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Blended Online EFL Activities in MOODLE for Higher Education: Students' Perceptions and Performance Impact

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ABSTRACT

A blended learning environment is becoming more and more important in all subject areas, especially language education. This study is conducted to investigate the effects of blended EFL writing activities on students' perceptions and writing performance. This study employs both quantitative and qualitative research methods. An experiment (n=40) was conducted with two groups of English majors having the same curriculum, course-book, facilities for 15 weeks. The experimental group takes weekly writing activities online while the control group does not. After the experiment, the experiment group was surveyed (n=20) and interviewed (n=12). Independent samples T-tests show that the experimental group doing their writing activities in a blended environment performs better than the control group doing those activities on paper. The questionnaire and interview data further confirm that students have positive perceptions of EFL writing activities in blended classes. It is suggested that EFL students should be given online writing activities blended with their traditional sessions. Designing interesting writing tasks, providing good topics for discussion, creating a more interactive online environment that boosts collaborative learning are good ways to motivate students and improve student performance.

Keywords: Blended learning, EFL writing, Moodle, Computer-Assisted Language Learning.

1. INTRODUCTION

Strong writing skills can be developed in English through persistence, practice, hard work, and dedication to the writing process. However, the question of how to motive students to write effectively in English is one of the most persistent problems that all EFL teachers face in their classes. To make things worse, the net citizens today have difficulties concentrating on tasks in traditional learning designs [1,2,4,67]. Although a lot of researchers have investigated the effectiveness of blended teaching for language classes [11,7,12,10,5,6,8], teaching writing with

b. What are the students' perceptions of the use of blended EFL writing activities on Moodle in teaching and learning writing? the support of Moodle platform is still underexplored considering the huge potential Moodle activities have to offer writing classes. In the teaching context of Vietnam, where Moodle has only recently found its way into tertiary language education, there is strong demand for research-based evidence to inform language teachers of the best practices. As a consequence, this research attempts to address the following questions by focusing on blended writing tasks on Moodle for EFL students in Vietnam:

a. To what extent do blended EFL writing activities on Moodle enhance students' writing performance?

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2. LITERATURE REVIEW

2.1 Defining blended learning

Blended learning is the synthesis of various pedagogical or instructional methods, e.g., self-paced, collaborative, learning supported by tutors, or traditional teaching in classrooms. It is an organized educational program in which students acquire knowledge in part via the use of digital and online media. Although blended learning has elements of both conventional face-to-face and online education, it is not binary in nature. Rather than that, this mode of learning is a synthesis of methods from both ends of the continuum into a single coherent model of learning. Other researchers stress the 'meaningful combination' of online and face-to-face learning [22,7,8]. Rather than that, blended learning is not a monolithic linear method of instruction. In terms of technology, blended learning refers to a collection of web-based educational technologies that enable students to study completely remotely and engage with the curriculum through an online learning management system. Although views on what should be included in the scope of blended learning have varied considerably, the following traits stand out:

- Blended learning mixes some kind of online learning with face-to-face contact;
- A blended learning strategy promotes students' independence. Students may study independently and use the information and tools offered in the most effective manner for them.
- Peer contact is critical. Whether or whether students attending online courses thrive is highly dependent on their level of interaction with other individuals in the online environment.
- Availability of learner assistance is needed for online activities. Trainers participating in these programs often provide all necessary assistance and support to learners via both face-to-face sessions and online solutions.

2.2 Blended learning in Second Language Acquisition

The subject of Computer Assisted Language Learning (CALL) has been widely studied since its inception in the 1960s. Thus far, themes and difficulties in this area have included the usage, disadvantages, and benefits of CALL technology, as well as the need for teacher training [30-34], have been well explored. They also show that CALL is very much alive and an independent research field. Lafford [35] and Daniels et al. [36] discuss the standardization of computer-assisted language learning. They suggested that CALL would

be widespread only if it becomes "invisible learning, incorporated in everyday practice and thus' normalized". For a long period of time, renowned CALL researchers avoided the term "blended learning." They started openly referring to 'blended learning' as a method for language acquisition only in the past decade. To further muddle the waters, the phrase "hybrid learning" [37–39] has been used to refer to what we now refer to as blended learning. Recently, an increasing number of research papers in language education has focused on blended learning. Table 1 summarizes the most often studied topics and factors in the application of blended learning for second language acquisition.

