Using Edmodo Learning Management System: Experiences of Teacher Trainees

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Abstract. This study describes teachers’ experiences using Edmodo Learning Management System (LMS) during Edmodo user training. After having exposed with an Edmodo workshop and participated in the blended course for eight weeks both as a student and as a teacher user, 11 selected participants of 22 teacher trainees were asked to respond to the effectiveness use of Edmodo in an online mode of learning through this training by filling the questionnaire and answering the questions through close and open-ended questionnaire and in-depth interviews. The participants’ responses demonstrate that the majority of the participants perceive positively towards all features on Edmodo. The study result also shows the acceptance, and the skill of participants in using Edmodo varies from one to another participant. Participants who have ever been exposed with similar tools of computer-assisted learning devices find this system easy to access and to use, but the ones who had never used Edmodo and other similar LMS before experienced with some difficulties during the earlier session of the training.

Keywords: Edmodo, Learning Management System (LMS), User Training, Computer Assisted Learning.

1. Introduction

The fast flow of information in technology starting from the wire until wireless internet connection, from copper cable, to fibre optic cable of landline connections, from landline home telephone to mobile smartphones, from desktop to laptop with a massive increase of storage capacity and velocity have changed the way we live, the way we learn and the way we teach. In an attempt to encourage student engagement in their lessons nowadays, the use of social media is believed to be an effective learning tool. Many of the current research findings show that the integration of information technology into teaching and learning is becoming popular among teachers as well as students. It is due to the fact that the computer-mediated communication lessons can provide drills on oral and visual aspects of language communication aspects. The multimedia resources of learning such as video and simulation posted on Edmodo allow students to practice on his/her own at home alone or even with his peers. S/he can adjust his speed and even replay the lesson as needed. In this connection, Warawudhi (2017) found a positive attitude toward Edmodo in terms of user-friendly functionality and interaction between students and teachers. Also, it was found that Edmodo facilitated students’ engagement cognitively during classroom sessions (Purnawarman, Susilawati & Sundayana 2014). This Learning Management System (LMS) allows teachers and students to interact with each other in real time from and to any place (Emekci, 2016). In his study for an assessment application, he found that most of the learners found this system to be fun, motivating, user-friendly, and practical. As a management tool, some features in Edmodo help users perform their admin tasks easily; for a student, the system provides transparent information on students’ activities or progress, meanwhile for a parent, the system provides information on student’s activities in which parent can easily monitor his child class activities from a distance. Still, as a management tool, the system also provides users with abundance resources either through connectivity or through a dedicated library feature created by a user that can be retrieved when is required.
In the mid of the year 2016, under the support of the Directorate General of Higher Education through its program called “IPTEK untuk Masyarakat” meaning science and technology program for community, three of the lecturers from the Faculty of Education Halu Oleo University conducted a training on using Edmodo for twenty-two teachers of senior high schools in Kendari. Two of the senior high schools were chosen to represent the schools, namely the State Senior High School 4 Kendari and the State Islamic Senior High School 1 Kendari. Both of the schools were facilitated with limited WI-FI connection. Therefore, only a few teachers use it for instructional purposes. Couples of the teachers in both schools were identified have tried to use Edmodo, but they discontinue implement the system because of several reasons. One of the teachers of the Islamic senior High School admits that she is willing to use the system. However, she knows just little on using the application. She has created a class at Edmodo, but it just does not work because she lacks of skill using it. Ten other teachers of her colleagues admit that they had never heard about the system, but they joint the training because they intend to use it. In terms of their skill in information and communication technology, most of them are a non-native-digital citizen who has just been exposed to this technology in two or more years. As mentioned by Robin (2014) that there are some possible constraints have prevented teachers from implementing technology effectively in secondary schools such as lack of time to learn new software and computer skills, computer anxiety, and lack of knowledge on how to integrate technology into teaching.

Before creating his or her own online class, the training teachers attended the workshop which was held through face to face once a week and an online with Edmodo class in a two month period to experience them with these two modes of teaching and learning, one a student and the other one as a teacher. After having experienced as a student, they were then asked to create his/her own class. For the purpose of evaluating the program achievement, this study was conducted to investigate whether Edmodo can be used as a supplementary learning tool in these schools.

