with the scoring system, the accuracy of the student's assessment decreased. As long as socialization was lacking, learning using e-Learning Madrasah had to be experiencing problems. Since students could not upload assignments in files, the assessment could not be carried out correctly. It could be that the student had the competence to answer it but could not send it due to the limited size. Hence, the students could not see feedback automatically; the teacher took a long time to convey student deficiencies. Therefore, the problems faced by teachers and students had implications for the success of the learning process.

4. CONCLUSION

The researcher found that E-Learning Madrasah 2.0.0 version needs significant improvements towards its feature, scoring, and computer-based test system. The teachers often faced problems. They are the main actors of the online teaching and learning process in e-Learning Madrasah 2.0.0 version. Besides, generally, the students had difficulty uploading the assignments in the form of image/audio/video. They also needed specific feedback from CBT. Thus, they can learn from their mistakes.

AUTHOR CONTRIBUTIONS

All author conceived and designed this study. All author contributed to the process of revising the manuscript, and at the end all author has approved the final version of this manuscript.

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