STUDENTS’ READINESS IN USING TECHNOLOGY DURING COVID-19 PANDEMIC

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Abstract

To prevent the spread of Covid-19, online learning or LFF is implemented. LFH shifted formal education practice from the classroom (on-site) learning to online learning. All subjects in schools are conducted online, including English subjects. One of the software applications that can assist in English teaching and learning online was Learning Management Systems. One LMS that can be used as a learning platform is Moodle. The friendly tools that Moodle offers help students to adapt quickly to this platform. However, with this sudden shifting between offline to online environments, the students need to adjust without maximum preparation. Therefore, in implementing Moodle, the teachers should know students' readiness and perception of using Moodle as an English learning media. In this research, the researchers apply survey research that explores students' readiness and perceptions towards the use of Moodle in learning English during the pandemic Covid-19. The instrument uses the questionnaire, and the participants are 100 students of SMK Yadika Bandarlampung. The result of this research shows that students of SMK Yadika Bandarlampung are ready to implement Moodle as their English learning media. They also had a positive perception toward Moodle during their time using Moodle. However, the students still face some problems such as connection and internet data, which often becomes a barrier for them in following Moodle activities.

Keywords: Moodle, Online Learning, Students’ Readiness

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INTRODUCTION

Many impacts on various fields that affected by the spread of Covid-19 in Indonesia. In preventing the spread of Covid-19, the government decided to switch offline classrooms to Learning from Home (LFH). Online learning or LFH shifts the practice of formal education from on-site learning to online learning. Online learning is a teaching and learning process that can bring students and teachers to interact with the internet with the help of the internet (Kurtanto, 2017). The teacher will deliver the material through the help of Information & Communication Technology (ICT), so the students can easily access the material from anywhere. Every level of education is implemented LFH in their learning and teaching activity, including vocational high school (SMK). Considering that because English has become a compulsory subject in SMK, it must be done online.

The number of sources of modern knowledge that are only available in English is a boost that teaching English in vocational high schools is believed to be able to accelerate national development. Gunantar (2016) stated that mostly the target of learning English for Indonesian students is commonly to develop reading skills, translation into the Indonesian language, and sometimes writing in English. English language teaching and learning becomes more prominent as the government focused on the development of excellent human resources.

Learning Management Systems is one of the software applications that can help the English teaching and learning process. According to Ellis (2009), LMS is a software application that enables the users to document, track, manage, and report the learning programs. The learning process in LMS happens through the features that enable communication, either synchronously or asynchronously. In LMS, the instructors, the learners, and the administrators would be facilitated to use and access the services without the boundary of time (Putri & Sari, 2020). With the handful of features mentioned above, LMS became one of the best learning platforms that schools can use for English language teaching and learning during the pandemic situation.
From many LMS that are used around the world as a learning platform, Moodle has gotten more attention from users all over the world. Moodle stands for Modular Object-Oriented Dynamic Learning Environment. Moodle platform provides several modules, such as Database, Lessons, Assignments, Workshops, Chats, Forums, News, Glossary, Quiz, Survey, Feedback, SCORM, and external tools (Costa, Alvelos & Teixeira, 2012). The features that exist in Moodle could help the teaching and learning process be comfortable because teachers can share material in all types of files, provide instructions, manage discussions and conduct multiple assessments easily.

Among many LMSs used worldwide as a learning platform, Moodle has gained more attention from users worldwide. Moodle stands for Modular Object-Oriented Dynamic Learning Environment. It is also called a virtual learning environment that is relatively free to use (Moodle.org, 2020). According to Costa, Alvelos & Teixeira (2012), Moodle platform provides several modules, such as Database, Lessons, Assignments, Workshops, Chats, Forums, News, Glossary, Wikis, Choice, Quiz, Survey, Feedback, SCORM (Sharable Content Object Reference Model) and external tools. With these features, the teaching and learning process could be done comfortably since teachers could share the material in all types of files, provide instructions, manage discussion and conduct multiple assessments.

The use of Moodle is also easier and suitable for language learning. Moodle provides various resources available to students, such as web content, video, audio, and file, which allow students to communicate, share files, and collaborate on work. Teachers and practitioners benefit from using Moodle in their second and foreign language classrooms (Suppasetseree & Dennis, 2010). Moodle is a friendly and easy-to-use tool that helps students adapt quickly and develop their language skills through teacher-designed language quizzes, assignments, and projects.

