

THE EFFECTS OF EDMODO MOBILE APP ON STUDENTS' ENGLISH VOCABULARY LEARNING FOR HIGH SCHOOL STUDENTS

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ABSTRACT— Every learner needs to develop their vocabulary in order to communicate in English. However, mastering English vocabulary is a difficult process. The programs that teachers use to aid students in this vocabulary acquisition process might be varied. The social networking site Edmodo is one of those programs. The purpose of this study is to determine how Edmodo might be utilized to teach vocabulary and how Nguyen Huu Canh High School students feel about using the Edmodo mobile app for vocabulary learning. Eighty students from the research site in the province of An Giang took part in this study. A questionnaire, an interview, a pretest, and a posttest were used to determine the effect of Edmodo activities on students' vocabulary learning and perceptions. The results of the research indicate that Edmodo supports students' vocabulary development and that students have favorable opinions about using Edmodo.

Key words — Mobile learning, Edmodo, Teaching vocabulary, Constructivism, Educational technology.

I. INTRODUCTION

Previously, mobile technologies were utilized to define mobile learning (Crompton & Traxler, 2018). But as more people own mobile and wireless devices like iPhones, iPads, tablets, and phablets, students are increasingly more actively involved in learning resources and activities that are pertinent to their own requirements. Therefore, Suki and Suki (2011) define mobile learning as the fusion of mobile computing and electronic learning (e-learning): anytime, everywhere access to resources, powerful learning support, rich interactivity, and performance-based evaluation (Suki & Suki, 2011). The second in-depth definition offered by Keskin and Metcalf states that "M-learning" is any activity that enables people to be more productive when consuming, interacting with, or creating information by using a small digital portable device that they carry around with them frequently, has dependable connectivity, and fits in their pocket or purse (Keskin & Metcalf, 2011). M-learning also makes use of mobile, portable devices like smartphones, tablet PCs, netbooks, cellphones, and even gigantic ultrabooks that connect to the Internet via wireless networks. Therefore, it is not necessary to be prevalent in a specific area (Ward & Beal, 2013). According to these researchers, M-learning is learning that develops via personal connection. This idea stimulates discussion of concerns relating to the use of mobile devices since, in Nyir's words, "mobile communication" means better daily contact; also, just as our everyday discourse is interdisciplinary, so is M-learning (Nyir, as cited in Abu-Al-Aish, 2014). In particular, m-learning makes it easier for students to communicate with one another by enabling them to connect and send messages via SMS and MMS as well as to share training materials and transfer files over Bluetooth (Abu-Al-Aish, 2014). M-learning can be viewed as a cutting-edge teaching and learning approach to improve English vocabulary development because it is an engaging and interactive learning tool that equips students with digital literacy for their future studies (Abu-Al-Aish, 2014). According to Vu (2016), mobile learning is now described as education made possible by mobile devices that allow students to learn whenever they want and from any location at their convenience.

Although numerous studies on the effects of mobile apps on students' English-language acquisition have been conducted, they often concentrate on the benefits of these platforms and frequently involve higher education students. Few studies specifically identified Edmodo's shortcomings for language instruction in general. Rarely were these concerns with high school students taken into consideration in the Vietnam context. Few of them examined how prepared high school students were to use mobile apps, particularly those in rural places like the Mekong delta of Vietnam. As a result, it can be difficult for most schools, especially those in rural areas of the nation, to properly utilize ICT in the teaching and learning of English vocabulary. Teachers struggle to integrate ICT into their classes to meet the needs of their students even when the school is well-equipped with computer labs and LCDs. The majority of students also own smartphones, which can be utilized for communication and education in a variety of contexts. Because of this, educators must effectively utilize the technology that students bring to class.

