The Utilizing of E-learning Moodle for Learning Process of Intensive Reading at College Students in Riau, Indonesia

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ABSTRACT

Utilizing e-learning with Moodle application has affected the learning process of higher education. To find out whether Moodle application is effective for Intensive Reading Course and to know the contention of students who go into Intensive Reading with Moodle. It is the great significance to know facts that influence the learning process of Intensive Reading with Moodle. The sixty-first semester students of FKIP-UlR English Language education were selected as a sample. This study mixed of qualitative and quantitative methods. Furthermore, this research used two kinds of instruments; questionnaire and interview. The result revealed that the average score of the pre-test is 4.6, while the post-test is 8.9. It shows a serious distinction the score of students' pre-test and post-test of learning by e-learning Moodle. Thus, it can be said that the learning process with the Moodle application is very effective. Further, the responses of students are also strengthened positively by the interview, almost all of the students were interested, motivated, and also agreed to use e-learning Moodle in learning Intensive Reading. It is implicated that e-Learning Moodle could be used to improve students reading comprehension. Therefore the researcher ensured e-Learning Moodle could be used in the learning and teaching process in the Intensive Reading Course.

Keywords: Learning process, e-learning Moodle, Intensive Reading.

1. INTRODUCTION

Considering all the time, Intensive Reading learning activities are usually applied in the classroom by a learning centered system that includes teachers or lecturers and textbooks as a source of knowledge. However this circumstance has not made the learners engaged in actively on learning process. Besides that, learners in learning activities are not forced to think critically or independently, [1]. This fact demanded a changing in learning process in all of field education through integrating technology into learning process. In the context of higher education in Riau Province, the use of Information and Communication Technologies (ICTs) such e-learning becomes progressively crucial in the learning activities.

E-learning is a system of teaching and learning that developed through a set of digital learning methods that facilitate, disseminate, and enhance learning. It is clear from those words that e-learning is concerned with the use of electronic media to transfer or assist the teaching and learning process. As an alternative learning system, e-learning can increase the quality of learning in college and institution. E-learning is intended to make it simpler for a lecturer or teacher to plan learning activities and interact with learners without regard to time or location.

To complete activities an e-learning, it needed to support some features of CMS/LMS. The use of a learning management system (LMS) such as Moodle has altered way people think about content and class activities especially education world. According to [2], students need to updates the learning process of Intensive Reading, which allows them to learn anywhere and anytime with the support of technology such as e-learning Moodle.

This research seeks to see if the Moodle application is effective for Intensive Reading Courses and to get feedback from students who use Moodle in learning Intensive Reading.
1.1. Related work

1.1.1 The Effectiveness of e-Learning Moodle

In the twenty-first century, e-learning brought substantial innovation to educational contexts, utilizing web-based communication, collaboration, multimedia, and information transmission [3]. In addition, [4] define e-learning as "interactive learning media designed to operate on a computer, mobile phone, or computer table."

Active learning may be facilitated by e-learning without regard to time or location. Learning management systems (LMS) give an impact on students' learning environment, reform collaboration and communication systems, and make it easier for learners to acquire learning resources. [5].

One of several LMS that has been widely used in education filed is Moodle. The system of Moodle may be utilized successfully in the educational world as well as in institutions. Using Moodle in universities has a variety of reasons, including hybrid learning, and both initial and on-going learning. According to [6] Moodle platform might enhance learning motivation and how much students are engaged in developing learning activities in the virtual world. Students who were exposed to an online learning environment exhibited encouraging, optimistic, and positive attitudes and methods. Learning activities with Moodle are also improving their understanding of the course material better. Students enjoy learning face-to-face that is supported with online material and activities (like E-mails or chat sessions etc.), as a favourite mode of learning [7], [8], [9].

E-learning Moodle presents users some varieties of learning communication media, such as a forum, chat and messaging system, wiki space, and so on, in the context of learning activities [10]. Users can do communication through non-synchronized way using forums, allowing learners to communicate with their friends and also teachers without the limits of space and time, as long as a connection is available. Interaction forum might about subjects of interest or about a specific issue, and any user can start a conversation. In contrast to a forum, the Chat and virtual meeting system allows for synchronized, real-time conversation between participants on the course platform and participants with participants. The messaging system facilitates private conversation between users[11].

1.1.2 Intensive Reading Course with Moodle

Intensive Reading, as a complete core course, has a significant impact on the final output of English education for English majors at the college level. Intensive Reading in implementation usually takes place in the classroom, which are lecturer and text book have the important role as a sources of information in the learning process.