Table 1. Popular themes and variables investigated in blended language learning

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|---|--|
| Themes and variables | Studies |
| Student computer skills | Abdul Rahman, 2018; Le et al., 2019; Mudure-Iacob, 2019; Patmanthara & Hidayat, 2018. |
| Student perception | Asri Humaira et al., 2019; Hidayat et al., 2019; Hughes et al., 2017; Manwaring et al., 2017; Zulkanain et al., 2017. |
| Teacher perception | Kihoza et al., 2020; Rasmitadila et al., 2020; Zilka et al., 2018; Linh & Vu, 2019b |
| Teacher training and support | Breddermann et al., 2016; Hajji et al., 2016; Langset et al., 2018; Qasem & Viswanathappa, 2016; Sunardi et al., 2016; Taylor et al., 2018; Vu, 2006; Vu & Anh, 2014 |
| Impact on learners' performance | Bader Al Bataineh et al., 2019; Huang, 2019; Kurucova et al., 2018; Sabti et al., 2019; Wichadee, 2018; Linh & Vu, 2019a |
| Assessment in blended language learning | Capone et al., 2017; Albiladi & Alshareef, 2019; Vymetalkova & Milkova, 2019; Bader Al Bataineh et al., 2019; Bataineh & Mayyas, 2017; Putri et al., 2019; |



2.3 Teaching writing in a blended environment

Moodle, Blackboard, Canvas, Twitter, and Facebook are replacing IRC and instant messaging at a fast pace. Numerous examples include the usage of forums and webpages, wikis, and student-created interactive presentations. Schulze and Liebscher [74] described their use of computer technology to facilitate a hybrid intermediate-level German writing course that included "email exchanges, synchronous chat, and discussion boards" in addition to "online study with interactive language exercises and other electronic materials." (p. 554).

Additionally, several research compared face-to-face (FTF) training versus a combination of FTF and computer-based instruction. The majority of these studies found no statistically significant difference between the comparison and control groups on a number of outcomes [75-79]. On the other hand, other research indicate that there are considerable variations in writing ability, with blended learning groups exceeding conventional learning groups in terms of writing abilities. Miyazoe and Anderson [90], for example, propose that writing may be taught in a mixed-ability setting. The researchers studied 61 EFL students at a Tokyo university who utilized forums, blogs, and wikis to participate in weekly FTF instruction and out-of-class online writing projects. The results indicated that participants improved their capacity to differentiate between different forms of English writing and gained favorable attitudes about the blended learning course. Numerous studies have shown that the FTF control groups outperformed the FTF group in the ability areas of voice, oral fluency, vocabulary, listening and reading comprehension, and grammar. Recently, the focus has shifted to the integration of blended learning within language instruction. However, little attention is given to how to teach English writing effectively using the capabilities of the Moodle platform.

2.4 Moodle implementation in language teaching

Huy et al. [1], Linh & Vu [23], Medina [15], Robertson [88], and Whitelock-Wainwright et al. [8] are all examples of researchers who are interested in the effect of blended education on students' writing performance. Robertson [88] investigated integrating a learning management system (LMS) such as Moodle into an existing constructivist-pedagogical EFL writing program. He said that by incorporating Moodle's content management system (CMS) technology into the writing course, instructors get organizational, implementation, distribution, communication, and

evaluation benefits. Hsieh [95], a researcher with a similar objective, investigated Moodle's use in the Taiwanese context of an EFL writing course at Chung Hua University. His results demonstrate that Moodle is a very effective tool for English teaching and learning. Through the complete statistics report, instructors may efficiently organize instructional materials, establish communication channels, and gather contact information for students using Moodle's writing capabilities.