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prepared high school students were for using mobile apps, particularly those in rural places like the Mekong delta of Vietnam. As a result, it can be difficult for most schools, especially those in rural areas of the country, to properly utilize ICT in the teaching and learning of English vocabulary. Teachers struggle to integrate ICT into their classes to meet the needs of their students even when the school is well-equipped with computer labs and LCDs. The majority of students also own smartphones, which can be utilized for communication and education in a variety of contexts. Because of this, educators should effectively utilize the technology that students bring to class. Therefore, this study tries to enhance the usefulness of mobile-mediated learning aids in English language teaching by exploring of the usage of mobile devices in the classroom with the following questions:

- To what extent does the Edmodo mobile app affect Vietnamese high school students' learning of English vocabulary?
- How do students perceive using Edmodo mobile app in learning English vocabulary?

II. LITERATURE REVIEW

A. VOCABULARY IN LANGUAGE TEACHING AND LEARNING

Successful English vocabulary development is a crucial component of learning English in ESL. Suyono contends that just as bricks are essential in the construction of a house, vocabulary is necessary in learning a language. A language cannot be learned without first developing vocabulary. Thus, vocabulary instruction has become a crucial component of language instruction (Suyono, 2018). The term "vocabulary mastery" refers to a thorough understanding of a language's vocabulary, including its meanings, spoken and written forms, grammar, word origin, collocations, spoken and written word registers, connotations or linkages, and frequency (Thornbury, as cited in Suyono, 2018).

According to Diamond and Gutlohn, vocabulary instruction should be given to students directly or "explicitly" by teachers using lists of words, matching translational parallels, or more subtly or "implicit" techniques like word immersion when reading real texts (Suyono, 2018). In a similar vein, Nahk-bohk (2008) uses Korea's particular circumstance as an illustration of pieces. However, vocabulary education that incorporates multi-word items made up of two or more words is clarified by corpus linguistics and lexicology. Their research determined the significance of the relationships between them through the use of idioms, collocations, and other fixed or semi-fixed terms (Nahk-book, as cited in Suyono, 2018).

One important aspect of vocabulary learning approach has been provided by a Deylamsalehi study that examined the efficiency of Concept Mapping in vocabulary education for Iranian pre-university students. According to this study's author, Deylamsalehi, students can actively participate in word meaning construction by making word meanings and links evident. This concurs with McCarville's conclusion. He asserts that concept mapping serves as an effective memory organizer for usage in the future (McCarville, 1993). According to the study by Deylamsalehi (2015), "teachers should switch from traditional techniques of education like memorization of definitions to more intensive instruction targeted at creating richer, deeper word knowledge." By creating a vocabulary map, students can use categories to create a visual representation of a new term or subject and then use their existing vocabulary to expound on it. While comparing new words with previously learned words, learners can also integrate new words into conceptual networks that already exist. This approach appears to be more successful than asking students to search up words in dictionaries. Students can learn and remember new words, use new terminology, and comprehend linguistic differences by using concept maps (Deylamsalehi et al., 2015).

All of the aforementioned generally agrees with Paul Nation, a world authority on the subject of second language vocabulary, regarding vocabulary elements that should be taught. He contends that an in-depth understanding of a word will have eight components: the written form, pronunciation, grammatical behavior, collocations, register, associations, and frequency. He draws the conclusion that these many facets of word knowledge must be taken into consideration when teaching vocabulary (Nation, 1990, p. 31, as cited in Nunan, 2015).

B. EDUCATIONAL TECHNOLOGY FOR TEACHING VOCABULARY

The requirement to master vocabulary has changed people's learning preferences as 4.0 technology has advanced. They enjoy using their smartphones and online resources to practice their vocabulary and English grammar. Saeed and Neyadi (2007) used vocabulary-building activities in their classroom research. They note that gamification improves students' capacity for efficient word memorization. While interacting in the group, learners receive understandable input and are given the opportunity to clarify the meaning of words. The use of games also boosts students' desire to learn new words. The causes for this inspiration stem from the students' exposure to novel teaching and learning techniques as well as their implementation of those techniques through vocabulary drills. They come to the conclusion that the approach they used also enables students to

communicate with one another. Given that they have been accustomed to teacher-centered approaches for a while, they may find this to be unfamiliar. Giving students the chance to take on challenges via games stimulates them as well. To complete the tasks, they need to be focused, which helps to strengthen the students' mental work. The students had never done such things before, so they had to pay close attention to acquire the right answers (Saeed & Neyadi, 2007).