2. Literature Review

2.1 Effectiveness of Edmodo

Unlike Facebook social media which is found to have a negative impact on students’ academic performance from its usage (Habes et al., 2018), a number of researches have shown the effectiveness of using Edmodo in the online mode of learning. For examples in a study of an English writing class of university students majoring in English teaching shows that teaching writing under Edmodo Learning Management System has a noteworthy impact on students writing performance. The research also suggests that the perceived usefulness and user acceptance have positive associations with student achievement (Tanduklangi et al., 2014). Another study conducted by Balasubramanian et al. (2014) shows that incorporating Edmodo encourages both student engagement and responsible learning when Edmodo is employed. The research also found that the students’ preference for using Edmodo mainly because of good resources, forum and discussion, and online discussion. Moreover, students find the system as wonderful and user-friendly social learning platform that makes them enjoy working on an online mode of learning. In addition, social media users, like students, find Edmodo easy to use because they have experienced with this kind of platform (Al-Said 2015). In a study of integrating Edmodo into an EFL class, Ekmekci (2016) found that Edmodo is an effective assessment tool in language classrooms. He added that with its feedback facility and its user-friendliness, the system might serve as alternative tool to traditional paper and pen exams. Likewise, Alkathiri (2015) examines the perception of the use of Edmodo among Saudi Secondary School EFL students. He concludes that the students’ perception on Edmodo was significantly positive in spite of the many remained challenges of its integration.

Currently, a study was conducted to investigate how Edmodo conducted in a blended setting in combining with Genra-based Approach. The research finds that in teaching writing it was possible to integrate Edmodo GBA writing cycles. In spite of the fact that some issues were still raised by the users was bandwidth, confusion on using Edmodo, incompatibilities, lack of responsibility in learning (Purnawarman et al., 2014).
2.2 Edmodo as a Medium of Instruction

In recent years we have witnessed the trends in instructional technology from behaviouristic computer-assisted learning to communicative computer-assisted learning and lately integrative assisted learning. Behaviouristic computer-assisted learning is associated with Web 1.0 in which computer merely functions as a tutor, serving mainly as a medium of transferring materials to learn. Meanwhile, communicative assisted learning, in which computer is used to stimulate discussion and feedback which is associated with Web 2.0 in which this technology promotes interactive communication between teacher and students and between student and his classmates. At the latest, in which a platform combined with multimedia that enables a learner and teacher to interact with through an asynchronous mode of learnings. As track back to Healey and Kinns (2000) that the medium of instruction allows files to be submitted back and forth between teacher and his/her students or between students. Hence, with this tool, it is possible to create a higher frequency of interactions, to generate a rich collaborative and to exert interactive learning environment.

From the trends mentioned above, Edmodo which was tailored from Noodle enables the learner to interact with the teacher and students as well as parents can be categorized as communicative computer-assisted learning. A current study related to Edmodo implementation in a virtual classroom conducted by Ekici (2017) shows pre-service primary teachers have a positive perception towards the use of Edmodo in instructional purposes. Moreover, Edmodo also offers an administrative feature to help teachers manage the class easily. In this regard, as Scott cited in Warawudhi (2017) mention some of the capabilities Edmodo that attract users, as follows (1) User friendly, in which it is easy to use by students, teachers and parents; (2) Mobile access, in which a user can use it anywhere as long as his computer or smartphone is Internet connected; (3) Peer connection in which enables the interaction between teacher and student and student to student (4) Classroom management by which a teacher can post various learning sources, assignments, quizzes and polls, and grading. (5) Cost saving, as it is free of charge. With all functions and features available in Edmodo, the system supports both collaborative and communicative activities which are similar to Facebook, a social network, see Figure 1.

![Figure 1: Edmodo Interface for Instructional Purpose.](image)

A study conducted previously by Balasubramanian et al. (2014) suggests that students' preferences of using this LMS are mainly attributed to resources, support, and communication which can be provided through forum and discussion. This study also finds the user-friendliness of the system that enables learners to enjoy studying on an online mode of learning. As innovation continues to make a teaching and learning activity simpler, a teacher and a student don’t need a class lab to use Edmodo, a teacher and students can build communication with students outside of class; a student who doesn’t have a laptop can use it because Edmodo can be available on smartphones. As found by Al-Said (2015) students' perception
towards Edmodo and mobile learning is positive because using Edmodo offers effective communication of instructions despite its limitations.