The same like the characteristics of Intensive Reading course; 1) Classroom based activity. 2) The reader is intensively involved in looking inside the text. 3) Students focus on linguistic or semantic detail in reading. 4) Students identify key vocabulary. 5) Text is read repeatedly. 6) The aim is to build more language knowledge rather than improve the skill of reading [12].

Intensive Reading class is identic teacher-led in learning, as is the case with traditional Intensive Reading programs. The majority of the speech is usually done by the teacher, while the learners listen, answer the question and complete activities. The usual responses and explanations are then given to learners. The majority of the time, students are in a passive stance. The students are instructed to study the book that used in learning and only a few opportunities to go others sources.

In Reading courses, multimedia technology such as Moodle e-learning has been frequently employed, but still a few in intensive reading class because Moodle e-learning in the Intensive Reading course is commonly utilized to illustrate of linguistic and it is not focus on use of language. As stated by [2] there are four primary reasons for utilizing e-learning Moodle in the learning process nowadays. First, there is a need for appealing, current learning material that can inspire students to learn. Second, there is a demand for remote learning that can be done from any location and at any time. Third, learners require a large number of learning resources. Fourth, both students and lecturers need to improve their understanding on how to use technology.

In Intensive Reading class context, Moodle classified in two kinds of learning process content: Sources and activities. Learning sources are educational resources that are often generated digitally and then published to a platform. Some examples of these are module, PowerPoint slides, documents, links, video and audio files. Meanwhile, activities are often produced using the Moodle system and allow opportunities for learner–learner or teacher–learner interaction, as well as content alteration and complete transformation. The examples of activities involve virtual meeting, assignments, forum of discussion, chat rooms, wikis, glossaries, quizzes, and test, [13]. Inline, [14] claim that there were nine categories of Moodle features used; 1) Creating and Managing Course Content. 2) Using Forums, Chat and Meeting Conference. 3) Assignments & Exercises 4) Student Workgroup & Peer Review. 5) Students’ Journal & Document Submission. 6) Class
Schedule, Calendar, Bulletin Board. 7) Online Quizzes & Surveys. 8) Student Grades and Scales.

2. METHOD

Composite quantitative and qualitative methods were used in this study. In most cases the investigation types focus on the participants’ opinions, behaviours and experiences [15]. Closed questions in online questionnaire, and online interview were used to complete the data in this study.

2.1 Questionnaire

The questionnaire distributed for 60 enrolled in intensive reading class at the English Language Education, of Islamic University of Riau. They were 19 and 20 old. They were taught Intensive Reading course through the use of e-learning Moodle. The questionnaire items involved eight features content of Moodle application in supporting and enhancing of learning process. They are: 1) Creating and Managing Content. 2) Using Forums, Chat and Meeting process. 3) Assignments & Exercises 4) Student Workgroup & Peer Review. 5) Students’ Journal & Document Submission. 6) Class Schedule, Calendar, Bulletin Board. 7) Online Quizzes & Surveys. 8). Student Grades and Scales.

The pre-test and post-test scores of the students differed. The findings are shown in Table 1 below.

Table 1. Learning Intensive Reading Pre-test and Post-test score

<table>
<thead>
<tr>
<th>Student</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Students</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.8</td>
<td>9</td>
<td>31</td>
<td>8.7</td>
<td>8.7</td>
</tr>
<tr>
<td>2</td>
<td>5.1</td>
<td>9.2</td>
<td>32</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>3</td>
<td>4.5</td>
<td>8.9</td>
<td>33</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>4</td>
<td>4.5</td>
<td>8.5</td>
<td>34</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>5</td>
<td>4.5</td>
<td>9</td>
<td>35</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td>6</td>
<td>4.8</td>
<td>9.1</td>
<td>36</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>7</td>
<td>4.5</td>
<td>9.1</td>
<td>37</td>
<td>8.7</td>
<td>8.7</td>
</tr>
<tr>
<td>8</td>
<td>4.8</td>
<td>9</td>
<td>38</td>
<td>9</td>
<td>9.0</td>
</tr>
<tr>
<td>9</td>
<td>4.5</td>
<td>8.7</td>
<td>39</td>
<td>8.9</td>
<td>8.9</td>
</tr>
<tr>
<td>10</td>
<td>4.5</td>
<td>8.5</td>
<td>40</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td>11</td>
<td>5.2</td>
<td>8.8</td>
<td>41</td>
<td>8.8</td>
<td>8.8</td>
</tr>
<tr>
<td>12</td>
<td>4.3</td>
<td>8.9</td>
<td>42</td>
<td>9</td>
<td>9.0</td>
</tr>
<tr>
<td>13</td>
<td>4.6</td>
<td>8.8</td>
<td>43</td>
<td>9.2</td>
<td>9.2</td>
</tr>
<tr>
<td>14</td>
<td>4.2</td>
<td>8.9</td>
<td>44</td>
<td>8.8</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Table 2 depicts the mean score of pre-test is 4.6, with Standard Deviation 0.27 0.meanwhile the mean score of post-test is 8.9 with Standard Deviation 0.20.