According to Turchyn (2020), students must increase their vocabulary in order to become fluent in speaking, listening, reading, and writing. Teachers ought to make an effort to increase students' vocabulary. It is a useful practice since giving the students precise instructions can help them comprehend what is required of them at each stage of the procedure. A new step in the learning process can be facilitated by such an easy procedure for the students' foundational knowledge. From his research on the value of online learning for vocabulary instruction, he also draws the conclusion that most students may experience some anxiety when learning new words online. However, he asserts that using various programs to acquire language has both advantages and disadvantages. It's thrilling on the one hand, but difficult on the other. Therefore, teachers should make online vocabulary classes more fun in an effort to pique students' interest in learning new terms and to inspire them. He recommends a variety of online tools for learning new words, including Quizlet, Kahoot, Wordily Wise, Mind Map, and others (Saeed & Neyadi, 2007).

The use of mobile devices in particular has been investigated in the context of learning as a result of how prevalent mobile phones have become in our daily lives. Additionally, this situation has significantly altered our behaviors, learning preferences, and outside-the-classroom strategies. Numerous researchers are interested in using mobile phones for language learning because of how popular and quickly they are becoming among teenagers (Fujimoto, 2012). In a similar spirit, Stockwell (2007) contends that students employed a mobile-based intelligent vocabulary tutor system in an advanced EFL class. They worked with the tutor on vocabulary exercises using a computer or a mobile device in a variety of task formats (Stockwell, 2007). The development of mobile language learning has led to a point where it is starting to leave the classroom and enter the real world. Mobile devices can help us provide a positive learning environment for our students, but before they can develop and flourish, there are still issues that need to be resolved. People's reluctance to try out new mobile gadgets is still a problem, although as attitudes shift, this may become less of a problem (Stockwell, 2010). In EFL classes, mobile assisted language learning has the potential to be a helpful constructivism tool (Hsu, 2013). Additionally, mobile learning enables students to contextualize their learning, collaborate more successfully, and access more information (Koole, 2009).

C. BENEFITS OF EDMODO FOR TEACHING VOCABULARY

For different users, including teachers, students, parents, and schools, Jeff O'Hara and Nick Borg created Edmodo in 2008 as a free and secure learning interface and mobile learning software. The website for this online platform is www.edmodo.com. This website seems similar to Facebook, but it is more private and secure due to the fact that only professors may create and manage accounts, and only students who get a group code and register in the group will be able to access and join it (Al-Kathiri, 2015). A learning management system like Edmodo makes it simple for instructors to set up and control online courses. Teachers and students can connect on the website and work together on teaching and learning projects (Al-Kathiri, 2015). For instance, teachers can create and distribute tests and assignments, give feedback, collect completed assignments, and award grades. They can also store and share content in the form of files and links, keep a class calendar, conduct polls, and send messages and SMS alerts to specific students or the entire class. In a similar manner to how they use Facebook, students can also collaborate on projects, turn in homework, assignments, and quizzes, check their grades, receive feedback, notes, and notifications from their teachers, and participate in poll voting.

Kong Chan conducted a study with 81 first-year students at the King Mongkut's University of Technology Thonburi, Thailand, using tools like a diary to record the teacher's use of Edmodo and their perceptions as well as a questionnaire to find out the opinions and recommendations of 17 teachers and the students about Edmodo. According to Kong Chan's study (2012), Edmodo is regarded as a top-notch and user-friendly social learning network that makes it easy to use as a tool to help students build an additional online classroom community (Kongchan, 2008). Wichadee conducted yet another quasi-experimental study that was tested in Thailand with the aim of developing a blended learning framework that uses Edmodo as a language learning tool and evaluating its efficacy in terms of oral proficiency, motivation, and attitude. Two courses, each with 42 second-year students, provided the examples. While the experimental group studied through face-to-face learning in class supported by online learning using Edmodo, the control group studied primarily through face-to-face instruction. The results show that while attitudes regarding the face-to-face learning paradigm were similar in both groups of students, those in the experimental group showed a favorable opinion of Edmodo. The results of this study have implications for English language teachers, encouraging them to think about how technology may support learning and help students reach higher academic outcomes (Kongchan, 2008).