3. Methodology

3.1 Method of Research

This study investigates the teachers’ perception of the use of Edmodo in the two senior high schools representing high schools in Kendari who are mostly aged above 30 years (non-native digital teachers). There were 22 participants of the teacher Edmodo workshop, but only 50% (11 teacher trainees) were chosen to participate in this qualitative study. They were chosen because they were fully participating in the Edmodo workshop. Before the participants were asked to fill in the questionnaire adopted from Kongchan (2012) they were trained for a month both in face to face and in the online mode of instruction. During the one-month training and another month of post-training, as trainees, they were asked to respond to any notes, assignments, quizzes, and pools posted by the instructors. They were required to post online teaching materials includes, but not limited to video, e-book, teacher’s owned presentations as well as his/her language of instructions. The training participants were also encouraged to give response and feedback on the instructor’s posts (notes, assignments, quizzes, and polls). To get a more comprehensive view of the use of the system, each of the participants was also trained on how to create his or her own online class. As teacher trainers, they were also asked to post notes, assignments, various kinds of quizzes and polls. All dates and activities were recorded for analysis. The questionnaire was divided into two sections with a total 20 questions. The first part of 10 questions asking for the participants’ opinion on technical aspects while the later 10 questions asking for the use of features of Edmodo. As the participants were all regarded as non-digital participants which were similar to the nature of Kongchan (2012) study, all the questions were basically unchanged. The technical aspect questions look like “I can log in and log out easily”, “I can register easily, and “I can load any page quickly” while the feature questions were printed as “I like using Edmodo”, “I’m pleased with posting my work in the class”, and “I’m happy with consulting the teacher personally” The data with the five points Likert scale were analysed by using a rating guide as follows: 4.21 to 5 = strongly agree, 3.41 to 4.2 = agree, 2.61 to 3.4 = neutral, 1.81 to 2.6 = disagree, and 1 to 1.8 = strongly disagree. Moreover, the researcher also used open-ended question related to the problems on the use of the system, intention of using Edmodo in the future and recommendations for improvement of its implementations.

3.2 Edmodo Implementation

Edmodo in a business world is an instructional technology company which is offering communication, collaboration, and coaching tools to K-12 schools and teachers (Wikipedia) which is nowadays, also popular among faculty members and university students scatter around the world. In a more specific term, it is a micro-blogging platform which is employed as an online learning platform. Edmodo is accessed through its URL: edmodo.com. It is a social media, like Facebook, but it was specifically dedicated for instructional purposes. Hence, it is environmentally safe, and there will be no abusive language or inappropriate content because the teacher can see and monitor every content that is posted on Edmodo even parents of students can watch from a distance (Edmodo). Moreover, it is easy; even non-digital natives find this system as easy to use. To get into the system, a user simply clicks its site, www.edmodo.com and then in seconds the welcoming page of Edmodo appears on the monitor screen as seen in Figure 2.
As it is a free and Multilanguage supported platform, anyone can easily become a member (Durack, 2017) and create an account based on his/her own position in a proposed class; to become a teacher, one should click ‘I’m a teacher’ label. Alternately, as a student, one should click ‘I’m a Student’ label. In addition, a parent can also have access into the class to control his/her child’s activities in the created class by clicking ‘I’m Parent’ label. Just like another social media, a potential user is required to sign up. As a student, after choosing a student option on the screen, then the student signs up form appears on the screen to be filled and completed.

As a student, s/he is required to write down a unique six characters group code (given by the teacher), username, first name, last name, and password then click the Sign-Up label. As easy as pie, a student is then listed to participate in a class in just a few minutes. When a student wants to join another class on Edmodo, s/he simply uses “joint group” button within the student interface then fills in with a given six-digit unique group code of Edmodo. As a teacher, s/he is also required to complete the sign-up form as a student does, but an email account instead of group code slot is a mandatory to be filled.
In order for a parent to get access into the Edmodo system, a child shall give a unique parent code that consists of six or seven-digit code that appears on the left bottom side of the student interface. A parent then completes the form with an email account, parent code, first name, last name, and password as the form seen in figure 5. After having verified a child and a parent relationship, parent interface then appears in the class to oversee his/her child activities and progress.

While as a teacher, when s/he gets in the system she is still required to create a group or a class by naming the group. To properly use the system as a class s/he must recognize several functions range from sending notes, sending alerts, creating small groups, delete group, sending assignments, making and sending quiz, sending out poll, posting video, attaching data, loading assignment, filtering incoming responses, using a library, grading and archiving of student records.
The most frequently used features of Edmodo are sending out a note, creating an assignment and making quizzes. To activate these functions, one should click the *Home* menu. To send out note, a teacher simply click Note button then the note box immediately appears in which a teacher can write down his/her presentation or instruction as seen in Figure 6. In order to create a quiz, a teacher must click ‘Quiz’ button then click ‘Create a Quiz’. When it is done, the following screen appears. At the beginning, the teacher should write the title, time limit the provided boxes. Next, a teacher must decide which type of five different quizzes (Multiple Choice, True/False, Short Answer, Fill in the blank, and matching) s/he wants to create as seen in Figure 7.