Due to the use of Moodle which is considered quite easy and popular in online teaching and learning activities, many vocational high school teachers are likely to use Moodle for their classroom. One of the factors that influence the effectiveness of Moodle in English language teaching is the students' readiness to use Moodle as a learning platform. Students' readiness is determined by several factors: computer/Internet self-efficacy, learner control, motivation for learning, online communication self-efficacy, and self-directed learning (Hung et al., 2010). Based on previous research, it is revealed that university students' readiness for E-Learning, especially Moodle, is high (Suwarsono, 2015; Caliskan et al., 2017). It means that Moodle can be applicable in the English language classroom.

However, based on the researchers' experience while doing Pre-Service Teaching at SMK Yadika Bandarlampung, Vocational students were not familiar with online learning systems and applications. Since online learning before the pandemic situation did not get any attention from the schools in that area, adaptation has been crucial for students to succeed in learning. The students might be ready to use the technology, but they find some difficulties interacting with the teachers and following the instruction. Moreover, time management has been another issue since they were not accustomed to independent and remote learning. At the same time, some teachers were also not ready to conduct teaching in an online setting due to unfamiliarity with the recent technologies. Accordingly, this study is designed to investigate students' readiness to learn English through Moodle during the COVID-19 pandemic situation. Based on the background of the study above, the researchers formulate the research question: Are the students of SMK Yadika Bandarlampung ready to use Moodle?

LITERATURE REVIEW

In this study, the researchers use four previous studies as a guide for finishing the study. The first previous study came from Unal, Alir, and Soydałat (2014), under the title “Students Readiness for E-Learning an Assessment on Hacettepe University Department of Information Management”. They had attempted to investigate students of the Department of Information Management (DIM) readiness levels' and perceptions about the main components (availability of technology, use of technology, self-confidence, acceptance, and training) of E-Learning. The second study about readiness was examined by Rasouli, Rahbania & Attaran (2016), entitled Students' Readiness for E-Learning Application in Higher Education. This study's main objective was to investigate the readiness of art students to apply learning through E-Learning. This study used quantitative and based on a survey for its methodology. The use of subjects in this research was four universities of Iran with arts majors. The results from this research revealed that Art’s students were as a moderate level of readiness for applying E-Learning. Therefore, the data analysis was done by indexes of descriptive statistics, and one sample t-test found a significant relationship between undergraduate students' readiness, graduate students, and post-graduate students to apply E-Learning. At the same time, there was no significant relationship between students' readiness and gender, university, and subject. The third previous study with the title “Students' Perception of The Practicality of Moodle Learning Management System Based on Behavioral Theory” was conducted by Oktaviani, Sholikhakh, and Lestiana (2018), at Universitas Pancasakti Tegal. This research determined the students' perceptions of the Moodle Learning Management System (LMS) based on the UPS Tegal Mathematics Education study program's behaviorism theory. This study used a quantitative approach with questionnaires as the instrument.
The participants were 107 students who had used LMS Moodle through the website pmtk.upstegal.com. The questionnaires were given to the students through Google Form on the Moodle LMS display. The result of this study showed that almost all of the students thought that the language used in LMS Moodle content was following the student mindset.

In the 21st century, English became the world's lingua franca, with non-native speakers of a language exceeding its native speakers. As English became a global lingua franca, English learning demand had risen along with English proliferation globally. It was used in all transnational aspects of life, including technology, commerce, telecommunications, medicine, and the practice of English, it was not only longer limited to international purposes but also local communication (Hülmbauer, Böhninger, & Seidlhofer, 2008; Gunantar, 2016).

In several countries such as Filipina, Singapore, and Malaysia, English had been viewed as the second language, while in Indonesia, English was seen as its foreign language (Gunantar, 2016). In English as a Foreign Language (EFL), English is commonly served as a tool for supporting international communication. As one of Indonesia's foreign languages, English was only taught at school and became a compulsory subject from primary to tertiary level (Jayanti & Norahmi, 2014; Sary, 2012). Since in Indonesia, English was taught as a foreign language and learned mostly in classrooms, teachers' role was especially important because maybe teachers' instructions and explanations were the only language exposure during learning as the English language for communication (Suryati, 2013; Sulistiyo, 2016). Since students will mostly learn English through their teacher, English teachers are expected to create an engaging teaching-learning environment to engage students in learning.

In teaching English, the use of teaching media is important, and media is used as a bridge between the teacher and the students. Media helps students understand the English language, and it also helps teachers in delivering the material. Many media can be used in teaching English, such as pictures, slide projectors, audio cassettes, charts, etcetera (Riza, Rufinus & Novita, 2013). With the development of technology, the media for teaching also develops. Nowadays, teachers can also use social media or internet-based technology to teach in class.