Similar findings were found in another Asian nation, where an Indonesian researcher conducted research on students' perceptions of the use of online learning platforms in English as a Foreign Language (EFL) Classrooms with 40 participants from junior and senior high school students in Bandung, West Java, Indonesia. According to this study, using Edmodo for English teaching and learning is both productive and time-efficient. Despite having some concerns with Edmodo and Quipper, the majority of participants said that the online learning platforms were beneficial and may aid in improving their language proficiency, expanding their vocabulary, and understanding of the lesson's content. Data were gathered through interviews and questionnaires, and a mixed-methods technique was used to evaluate them (Saeed & Neyadi, 2007).

Similar research was done in Vietnam by Tran and Nguyen, who first presented the Edmodo website's design practices before testing out these vocabulary-learning activities on the experimental group. The pre-test and post-test results show a significant increase in vocabulary knowledge in the experimental group as compared to the control group. This study demonstrated that using Edmodo to teach and acquire English vocabulary is an efficient and useful strategy that English teachers can use in contexts like these (Thanh & Ngoc, 2018). The study could only examine the other aspects of using the websites to the learners' autonomy, the development of ICT skills, difficulties, and attitudes toward using ICT to learn vocabulary. It was limited to assessing the increase in students' vocabulary knowledge (meaning, usage, and collocation) (Al-Daihani et al., 2016).

III. METHODOLOGY

A. RESEARCH DESIGN

Due to its interest in determining the impact of exposure sequence and medium on the acquisition of subject-specific vocabulary, this study used a quasi-experimental methodology. The study was carried out at the Nguyen Huu Canh high school in the province of An Giang's Cho Moi town. One of our town's largest schools, Cho Moi Town School in An Giang Province is around 200 kilometers from Ho Chi Minh City and has a teaching staff of over 120 persons, including the administration board and teachers. With roughly 1,600 students, the school has 40 classes for three grades (10, 11, and 12). Two computer laboratories, one dedicated classroom for learning foreign languages, a computer set, a projector, a panel of headphones, and a voice-recording device are among the resources found in the school's 35 classrooms, which make up two-thirds of the total. Twelve educators trained from Ho Chi Minh City University of Pedagogy and Can Tho University make up the English department. Some of them have taught for more than 20 years, two of them have master's degrees in English teaching methodology, and the rest are young and inexperienced yet passionate. The school's instructors are all local residents. A senior high school admission exam in English, math, and literature is taken by junior high school students each year in June. The age range of the students at this school is from 16 to 18. Although the majority of these students are from rural areas, most of them have smartphones that they use for communication and learning. They haven't had the chance to speak with anyone who speaks English. As a result, teaching English is really challenging at the research site. The students also have to take roughly 13 required classes at once, and they appear to be more interested in math than English. Their desire to study English is hence not very strong.

80 students from the two tenth-grade classes of the academic year 2020–2021 at Nguyen Huu Canh high school in the province of An Giang participated in the study. 40 students were enrolled in each class. The participants were divided into two groups at random by the researcher using the random app that was downloaded from the Android store: a control group of 40 students and an experimental group of 40 students. The participants were also a convenience sample because study participants in the experimental groups had to have smartphones in order to participate. Table 1 lists the details of the individuals in both groups in relation to their numbers, sexual orientations, backgrounds, and lengths of time studying English.

		Control		Experimental		
1	Number		40		40	
2	Gender	Male	17	42.5 %	19	47.5%
		Female	23	57.5 %	21	52.5 %
3	Age	16	40	40		
4	English learning experience	5 years	16	40%	15	37.5%
		8 years	24	60%	25	62.5%

Table 1. Participants' characteristics

B. RESEARCH INSTRUMENTS

The research instruments included a pre-test and post-test on EFL students' vocabulary knowledge, a questionnaire, and an interview. After having permission from the head of the school, the researcher prepared the instruments to conduct the research. The first consisted of pre-and post-test to examine whether or not the Edmodo app is significantly effective in learning vocabulary. The second was composed of a questionnaire to identify the students' perceptions of the Edmodo app in learning vocabulary. The third was an interview. The researcher employed triangulation because a typical recommendation has been to select triangulation sources with varying biases and strengths to complement one another (Ward & Beal, 2013).