In order to check the students’ progress, a teacher should click Progress. When the progress button is clicked, the following statistical figure of students’ performance appears.
To administer the students’ score, a teacher simply clicks ‘Export’ button to transform the format data into Excel spreadsheets format where the teacher can continue work in the targeted spreadsheet for a class assessment report. After clicking the ‘Export’ button, the spreadsheet format report instantly appears on the screen. One of the most resourceful functions of Edmodo is the use of the Library menu, in which one can manage the resources (creating, storing, and disseminating) data and information for instructional purposes. All the menus are on the top left side of the header, Home windowed with the home picture, Progress windowed with statistics picture, and Library with book picture.

4. Results

4.1. The Usage of Edmodo

As noted in the researcher’s diary, in the early period of the training, most participants were hesitating to respond to the teacher’s posts just because they were afraid of making mistakes and because they did not know how to. There has been no progress in terms of their responses to teacher’s posts until they were asked to respond to any posts sent out by the teacher after a week period of time. To encourage student engagement, the teacher or the instructor told them that Edmodo attracts students, which is just like any other social media, such as Facebook. As they were told to get done, when someone sent outposts, the member should respond to the posts to show his/her interest by being participated in the discussions or any other learning activities. Quizzes that consist of four different types, multiple choice, short answer, fill in gaps, and matching are very attractive for the teacher of English trainees when they were exposed with these quizzes during the training because this feature can facilitate the need of English in making evaluations. As one research participant said, “these types of quizzes will decrease my workload as a teacher because I can send out quizzes in many different types of evaluation without a hard work as Edmodo will do the assessment and grading administration”. Another interesting part which motivates the research participants to use Edmodo is an easy way to attach files, to make a link and to take resources from the library for a post. Another participant said “I like to watch videos posted by a teacher, particularly English lessons because learning English with video I can see clearly an expression of the native speaker when using language. Also, I can repeat many times as I like (meaning do drills as needed)” When they were asked problems they face when they are trying to sign up as there to create an online class, one of the representative responses says “my problem is it difficult for me to sign up as a teacher after being as a student”. Another problem which was raised by most participants is the insufficient capacity of bandwidth and interrupted electricity supply. As one participant mentioned, “among the problems we face to get into an online class are it’s hard to reach signal in the schools and electricity is sometimes interrupted”.

Figure 8. Portfolio of Edmodo trainees’ progress.
4.2 Participants’ Perception

<table>
<thead>
<tr>
<th>Technical Aspects</th>
<th>M</th>
<th>SD</th>
<th>Features</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Log in and log out quickly</td>
<td>4.18</td>
<td>0.60</td>
<td>Like using Edmodo</td>
<td>4.27</td>
<td>0.64</td>
</tr>
<tr>
<td>Register easily</td>
<td>3.81</td>
<td>0.60</td>
<td>Enjoy using Edmodo</td>
<td>4.36</td>
<td>0.67</td>
</tr>
<tr>
<td>Easy steps of doing quizzes</td>
<td>4.09</td>
<td>0.53</td>
<td>Pleased with doing quizzes</td>
<td>4.18</td>
<td>0.75</td>
</tr>
<tr>
<td>Load any page quickly</td>
<td>3.81</td>
<td>0.40</td>
<td>Like submitting works and getting feedbacks/progress report</td>
<td>3.81</td>
<td>0.60</td>
</tr>
<tr>
<td>Never fail</td>
<td>3.9</td>
<td>0.70</td>
<td>Like reviewing lessons posted by the teacher</td>
<td>4.09</td>
<td>0.53</td>
</tr>
<tr>
<td>Attach a file easily</td>
<td>4.0</td>
<td>0.63</td>
<td>Pleased with posting their work in class</td>
<td>4.18</td>
<td>0.60</td>
</tr>
<tr>
<td>Submit/post easily</td>
<td>4.2</td>
<td>0.46</td>
<td>Pleased with studying their classmates’ work</td>
<td>4.09</td>
<td>0.30</td>
</tr>
<tr>
<td>Post messages/files quickly</td>
<td>4.18</td>
<td>0.60</td>
<td>Enjoy voting</td>
<td>4.45</td>
<td>0.52</td>
</tr>
<tr>
<td>Vote easily</td>
<td>4.0</td>
<td>0.63</td>
<td>Happy with consulting the teacher personally</td>
<td>4.0</td>
<td>0.44</td>
</tr>
<tr>
<td>Download quickly</td>
<td>4.36</td>
<td>0.67</td>
<td>Like having an online class via Edmodo</td>
<td>4.27</td>
<td>0.46</td>
</tr>
</tbody>
</table>

Table 1. Participants’ perception of technical aspects and features in using Edmodo.