2.1.1 Test of Normality

After calculating the mean score of pre-test and post-test, the normality and homogeneity should be done by using the statistical software (SPSS 24.). As a requirement for completing hypothesis testing, the researcher did the normality and homogeneity test. The result of normality test can be seen in the table 2.

Table 2. The result of Normality Test

<table>
<thead>
<tr>
<th>N</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Normal Parameters\textsuperscript{a,b}</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.0000000</td>
<td>.2048217</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Most Extreme Differences</th>
<th>Absolute</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.110</td>
<td>.090</td>
<td>-.110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Test Statistic</th>
<th>.110</th>
</tr>
</thead>
</table>

| Asymp. Sig. (2-tailed) | .067* |

150
As can be seen in the table 2, the test of normality test was significant. It proves from the significant value which is (0.067). It denotes that the value is more than or equal to 0.05. As a result, the residual values can be assumed to be normally distributed.

2.1.2 Test of Homogeneity

To determine whether the data variation is homogeneous or not, a homogeneity test was carried out.

Table 3. Test of Homogeneity of Variances

<table>
<thead>
<tr>
<th>Students Score</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.692</td>
<td>1</td>
<td>118</td>
<td>.196</td>
</tr>
</tbody>
</table>

According to table 3, the population of the study was homogenous. It can be seen from a significance value of Leven Test which is 0.196. It clearly shows that the value is larger than 0.05. As a result, it is possible to conclude that the data distribution is homogenous.

2.1.3 Hypothesis Testing

After analysing normality and homogeneity using normal and homogeneous distributions, hypothesis testing was performed using the one sample t-test.

Table 4. Hypothesis Testing

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test - Post-test</td>
<td>-4.30000</td>
<td>.33699</td>
<td>.04350</td>
<td>-4.38705 - 4.21295</td>
<td>-98.840</td>
<td>59</td>
<td>.000</td>
</tr>
</tbody>
</table>

After testing the hypothesis, the averages score was 4.30000 (SD = 0.33699). The t-test value was 98.840, and the significant value (2 tailed) is less than a = 0.05, which is 0.000 (see table 4). The conclusion is the alternative hypothesis was accepted, since there is a substantial considerable gap achievements between both the pre-test and post-test. Thus, learning using Moodle e-learning is successful in the Intensive Reading process of learning.

2.2 Interview

Interview was held on October 20 2020 for fifteen students that join on Intensive Reading class. The Samples of interview selected in random. The questions related with the following items.

Access to Moodle

Ques-1. It is easily accessible both inside and outside the classroom.
Ques-3. It is quick and dependable.

Interaction

Ques-4. It is simple for students to properly express themselves in online.
Ques-5. Make it easier for students to communicate with lecturers in online.
Ques-6. It is simple to interact with a classmate in online.

Student self-reflection

Ques-15. Using Moodle makes me more confident learning online.
Ques-16. Moodle can improve my learning experience.
Ques-17. Moodle can discipline me in learning.
Ques-18. Moodle helps me in improving my typing skills.
Ques-19. I only use Moodle as course requirement.
Ques-20. I hope Moodle is used in other courses.

Layout of Moodle

Ques-7. The information is simple to grasp.
Ques-8. The design is well-organized and simple to use.

Moodle resources

Ques-9. It is useful to have access to information updates..
Ques-10. Downloading or reading online written instructional resources is more effective.
Ques-11. It is worthwhile to do online workouts and quizzes..
Ques-12. It is serviceable to take part in a forum of discussion.
Ques-13. It is useful to distribute audio and video files.
Ques-14. It is handy for online chats.
The first question was about the students' ability to access Moodle. 13 from 15 students or 86.6% said that Moodle is easy to be accessed. They had no problems about it. Accessing Moodle from classroom or at home was convenient for them. They could find the Moodle website so fast and dependable.