Following the Edmodo treatment, the researcher provided the experimental group participants a link to a questionnaire to learn about their experiences with the Edmodo app intervention in their vocabulary learning. The questionnaire consisted of 36 items divided into three themes: (1) Effectiveness of Edmodo app on vocabulary learning (items 1-10), (2) Perceptions of Edmodo app in collaboration and interaction (items 11-16), (3) Perceptions of Edmodo app in satisfaction with Edmodo app (items 17-23) via Edmodo app with a five-point Likert scale: (1) "strongly disagree," (2) "disagree," (3) "neutral," (4) "agree" or (5) "strongly agree" on the questionnaire.

This questionnaire was adapted from the questionnaire designed by (Kodriyah, 2015) and Al-Said (2015) since this study shared the same research's aims with these two studies. In addition, the participants in the three studies learned English as the foreign language. However, the researcher in this study had to adapt certain issues from the original ones so as to serve her purposes as well as to suit her students' background. The researcher combined the two authors' questionnaire items and then grouped the items into theme according to the previous studies mentioned. The questionnaire then translated into Vietnamese with the help of her supervisor and her colleague. To avoid any misunderstanding from the students, the researcher delivered a Vietnamese version of the questionnaire.

Following the questionnaire was a semi-structured interview to confirm the results of the questionnaire as well as to clarify the participants' perceptions of the Edmodo app. According to Oppenheim (1992), interviews engage and motivate respondents far more than questionnaires, and they are better at tackling more complex and open-ended topics than questionnaires. In-depth interviews can also be undertaken at a reasonable pace (Albuam & Oppenheim, 1993). Therefore, it is reasonable to use the interview technique because interviews and questionnaires can support and supplement each other to assess the students' responses regarding the exhibition of their perceptions of the Edmodo app.

IV. RESULTS AND DISCUSSION

A. INDEPENDENT SAMPLES T-TESTS

The results of the Independent T-test are shown in Table 2. Firstly, the Sig. Value is 0.528 (Sig. >.05), which was considerably larger than the value of 0.05 based on Levene's test for equality of variances. As a result, it is reasonable to conclude that the condition for equal variance was accomplished. Correspondingly, the Sig. (2-tailed) value is 0.153, more prominent than the alpha value of 0.05, derived from the T-test results for equality of means. Accordingly, the differences between the CG (Control Group) and EG (Experimental Group) means are not significant. In other words, they are considered similar, if not identical. In conclusion, before the treatment, the vocabulary competence of CG and EG were equivalent.

	F	Sig.	t	df	Sig. (2-tailed)	MD	Std. Error Df
Pre-tests	,402	,528	1,444	78	,153	-,11	,076
Results							

Table 2. The pre-test results

As shown in Table 3, after the treatment the mean scores of the control and experimental groups are significantly different, with 6.06 and 5.38, respectively. That is to say, after the treatment, the experimental group's mean score is 0.73 greater than that of the control group. The independent samples T-test for post-tests show that there is statistically significant difference between the experimental group (M=6.06, SD=0.72) and the control group (M=5.37, SD=0.36) with t=5.307, sig. value (2-tailed) = 0.00 < 0.05.

	F	Sig.	t	df	Sig. (2-tailed)	MD	Std. Error Df
Post-tests Results	16,398	,000	5,307	78	,000	,68	,128

Table 3. The post-test results

The improvement after the experiment is visually represented in Figure 1. This figure provides a clear improvement of pretest and post-test scores within EG following the treatment. In other words, Edmodo's impacts on participants' efficient outcomes on vocabulary acquisition were proven to be significant.