Table 1 presents the overall means (M) and standard deviation (SD) of both technical aspects and features in this study. Overall, participants agreed that they could use all the functions (register, doing quizzes, load page, attach files, submit, post, post messages/files, and vote) of Edmodo quickly and easily. The participants also on average agreed that they never failed, even though the SD value is at 0.70 which could suggest that the values are not well distributed meaning some of the participants still sometimes find difficulties. From the response of close and open-ended questions, we found that the participants who stand on the neutral perception admit that once, s/he failed when trying to log into Edmodo. The interview results show that they like reviewing lessons using video posted by the instructor. Also, with the multimedia post on Edmodo, they can do drill activities repeatedly. From their response, we also found that they also like to use the library feature on Edmodo, with it, they can share their resources easily in the class and even to other classes or groups.

In terms of features, on average the participants perceived positively towards all features on Edmodo. From Table 1, it is shown on average the participants strongly agreed that they like using and enjoying Edmodo (M = 4.27, SD = 0.64; M = 4.36, SD = 0.67). They also strongly agreed that they enjoy voting and like having an online class via Edmodo at the rate of M = 4.45, SD = 0.52, M = 4.27, SD = 0.46 consecutively. Moreover, the participants on average agreed that they are pleased doing quizzes, posting their work to the class, pleased with studying their classmate’s work, like having an online class via Edmodo, happy with consulting the teacher personally. These findings suggest that most participants are highly motivated to learn through Edmodo and therefore will continue using it.

5. Discussion

This study investigates the use of Edmodo among the Edmodo training participants who mostly of English teachers at two senior high schools representing high schools in the Kendari City of Indonesia. The instruments of the study include instructor’s diary, questionnaire and direct interview with the participants. The findings from the study indicate that few of the participants had been exposed previously with Edmodo, but they discontinue using it due to the lack of knowledge on all functions and features available on that system. But, when they were trained through both face to face and online class with Edmodo training conducted from August 1st to 15th September 2016 it was found that they on average agreed that all the functions on Edmodo are employed easily and quickly. The finding is somewhat different of Konchan’s finding which shows that on average the students who had trained Edmodo are, on average strongly agreed that they could use easily and quickly all seven functions on Edmodo. However, the current study confirms 3 out of 10 aspects perceived by the participants of the previous study by Kongchan (2012), i.e., the participants strongly agreed that they like using Edmodo, enjoy using Edmodo, and enjoy voting. The current study also agrees with the previous finding that the participants agreed that they are happy with consulting the teachers personally. The differences towards the results are subject to the different context of culture, social, even learning styles of the participants from two different countries and information or exposure with the use of Edmodo they received. As mentioned by Sean (2011) in order to implement the e-learning successfully, the learners should be provided with enough information and knowledge they need.
The results of the current study are also in line with the results of the previous studies conducted for examples, by Enrique (2014); Warawudi (2017); Shinji (2016); Purnawarman (2014); Balusubramanian (2014); Emekci (2016), and Alkatiri (2015) which all agree on the effectiveness of using Edmodo as a supplementary tool in teaching and learning. All the studies agree that Edmodo is a learning management system which is easily accessed and conveniently used even by the non-digital native users. Hence, this tool meets the principles of effective website for instructional purposes as suggested by Cook et al. (2013), i.e., clear, concise, and consistent. However, in order to continue using Edmodo, teachers as well as their students are still needed to be supported by technical services because most users in developing countries as mentioned by Alkarang (2013) are not familiar with e-learning technology and procedures.

6. Conclusion

In conclusion, Edmodo can be used by teachers as a medium of instruction for activities outside of the face to face mode of learning. The system is easy to use, free of charge and is easy to access, thereby, students who learn with it will be highly engaged and motivated for its convenience and fun in learning. In order to effectively use it, the potential users must be trained previously based on the guide (Edmodo 2016) to make them aware of technicalities and features that are available to take full advantage of the system. With the potential benefits of using the system, it is, therefore, recommended that the system is applied to schools or universities in a more efficient and effective way of learning.

7. Acknowledgment

The authors gratefully acknowledged the financial support donated in the form of "IbM" (the Science and Technology for Community) program by the Directorate General of Research, Technology and Higher Education Empowerment of the Republic of Indonesia. The authors also would like to appreciate the school principals and the teachers of SMAN1 and MAN1 of Kendari for their support and active participation during the program.

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