Moodle activities for writing were also investigated by Miyazoe & Anderson [90] informal university education. 61 participants from three courses at a Tokyo university were surveyed, interviewed, and analyzed using a mixed-methods approach that included survey, interview, and text analysis. The findings generally indicated that the Moodle integrated writing course had a beneficial impact. The study showed, in particular, students' positive attitudes about blended learning. Qualitative text analysis of works revealed that students had improved their capacity to differentiate between English writing styles. The interview script analysis revealed the many advantages students felt from each activity.

Considered as an innovation in language teaching, Moodle blended learning activities were also examined by Adas & Bakir [91] with 60 participants. Thirty students in the experimental group completed the chosen course using a combination of blended learning and online assistance. They created online assignments and conversations using Moodle as a platform. Writing abilities were assessed pre-and post-test, with emphasis on the major components of writing such as paragraph sequence, coherence, punctuation, grammar, spelling, and capitalization. Following the trial, the researcher discovered a substantial increase in the experimental group's accomplishment scores. They also enjoyed a lot of interaction during instructions and illustrations technology. They showed significant improvement in writing topic sentences, spelling and grammar, punctuation marks, and capitalization. Additionally, the results showed the advantages of combining blended learning with conventional techniques for improving writing abilities.

3. METHODOLOGY

3.1 Research design

The purpose of this study was to determine the effect of Moodle writing exercises on the writing performance of advanced English students at the research location. Two groups, one experimental (EG) and one control (CG), were randomly assigned to the



experiment throughout the 10-week research study. Both groups complete a pretest before the experiment. CG and EG share many characteristics throughout the trial, including curriculum, coursebook, equipment, and face-to-face teaching techniques. The primary difference between these groups was that EG completed their writing tasks on the Moodle platform while CG completed them on paper. Following the experiment, a post-test with the same degree of difficulty was given to ascertain the differences in the outcomes of these two groups. Students' views of their mixed writing activities on the Moodle platform were analyzed using a questionnaire and an interview.

3.2 Research sample

Participants in this research during the first semester of the 2018 school year were 40 freshmen from two Academic Writing classes. This is the study site's first writing course in the Faculty of Social Sciences and Humanities' English Language Associate program. Because the researcher was responsible for teaching these two classes and lacked the authorization to choose other courses, convenience sampling was utilized. The researchers randomly assigned two groups of participants, including 20 students for CG and 20 students for EG, to each.

 Table 2

 General information of participants before the treatment

| Group | N | Male | Female | Years of English learning |
|--------------|----|------|--------|---------------------------|
| Control | 20 | 6 | 14 | 7,5 years |
| | | 30% | 70% | |
| Experimental | 20 | 5 | 15 | 7,5 years |
| • | | 25% | 75% | |

Table 2 provides more information about the research sample. The CG consisted of six males (30%) and 14 females (70%), whilst the EG had five males (25%) and 15 females (75%). From past studies [92–94], gender differences can influence the development of writing performance and learning. Therefore, the variations among CG in the proportion of males and females may mislead the study result. The number was small, however, so it could be considered negligible. The participants from the two groups were very young in terms of age, and incidentally, all of them were 19 years old. Age can affect the learning of writing or the effect of mixed learning. However, the age distribution of the two groups in this research was homogeneous. It is certain that it had no effect on the result of this research. Given the participants' prior experiences with English learning, all participants began studying the language in sixth grade, implying that they had seven and a half years of familiarity with the language. Therefore, it could be said that the English skills of the participants in each group were not very different or nearly the same.

In summary, CG and EG were almost identical in terms of number, gender, age, and English learning experience or competence.

3.3 Research Instrument and Procedure

All classes have used the same syllabus and teaching methods. Nevertheless, for homework, the CG participants were given the assignments to do by themselves at home, while the EG participants had to complete their online homework developed on Moodle with four main activities: chat, web, journal, and workshop.

To collect quantitative data, pretests and post-tests were planned for two groups in the form of writing. Each test consisted of two tasks of writing, similar in difficulty level. The participants are able to choose the writing topics they are more familiar with. This might prevent diversion from the topics and help assess the writing output of the participants. The evaluations for each test were carried out by two independent raters and cross-checked with the Pearson correlation analysis. Additionally, the researchers adjusted Hsieh's [95] questionnaire to gather participants' perspectives on Moodle activities. A Likert-type scale with five response alternatives was utilized in the questionnaire: strongly disagree to strongly disagree, disagree to neutral, agree to agree, and strongly agree. Prior to distribution, the questionnaire was piloted on five students.