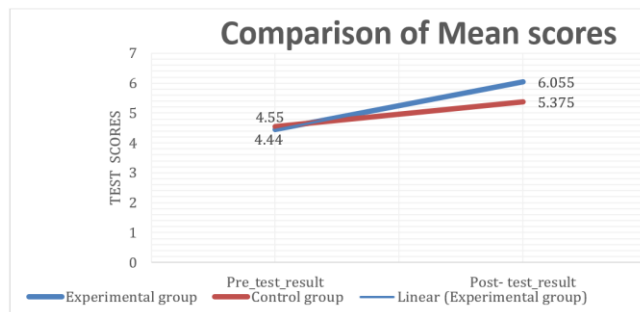


Figure 1. Comparison of means of pretest and posttest scores

B. QUESTIONNAIRE

The majority of participants, as shown in Figure 2, agreed that the Edmodo app was effective. 95 percent of participants, as shown in the graphic, believed that Edmodo activities helped students improve the efficacy of their learning. 65 percent of them strongly agreed, and 35 percent agreed, that Edmodo is a useful tool for learning. Only 5% of those surveyed indicated neutrality toward this question. It means that the majority of participants found Edmodo to be a useful tool for facilitating their learning and comprehension of the course. They feel that its ability to enhance conventional vocabulary learning by offering extra tasks outside of the classroom through Quiz, New Post, and Discovery is its most significant advantage. Compared to the other things in the group, it received the highest level of student agreement. 95 percent of the total is represented by this number. 62.5 percent of respondents approved and 32.5% strongly agreed with this statement. According to the graph, no students strongly disagreed or protested to the positive effects of the Edmodo app on their vocabulary growth. Additionally, nearly all students (> 80%) claimed that the Edmodo app increased their vocabulary quality by boosting vocabulary retention, obtaining rapid feedback, fostering self-learning skills, and enhancing self-learning abilities. Only 5% of individuals were still unsure about whether their vocabulary acquisition had progressed or not.

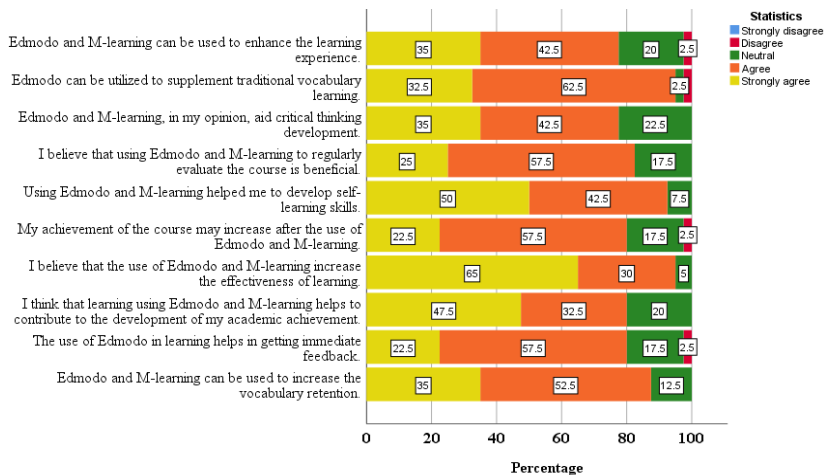


Figure 2. Effectiveness of Edmodo app on Vocabulary Learning

Figure 3 demonstrates that students agreed with the peer learning feature that "Edmodo and M-learning make it easy for isolated students to interact and contribute," with a mean score of 4.45, with 30% agreeing and 62.5 percent strongly agreeing. Additionally, more than 60% of students showed interest in this kind of involvement. Aspects like exchanging ideas and working with peers and teachers were crucial to take into account. At least 27.5 and 42.5 percent of students both agreed and strongly agreed. The information also demonstrated that students might use comments or messages to get clarification from their instructor and fellow students. Only a very small percentage of those who were impacted subsequently expressed reluctance to take part in Edmodo events. Fewer than 5% of disagreements and less than 25% of neutral answers result from these reactions. Users will better understand the course because they can review and reread the materials on Edmodo from anywhere in the world. 10% of participants indicated they were unsure about the ability to promote more dialogue and interaction. This proof was made possible by the fact that some students continue to think that activities requiring face-to-face interaction are much more advantageous than those involving internet engagement. They cannot, however, argue that they were not equally helped by online activities and traditional teaching in their learning.