One of the teaching media that is becoming popular is the Learning Management System. According to Ellis (2009), Learning Management System (LMS) is a software application that automates the administration, documentation, tracking, reporting of learning programs. Teachers and students use LMS to conduct the learning and teaching process online. Putri and Sari (2020), stated that in LMS, the interaction happened through devices to enable communication, either synchronously or asynchronously. They also stated that the instructors, the learners, and the administrators would be facilitated to use and access the services efficiently. It is beyond the limitation of their time and place in the teaching and learning process. With the specification mentioned above, LMS became one of the appropriate learning platforms that can be used for their teaching-learning process.

Moodle is one of the Learning Management System (LMS) or Virtual Learning Environment (VLE). Moodle stands for Modular Object-Oriented Dynamic Learning Environment. Moodle was created by Martin Dougiamas. Moodle is a license-free open-source software platform. This LMS is a web-based application that provides an online learning service. It can be accessed using the Internet because it is mostly net-based, and it should not install anything domestically. Moodle presents a wonderful platform for resources and communication tools that are suitable for learning and teaching tools.

Online learning is a form of distance learning or distance education. According to Nguyen (2015), both hybrid or blended learning and purely online learning were considered to be online learning as much of the literature compares these two formats against the traditional face-to-face. Online learning has become a widespread practice over the years as an integrated technology for education. Delivering the scope of online learning, Aparicio, Bacao, and Oliveira (2016), divided online learning into two main areas, learning, and technology where learning is the cognitive process for achieving knowledge and the tool to support the process of achieving it as technology.

Based on Tang and Lim (2013), Online learning readiness was described in three major features: choices for online learning as opposed to face-to-face learning instructions; competence and confidence in using the technological tools; and ability to learn separately. To give a specific concept of readiness, McVuy (2000, 2001), developed a 13-item instrument for measuring online learning readiness. The instrument focuses on student behavior and attitudes as predictors. Hung et al. (2010), added some new dimensions to the readiness concept, such as computer/Internet self-efficacy, learner control, motivation for learning, online communication self-efficacy, and self-directed learning.

The readiness model was also developed by Akaslan and Law (2011). They developed a model to measure teachers' readiness for E-Learning. This model is appropriate for measuring students' E-Learning readiness because the core factors and their subsuming attributes (or sub-factors) remain relevant. Based on Akaslan and Law (2011), readiness measurement is divided into three steps. They are the first readiness for E-learning that consists of several parts, which are Technology, People, Content, and Institution, the second is acceptance for E-learning that consists of two parts which are Perceived Usefulness and Perceived Ease of Use and the last part of the third is training for
E-learning that is divided into 4 part which is Training Teachers, Training Learners, Training Personals and Improving Facility. (See Figure 1)

Figure 1. Model for Measuring Students' Readiness for E-learning

Students' experiences and confidence in the use of online learning and their attitudes towards E-Learning are critical success factors for E-Learning. Dray et al. (2011), also believed that students' characteristics that made them successful in traditional learning could contribute to their E-Learning success. In conclusion, students' readiness is determined by several factors, which are behavior, attitudes, computer/Internet self-efficacy, learner control, motivation for learning, online communication self-efficacy, self-directed learning, and students' characteristics.

RESEARCH METHOD

In this study, the researchers applied survey research that explores students' readiness towards the use of Moodle in learning English during the pandemic COVID-19. In this research, the researchers wanted to know students' readiness using Moodle as their learning tool using a self-completion questionnaire. According to Creswell (2008 in Creswell 2009:4), quantitative research-tested objective theories examine the relationship among variables. These variables that will be used can be measured, so that numbered data could be analyzed using statistical procedures, Creswell (2009:145), also explained survey design to provide a quantitative or numeric description of trends, attitudes, or opinions of a population by studying a population sample.

From the explanation above, the researchers could conclude that quantitative research was about numbers and figures. It is used to measure opinions, attitudes, behaviors, and other variables. Results from quantitative research will be presented in the form of numbers. Therefore, the result of students' readiness was presented in numbers.

This study involved the students of Vocational High School Yadika Bandarlampung majoring in Multimedia, Computer and Network Engineering, and Otomotif who have conducted the teaching-learning process through Moodle. The total number of participants for this research was 100 students.

Open-ended questions were useful if the possible answers were unknown or the questionnaire was exploratory. This type of question allowed participants to write using their terms, explained and fulfilled the response requirements, and avoided predetermined categories of responses. In a closed question, the researchers determined the range of responses that the respondent could choose. Closed questions were structured and useful because they could produce frequency responses from treatment and statistical analysis.