Qualitative data is gathered during an in-depth interview. The interview was conducted to get a better understanding of the efficiency of Moodle-based learning activities and a thorough understanding of the issues encountered in the Moodle blended writing course. Additionally, the questionnaire was linked to the research's interview questions in order to contextualize the students' survey answers.

3.4 Data Analysis

The experimental and control groups were analyzed quantitatively using the Statistical Package for the Social Sciences (SPSS) version 22.0. The researcher used the Independent Samples t-Test to analyze the pretest and posttest data in this study. The purpose of this statistical analysis is to compare the mean scores of two unique groups in order to determine if there is statistical evidence of substantially different significance for the linked population. To guarantee that the writing abilities of the two groups were similar, the Independent samples t-Test was employed to evaluate and compare the outcomes of pretests administered to CG and EG. To determine the difference in post-test results between the two groups



and the treatment's effectiveness, an independent samples t-test was performed.

The questionnaire was used to investigate the students' perceptions of blended writing activities. Questionnaire data collected were processed and analyzed using the Social Sciences Statistics Package (SPSS) version 22. To check the reliability of the questionnaire, the Cronbach Alpha was calculated for two constructs mentioned in the questionnaire. Cronbach Alpha value for perceptions of blended writing activities and the impact of blended writing activities were 0.84 and 0.91, respectively.

Concerning the interviews, the researchers transcribed all accessible data in order to conduct textual analysis and then summarized and integrated the material using tables, matrices, and quotes. The responses were classified according to the impact of blended writing activities, cooperation and interaction during blended writing activities, and overall impressions of mixed writing activities.

4. RESULTS

4.1 Tests

Two instructors (rater A and rater B) graded the pretests for both CG and EG to verify the dependability of the pretest score for comparison, i.e., inter-rater reliability. The connection between rater A and rater B's pretest scores in CG is shown in Table 3, while the correlation between rater A and rater B's pretest scores in EG is shown in Table 4.

Correlation of pretests scores of the CG by two raters

| | | Pre_Rater1_CG | Pre_Rater2_CG |
|--------------------|------------------------|---------------------|---------------|
| Pre_Rater1_CG I | Pearson Correlation | 1 | .969** |
| S | Sig. (2-tailed) | | .000 |
| 1 | N | 20 | 20 |
| Pre_Rater2_CG | Pearson Correlation | .969** | 1 |
| | Sig. (2-tailed) | .000 | |
| 1 | N | 20 | 20 |
| **. Correlation is | significant at the 0.0 | 01 level (2-tailed) | |

 Table 4

 Correlation of pretests scores of the EG by two raters

| | | Pre Rater1 | |
|---------------|---------------------|------------|---------------|
| | | _EG | Pre_Rater2_EG |
| Pre_Rater1_EG | Pearson Correlation | 1 | .944** |
| | Sig. (2-tailed) | | .000 |
| | N | 20 | 20 |
| Pre_Rater2_EG | Pearson Correlation | .944** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 20 | 20 |

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As indicated in Table 3, there was a statistically significant correlation between rater A pretest scores and rater B ratings in CG (sig. (2-tailed) = .000.05.

Pearson's Connection Coefficient for CG (r= 0.969) indicates a good correlation between the CG pretest scores of rater A and rater B. As demonstrated in Table 4, there is a substantial correlation between rater A pretest scores and rater B EG scores, with sig. (2-tailed) =0.05 and Pearson Correlation Coefficient, r=.944. Thus, the high inter-rater correlation between the two raters' scores may be used to determine the pretest's inter-rater reliability. The scores for the subsequent analysis were chosen from rater A.

To verify that the underlying population follows a normal distribution, Normal Q-Q Plot has verified and graphically displayed the pretest scores of CG and EG. From the plots, it is obvious from Figure 1, that the scores of two classes were spread along a straight line, which means that the scores were normally distributed.