The second question asked for students about the interaction activities during learning of Intensive reading with Moodle. 14 students or 93% state that they could express themselves freely and openly with other students. They thought that it was straightforward to communicate and share their ideas with classmates online. They also felt comfortable communicating with their lecturer in online.

The third question was about the layout usability of Moodle in learning process of Intensive reading, 12 or 80% of students said that they understood the learning information distributed by Moodle. Moodle help them to understand the information given by the lecturer. Navigation in Moodle facilitates students to link each feature provided by Moodle.

The fourth question asked about the learning resources on Moodle. 14 or 93% of Students stated that Moodle was helpful to them undertake online exercises and quizzes. It was useful to access information updates on Moodle. Moodle was helpful to download or read online written resources. It was straightforward to watch and listen the audio and video files. It was helpful to participate in forum discussion and room chat.

The fifth question asked about students' self-reflection. 86.7% of the students wished to use Moodle in other courses in the future. They felt that their learning was enhanced through using Moodle. They said that Moodle make them more confident in online learning. They also think that they needed to improve their typing and/or computing skills to work more effectively on Moodle. The last, they only used Moodle as it was part of their course requirements.

3. RESULT AND DISCUSSION

The study revealed that the distinction of average score of tests. It can be said that, e-learning Moodle is effective in learning process of Intensive Reading. The same finding with [16], they study found that e-learning Moodle has positive impact to improve students' reading comprehension

Students love learning presented with Moodle e-learning. Besides being able to upload and share papers in Moodle, it allows them to access learning materials from anywhere and at any time. Furthermore, learners are able to perform the activities on their own. In line with the finding above, [17] stated that Moodle supports the incorporation of a rich learning environment, such as text-based or HTML-formatted documents, as well as multimedia elements such as audio, video, and images.

The majority of students who used the forum and chat features to finish their work were pleased with the results. [18] asserted that discussion forums and chatting rooms are effective communication devices. These forums function allow students to participate in interactive learning activities. The study results demonstrate that a discussion forum on Moodle may increase students' learning engagement when compared to traditional classroom discussion, with a substantial outcome of improvement. The usage of Moodle can increase interactions online between student-lecturer, student-student, and student with learning material [11].

Students have positive opinions toward learning of Intensive Reading with e-learning Moodle. They mentioned that it was easy to access Moodle from both classroom and home. Moodle was fast and reliable. Students could communicate with their classmates and instructors. This statement confirmed by [19] who mentioned that using CMS/LMS help to improve communication with classmates and teachers both inside and outside classroom. It helps to access information updates, download or read online written class resources, undertake online exercises and quizzes, participate in the discussion forum and chat room, listen to audio and watch video files. Students felt more confident and their learning was enhanced when using Moodle. However, students still want to have face to face discussion with classmates and instructors.

4. CONCLUSION

Utilizing of e-learning Moodle in supporting learning activities is now widely in the world. E-Learning Moodle is a website that is particularly designed to support teaching and learning activities. To gain the effect of integrating e-learning Moodle during the learning activates, lecturer should prepare themselves with a proper way, and grasp students' capability. Furthermore, before implementing e-learning Moodle for teaching Intensive Reading or others courses, there are some benefits and problems that should be understood by the lecturer and students so that when they implement an e-learning Moodle to teach, they can maximize the benefits and minimize or anticipate the possible problems.

Based on the conclusions from the results In this research, several suggestions can be made namely (1) teachers/lecturer or course creators need optimizing the forms of activities that others in Moodle so that students
are more interested using e-learning Moodle. (2) the teacher or course creators need to improve ability in management courses in e-learning so that e-learning becomes more interesting and not considered only as a supplement to education.

**AUTHORS’ CONTRIBUTIONS**

Estika Satriani and M. Zaim conceived of the presented idea. Further, they developed the theory and performed the computations. M. Zaim and Ermanto verified the analytical methods. M. Zaim and Ermanto encouraged Estika Satriani to investigate [a specific aspect] and supervised the findings of this work. All authors discussed the results and contributed to the final manuscript.

**ACKNOWLEDGMENTS**

This article or research would not have been possible without the extraordinary assistance of my promoters; Prof. M. Zaim and Prof Ermanto. Their passion, knowledge, and rigorous attention to this study have been an inspiration and have kept my work on track from my first contact through the final draft of my article.

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