In this study, the researchers used open-ended questions and a close-ended questionnaire with a rating scale questionnaire. The Likert scale was used to measure the extent of subjects' agreement with each item. The extent was measured on a five-point scale: strongly agree, agree, neutral, disagree, and strongly disagree.

For this research, the researchers used the Alpha Cronbach formulation in SPSS 16.0 to determine survey instruments' reliability. According to Ary et al. (2010:201), reliability was the extent to which a test was measured accurately and consistently. Cronbach's Alpha was a measure of reliability that had values ranging from zero to
one (Hair et al., 2010: 92). The reliability analysis results showed the Cronbach’s Alpha of the Readiness was .91, while for the perception instrument, the Cronbach’s Alpha was .92.

FINDINGS AND DISCUSSION

Expected readiness for e-learning by Aydın and Taşçı (2005) was used to analyze the data. The specification for expected readiness was divided into three levels. The first level was “not ready and needed a lot of work,” with a mean score of 1.00-2.59. The second level was “ready but needed few improvements” with the mean score of 2.60-3.39, and the last was “ready, go ahead” if the mean score reaches 4.20-5.00.

In this section, four main points were used to evaluate students’ readiness. The first point was technology, the second people, the third content, and the last was an institution. Specifically, these points were explained as follows:

A. Students’ Readiness in Terms of Technology

In this aspect, three statements were given to the students to indicate their readiness in using technology. The students who filled out the questionnaires were 100 students from SMK Yadika Bandarlampung. The statements used were positive statements with five options: strongly disagree, disagree, neutral, agree, and strongly agree. From the questionnaires, the researchers found out the mean score from those three statements (M = 4.29, SD = .23), which indicates that most of the students were strongly agreed with all of the statements that the researchers provided (see table 4.1). The mean score of 4.29 indicates that the students were fully ready and able to use technology.

Three statements were used in this point, the result of the questionnaires showed that students were fully ready to employ technology in their teaching and learning process. In the first statement, which was I have access to handphone, the mean score was 4.45, which almost reached the fullest score. This indicates that almost all the students had access to handphone, while the lowest score was in the second statement, I have access to laptop/netbook/computer, with the mean score of 4.03, while for the third statement, which was “I have access to the internet” reached 4.39, and the mean score for all of these statements was 4.29. According to expected readiness, this score indicates the students of SMK Yadika Bandarlampung were fully ready to use technology to help them in their learning process.

Table 3. Students’ Readiness in Terms of Technology

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>SD %</th>
<th>D %</th>
<th>N %</th>
<th>A %</th>
<th>SA %</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I have access to handphone</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>29</td>
<td>59</td>
<td>4.45</td>
<td>.83</td>
</tr>
<tr>
<td>2</td>
<td>I have access to a laptop/netbook/computer.</td>
<td>4</td>
<td>11</td>
<td>10</td>
<td>27</td>
<td>46</td>
<td>4.03</td>
<td>1.18</td>
</tr>
<tr>
<td>3</td>
<td>I have access to the Internet</td>
<td>0</td>
<td>3</td>
<td>13</td>
<td>25</td>
<td>56</td>
<td>4.39</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.29</td>
<td>.23</td>
</tr>
</tbody>
</table>

B. Students’ Readiness in Terms of People

The second point was people or students’ readiness and experiences in using technology as learning media, this consists of 11 statements with five choices. The data below show students’ readiness to use media technology and the Internet as learning media.