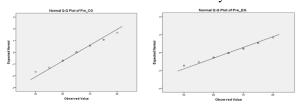


Figure 1. Normal Q-Q plots for the writing pre-test results

The mean scores of the CG and EG pretests were compared to the assured reliability of the writing pretest score. As indicated in Table 5, the Mean score for CG pretests is 65.50, whereas the Mean score for EG pretests is 65.25. The difference between the two numbers seems to be very minor. The mean CG score (M=65.50, SD=7.42, n=20) is somewhat greater than the mean EG score (M=65.25, SD=8.346, n=20). An independent T-test was used to determine if there was a statistically significant difference between the samples. The Independent T-test findings in Table 1 indicate that there is no statistically significant difference between the CG and EG averages (t=0.1, df= 28, p >.05). And, prior to treatment, CG and EG 's writing output was equal.

 Table 5

 Independent Samples t-test and Descriptive Statistics for pretest results

| | Group | | | | 95% CI for Mean | | | | |
|---------|-------|---------|----|--------------|--------------------|--------------|-------------|------|----|
| | (| Control | | Experimental | | Experimental | | | |
| | M | SD | n | M | SD | n | | t | df |
| Pretest | 65.50 | 7.42 | 20 | 65.25 | 8.35 | 20 | -4.80, 5.30 | .10* | 38 |

^{*} p > .05

As with the pretest, the association between the two raters' post-test results was investigated. The correlation between rater A and rater B's post-test scores in CG is shown in Table 6 and the correlation between rater A and rater B's post-test scores in EG was shown in Table 7.



 Table 6

 Correlation of posttests scores of the CG by two raters

| | | Post_Rater1_CG | Post_Rater2_ |
|----------------|---------------------|----------------|--------------|
| Post_Rater1_CG | Pearson Correlation | 1 | .917** |
| | Sig. (2-tailed) | | .000 |
| | N | 20 | 20 |
| Post_Rater2_CG | Pearson Correlation | .917** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 20 | 20 |

^{**.} Correlation is significant at the 0.01 level (2-tailed).

 Table 7

 Correlation of posttests scores of the EG by two raters

| | | Post_Rater1_EG | Post_Rater2_E |
|----------------|---------------------|----------------|---------------|
| Post_Rater1_EG | Pearson Correlation | 1 | .914** |
| | Sig. (2-tailed) | | .000 |
| | N | 20 | 20 |
| Post_Rater2_EG | Pearson Correlation | .914** | 1 |
| | Sig. (2-tailed) | .000 | |
| | N | 20 | 20 |

^{**.} Correlation is significant at the 0.01 level (2-tailed).

As indicated in Table 6, a statistically significant correlation existed between rater A and rater B posttest scores in CG (Sig. 2-tailed=.000.05). The Pearson Connection Coefficient for CG is r=.917, and it has been shown that rater A and rater B have a high degree of connection. As shown in Table 7 (Sig. 2-tailed=.000.05, r=.914), there was a significant correlation between rater A's post-test scores and rater B's for EG. As a consequence, the high inter-rater reliability of the post-test was ensured by the substantial inter-rater correlation between the scores of the two raters. The following study made use of the ratings of rater A.

As with the pretest, the Normality test was used to examine the distribution of post-test CG and EG scores. The data from each group formed a straight line based on the Q - Q Plot results. It was therefore assumed that the post-test scores of both groups have a normal distribution, and the Independent Sample T-test can be used.

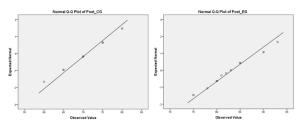


Figure 2. Normal Q-Q plots for the writing posttest results

According to Table 8, the mean post-test score for EG (M=83.25, SD=4.919) is significantly higher than the mean post-test score for CG (M=71.708, SD=6.708). However, a test would be conducted to determine the statistical significance of the difference between the mean CG and EG scores. The Independent Samples T-test shows (Table 8) that the discrepancy between the post-test CG and EG means was statistically significant (t=-6.37, df=38, p<0.05). Hence, after treatment, the

writing performance of CG and EG improved. The writing performance change was, in particular, significant for EG.