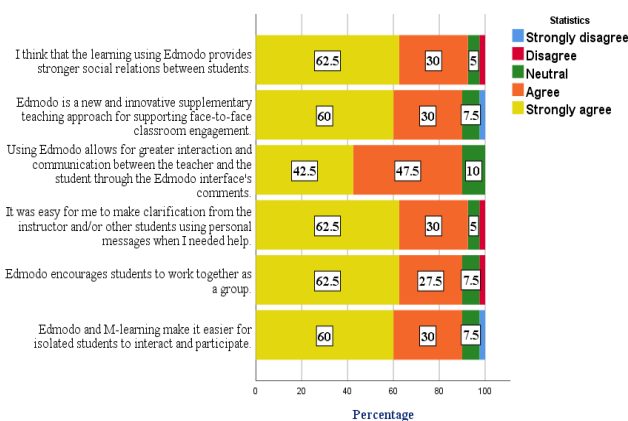


Figure 3. Perceptions of Edmodo in promoting interaction and collaboration

C. INTERVIEW

When asked how they felt about Edmodo, a vast majority of the students expressed good feelings. The majority of them expressed satisfaction with Edmodo's use in vocabulary classes. In general, they agree that this style of learning helped them greatly enhance their vocabulary. Furthermore, several of them stated that they were interested in utilizing Comment because it resembled Facebook comments. They might discuss the subjects mentioned or other concerns in English with their classmates.

"I believe Comment, where I can chat and discuss with everyone in my class, is cool. They attract my interest and help me to speak in English in order to convey my thoughts. When we debate anything on Edmodo, we have a lot of fun and learn a lot. We may even ask our teacher about the matter or anything else that has me confused." said P1, one of the people that was questioned. These findings were in the same vein as Thien et al. (2013). With its Facebook-like user interface, Edmodo fosters this sense of social presence through groups, Q&A, polls, and other features (Thien et al., 2013).

However, one student (P5) stated that she liked the app but was hesitant to remark on it because she was frightened of making a mistake and losing face. "I enjoy doing this language model since it is new to me, and I also enjoy using my smartphone, but I am nervous about making Edmodo comments. I'm having trouble deciding what to say, and I'm worried about making mistakes. I also don't know how to express myself; therefore, I don't want my friends to make fun of me. Rather than utilizing Comment, I frequently utilize Messaging to communicate with my teacher or peers", she explained. Proportionally, the students in the experimental group had a positive attitude on the use of Edmodo activities. They approved that Edmodo activities were satisfying and practical for developing their vocabulary learning.

Three of the six students (P2, P4, P5) further said that trying to comment was their most satisfactory section with Edmodo since it was a great communication tool that allowed them to connect well, had functionality comparable to Facebook, and allowed them and their instructor to exchange ideas by making comments. "I can have real-time talks thanks to the comment participation," said P5. One of the three students above (P2) remarked, "It is essential to understand each other and gain the new ideas from my friends in this way." "I can improve my vocabulary and sentence patterns through talking to my peers., with this interesting platform, I can learn a lot from my friends and my teacher." (P4).

Likewise, participants, P1 and P3, preferred the Discovery area, particularly the search engine, since it allowed them to locate photos, video clips, and numerous postings from others all over the world relevant to their interests. They may also discover additional resources for themselves or be introduced by their instructor, who might lead them by searching for these materials ahead of time and bringing them to his or her class to follow. "My vocabulary is considerably improved thanks to receiving a variety of sources to learn vocabulary from my teacher and friends. I am encouraged when they supplement my learning. As a result, my learning becomes better and better." (P1)

Additionally, the last student perceived Quizzes as an effective assessment tool that triggered their attention. Quizzes are clearly designed to assist students in succeeding in online learning contexts. "Quizzes benefits me in many ways. I can develop better vocabulary retention due to taking quizzes to check my memory," said P6.

Ultimately, six respondents grabbed all four activities, indicating that students appreciate working with these activities. This also emphasizes the importance of using the Edmodo app to improve students' vocabulary acquisition. Despite the fact that these participants rank the activities in a variety of ways, they all enjoy them in general.