Table 4. Students’ Readiness in terms of People

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>SD %</th>
<th>D %</th>
<th>N %</th>
<th>A %</th>
<th>SA %</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>I use the Internet as a source of information.</td>
<td>1</td>
<td>0</td>
<td>12</td>
<td>40</td>
<td>44</td>
<td>4.31</td>
<td>.76</td>
</tr>
<tr>
<td>6</td>
<td>I use social networks (e.g., Facebook, Instagram)</td>
<td>1</td>
<td>2</td>
<td>12</td>
<td>34</td>
<td>47</td>
<td>4.31</td>
<td>.84</td>
</tr>
<tr>
<td>7</td>
<td>I use Instant messaging</td>
<td>4</td>
<td>66</td>
<td>26</td>
<td>38</td>
<td>25</td>
<td>3.75</td>
<td>1.03</td>
</tr>
<tr>
<td>8</td>
<td>I use my computer with confidence</td>
<td>3</td>
<td>4</td>
<td>34</td>
<td>8</td>
<td>20</td>
<td>3.71</td>
<td>.96</td>
</tr>
<tr>
<td>9</td>
<td>I use the internet with confidence (e.g., Google chrome)</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>39</td>
<td>34</td>
<td>4.04</td>
<td>.91</td>
</tr>
<tr>
<td>10</td>
<td>I use a search engine (e.g., Google, Yahoo)</td>
<td>2</td>
<td>4</td>
<td>29</td>
<td>36</td>
<td>28</td>
<td>3.8</td>
<td>.95</td>
</tr>
<tr>
<td>11</td>
<td>I know what E-Learning is</td>
<td>1</td>
<td>2</td>
<td>28</td>
<td>31</td>
<td>35</td>
<td>4</td>
<td>.91</td>
</tr>
<tr>
<td>12</td>
<td>I know what Moodle is</td>
<td>1</td>
<td>6</td>
<td>24</td>
<td>37</td>
<td>28</td>
<td>3.9</td>
<td>.94</td>
</tr>
<tr>
<td>13</td>
<td>I have sufficient ability to use ICT to prepare materials</td>
<td>0</td>
<td>10</td>
<td>25</td>
<td>47</td>
<td>16</td>
<td>3.71</td>
<td>.87</td>
</tr>
<tr>
<td>14</td>
<td>I have sufficient time to prepare my Homework using Technology / Electronics.</td>
<td>4</td>
<td>4</td>
<td>36</td>
<td>44</td>
<td>12</td>
<td>3.56</td>
<td>.91</td>
</tr>
<tr>
<td>15</td>
<td>Moodle makes me complete my studies more effectively</td>
<td>1</td>
<td>7</td>
<td>46</td>
<td>31</td>
<td>12</td>
<td>3.49</td>
<td>.85</td>
</tr>
<tr>
<td>16</td>
<td>I believe using Moodle will increase my productivity.</td>
<td>1</td>
<td>5</td>
<td>46</td>
<td>32</td>
<td>15</td>
<td>3.55</td>
<td>.85</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.85</td>
<td>.28</td>
</tr>
</tbody>
</table>
The mean score of students' opinions was 3.85 (SD = .28), with the highest score being 4.31 for statements number 5 and 6. The data obtained show that the students were ready to use technology and the Internet as their learning media, but there is still room for improvement.

### C. Students' Readiness in Terms of Content

The third point was about the content to determine whether the students received the practical and theoretical material in learning English through Moodle or not.

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>English theory can be accessed for Moodle</td>
<td>0</td>
<td>4</td>
<td>43</td>
<td>39</td>
<td>12</td>
<td>3.61</td>
<td>.76</td>
</tr>
<tr>
<td>18</td>
<td>The practical part of English learning can be applied in Moodle</td>
<td>1</td>
<td>9</td>
<td>48</td>
<td>31</td>
<td>9</td>
<td>3.4</td>
<td>.83</td>
</tr>
</tbody>
</table>

The mean data from Content (M = 3.51, SD = .15) means the students were able to receive theoretical and practical material from Moodle, but it needs some improvement.

### D. Students' Readiness in Terms of Institution

The last point only had 1 statement, which was “Moodle is applied in my school”. This point was used to determine whether Moodle was implemented in SMK Yadika Badarlampung.

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Moodle is applied in my school</td>
<td>1</td>
<td>2</td>
<td>12</td>
<td>37</td>
<td>46</td>
<td>4.27</td>
<td>.84</td>
</tr>
</tbody>
</table>

Total |  |  |  |  |  |  | 4.27 | .84 |

Based on table 4.4, the mean score is 4.27, which indicates that Moodle is implemented in this school. This result is reasonable because based on the researchers’ experiences during her pre-services in SMK Yadika, Moodle has already been implemented since the beginning of the odd semester.

### CONCLUSION

The result shows that the students are ready to use Moodle as an online learning media, with the overall score (M=3.61) passing the expected mean score of online learning readiness. Each aspect of readiness passed the expected mean score with the highest mean score (M= 4.29) in the level of “ready, go ahead”. However, improvement is needed to improve students' understanding of practical material delivered in Moodle, as students find it difficult to understand the practical material, for example, in speaking material. Perhaps improving this could increase students' readiness to use Moodle as English learning media.

### REFERENCES


**BIographies of AUTHORS**

Marta Widiawitasari Br Simamor currently is an English Private Teacher. During her study in bachelor degree, she has achieved some regional and national achievements, such as the top ten national teaching media competitions in Pekan Pendidikan GenerasiHebat 2018 in Universitas Muhammadiyah Makasar, Top ten national essay competition in LEN PPI 2018, and she also became the Most Active Female of Faculty of Arts and Education 2019. She also obtained a Copyright from the Ministry of Law and Human Rights in 2018 for *Fun Fishing Game*.

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