Table 8

| endent Samples 1-lest and Descripti | Te oranines jor positest results |
|---|----------------------------------|
| Group | 05% CT for |

| | | Group | | | | | | |
|---------|------|-------|--------|----------|-------------|--------------------|---------------|-----------------|
| Control | | | Exp | erimenta | ıl | Mean Difference | | |
| M | SD | n | M | SD | n | | t | df |
| 71.50 | 6.70 | 20 | 83.25 | 4.92 | 20 | -15.51, -7.98 | -6.37* | 38 |
| | M | M SD | M SD n | M SD n M | M SD n M SD | M SD n M SD n | M SD n M SD n | M SD n M SD n t |

The improvement is visually illustrated in Figure 3.

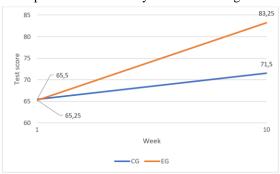


Figure 3. Comparison of means of pretest and posttest scores

4.2 Questionnaire

Students were asked to give responses about their perceptions of blended writing activities. Figure 4 presents a summary of those responses.

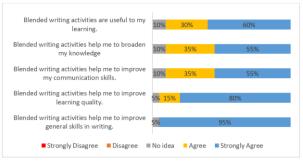


Figure 4. Students' perceptions of blended writing activities

We can see at first glance the different choices of the students ranging from "No idea" to "Strongly Agree." Among them, "Blended writing activities help me improve overall writing skills" has a mean of 4.9. It shows that nearly all the students shared the same belief that their communication skills in general writing were enhanced. It received the highest score amongst students compared to the other items in the project (95%). On the other hand, just one student checked the neutral box (5 percent). Additionally, nearly all students (80%) said that mixed writing exercises improved the quality of their learning. A small percentage of pupils (5%) were likewise unsure if their work was of a better level. Coincidentally, 35% of respondents agreed, and 55% strongly agreed that the communication skills and knowledge of the students during the experiment were



improved. As a result, a large majority recognized the effectiveness of Moodle's blended writing activities.

Figure 5 shows the students ' responses to the construct on the communication and interaction impacts of blended writing activities. Overall, the means for all questions were more than 3.0, indicating that nearly all students felt that blended writing exercises improved cooperation and interaction. As shown in the picture, students reacted well to the peer learning component, with 35% agreeing and 50% strongly agreeing that the mean score reached 4.25. One kid, however, categorically disputed that he or she could learn from classmates. It accounts for 5% of all answers. In accordance with this, it is observed that a significant proportion of respondents (M=4.4) benefited from social contact. Additionally, 60% of students were very engaged in this kind of engagement. Additionally, the interchange of viewpoints between peers and teachers was noteworthy. With a high mean score (M=4.4), it provided many opportunities for students to express their views, which they appreciated. Additionally, many students may seek clarification from the teacher other students at any time synchronous/asynchronous chat conversations. Only a handful of them felt uncomfortable using blended writing activities because of this. Such responses reflect a 5% difference and 10% neutrality.

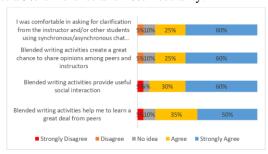


Figure 5. Impact of blended writing activities on collaboration and interaction

4.3 Interview

Most of them mentioned having a good impression of using blended activities in writing lessons. In general, they share the same opinion that thanks to this new way of learning, their writing has been significantly improved. Most of them also revealed that they were very keen to use Chatroom.

"I think that the Chatroom, which allows me to interact and debate with the other students in my class, is very interesting. They spark my curiosity and encourage me to express myself in English. While discussing anything on Moodle, we have some really fun and informative moments. I'm happy when I'm not pressed for time when I study." one of the interviewed participants – S7.