Although some students still experienced difficulties, it was clear that all students saw an increase in their ability to use Edmodo activities. Five of the six students interviewed agreed that they wished to study more using Edmodo since the activities helped them improve their language over time. "I wanted to study vocabulary from Edmodo since it is highly essential for every student learning English," one student said clearly (P3). "I saw a better increase in my learning after using Edmodo." (P4). Students were not only able to boost their vocabulary owing to Edmodo, but they were also more willing to make an effort to study English. All in all, Edmodo activities had positive effects on students' learning. After the experiment, they all felt pleased with their achievement.

The third question was used to find out students' attitudes and motivation toward vocabulary learning. Overall, it is interesting to note that most of the students responded positively to the question. Four of them who revealed that they got involved and were more interested in learning vocabulary with Edmodo always finished the online assignments. They also began logging into the site more frequently.

"I was a very inactive student, and I was not interested in English. At first, I tended to do exercises for nothing but for only grades. However, when I studied with Edmodo, I felt better and was more confident in learning English. This is because the Edmodo app allows me to use vocabulary more frequently than in traditional class. It brought me a lot of fun and happiness through playing vocabulary games via Quizzes" (P5 and P6) shared that Edmodo activities motivate them to become autonomous learners. In addition, the rest respondents also had the same point of view except P1, who had the highest score in the test. However, three out of six interviewees revealed that sometimes they cheated by discussing the assignment privately not to recognize the teacher. The reason can trace this that Edmodo helped them search for anything they needed online through a search engine while doing the assignment. Therefore, that issue can be regarded as one drawback of Edmodo activities as an assessment tool. This finding plays an essential role in contributing to the findings of several previous researchers, namely Kerawalla et al. (2007); Livingstone (2007) in particular. Learners may access materials via m-learning from their homes, on the go, or anywhere else, and they can learn at their own pace. They can work whenever and wherever they choose, making them feel more relaxed, accessible, comfortable, and adaptable. As a result, the flexibility and personalized settings provided by m-learning increase learners' enthusiasm and engagement. Students, on the other hand, occasionally use mobile devices for purposes unrelated to the course, such as surfing the web, playing games, chatting, and so on, and as a result, they lose their focus on the topic, and they are distracted (Kerawalla et al. 2007; Livingstone, 2007, as cited in (Kilis, 2013).

As all the results suggest, most of the students were as autonomous as possible while completing assignments and doing exercises given. Therefore, Edmodo activities did add to the learners' motivation and attitudes to some level.

V. CONCLUSION

Test results in this study demonstrated how effective the Edmodo mobile app was for learning vocabulary. Most of these students struggled from the start to utilize vocabulary effectively in terms of phonetics, meaning, collocations, and idioms. As a result, upon taking the pretest, they had trouble in these. Both sets of students received many poor scores. The students in the experimental group, however, scored higher on their posttest after using the Edmodo mobile app to learn vocabulary, and they were especially more comfortable using it to communicate. This development is the result of the vocabulary study course's use of Edmodo activities.

Besides, the study found that many students had favorable opinions of the Edmodo mobile app using a well-designed questionnaire and interviews. Even though they ran across some difficulties while using the Edmodo mobile app, the majority of them found it to be enjoyable. The results of the interviews also indicated that Edmodo could aid in student learning. The program is easy to use, affordable, and available whenever and wherever students are. Additionally, Edmodo is helpful for discussing the course with teachers and other classmates. The improvement of collaboration and interaction between the teacher and students as well as amongst students is highlighted as one of the benefits. Additionally, the majority of students said that the Edmodo mobile app activities inspired them to communicate in English and drove them to learn vocabulary.

The study also discovered that students' vocabulary improved when using the Edmodo mobile app. Additionally, the Edmodo mobile app-based design did enhance the learning experience for students. In order to motivate students, the teacher should exploit these benefits. As a result, it is possible to construct a vocabulary course using the Edmodo mobile app and execute it for many students as well as teach other language skills like writing, reading, or grammar.

VI. REFERENCES

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