However, one student (S1) said that he found Moodle to be rather difficult to use. "I am unfamiliar with this style of instruction. When I use Moodle, I become scared. It's a little difficult for me to choose what to write. Usually, I have issues with my internet connection and with writing and editing. Furthermore, I am unsure how to modify my friend's writing, "he said. Overall, it can be concluded that the experimental group students had positive perceptions of blended writing activities. They agreed that the exercises in Moodle were fun and useful for their writing performance.

Three (S4, S5, S8) of the ten selected kids said that their preferred activity was chat since it was a great communication tool that allowed them to engage successfully. "The chat activity module enables me to have real-time synchronous discussions. This allows participants to get a more nuanced understanding of one another and the topic at hand, "As one of the three students (S4) mentioned before said. "I can enhance my vocabulary and sentence patterns via discussion. Indeed, this wonderful hobby allows me to get valuable knowledge from my friends and teacher." (S8).

Meanwhile, participants S2, S3, and S6 endorsed the forum's function since it enabled them and their teachers to communicate via the usage of comments. In forum postings, comments may contain files such as pictures and media. The teacher may opt to evaluate forum postings, and students may also rate posts made by other classmates. "My writing has significantly improved as a result of feedback from my instructor and friends. When they rate my works, I feel encouraged. As a consequence, my writing improves." (S6).

In addition, the journaling activity was the third most popular. S1 and S7 said that they enjoyed journal writing the best. "I like online diaries that are accessible exclusively to the instructor. It gives me a sense of security. My errors will go unnoticed by the majority of my friends, which boosts my confidence." (S1). S7 said that he was allowed to express his own views due to the teacher's politeness and consideration.

Additionally, the remaining two students identified workshops as an effective peer assessment method that piqued their attention. The workshop helps me in a variety of ways. I am able to improve my abilities as a result of the centralized peer-review environment, the focus on class participation, the emphasis on communication skills, and the criticisms obtained from my peer editors." stated S9. Apparently, a workshop



activity in the course helps students achieve success in online learning environments.

In conclusion, all four Moodle-based platform activities that support blended writing activities, i.e., chat, forum, journal, and workshop, earn positive perceptions from the students. This shows, once again, the efficacy of integrated writing activities for the learning performance of students.

5. DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

Although the average CG score (M=65.50, SD=7.42, n=20) is somewhat higher than the average EG score (M=65.25, SD=8.35, n=20), there is no statistically significant difference in writing skill between CG and EG (t=0.10, p>0.05, df=38). However, following treatment, the mean score for EG (M=83.25, SD=4.92, n=20) is substantially higher than the mean score for CG (M=71.50, SD=6.70, n=20), and the difference in mean score between CG and EG is statistically significant (t=-6.37, p>.05, df=38). The experiment has shown that blended writing activities have positive effects on the writing performance of the students and mixing online and offline activities will provide better results for the students. The findings of other work by Roberton [88], Miyazoe and Anderson [81], Adas and Baki [91] confirmed this result.

The results of the questionnaire demonstrated the optimistic attitudes of the students towards the new approach to teaching. After the experiment, the students claimed their writing was better. With blended writing activities, they also had greater learning motivation. In addition, they found that blended exercises were useful resources to help them overcome their writing difficulties. They felt that Moodle activities would benefit them by creating a more engaging and comfortable environment, as well as increasing their flexibility enjoyment. and Additionally, they were able to read, evaluate, and rate items created by their peers. Receiving feedback from friends and instructors proved to be a great method of developing reciprocal connections. Students were also made aware of their active participation in the learning process as a result of the blended course's emphasis on the significance of individual responsibility. While internet connectivity, time constraints, typing abilities, and computer capabilities presented some challenges, it can be determined that the blended writing course significantly contributes to students' writing skills development.

The interview data further consolidate the responses of the students in the questionnaires. When asked to share their thoughts on blended writing activities, most students agreed that such activities are useful to their writing process. They felt interested in this new approach because, during the course, it helped them see how their writing developed. A few interviewees were not pleased with the poor connection to the internet. If the network is improved, it will improve the learning experience. In addition, 80 percent of the students interviewed expressed their fondness for the blended method and recommended that it be extended to all subjects at school. By and large, students expressed favorable attitudes about the mixed writing course. While the researchers encountered a few obstacles throughout the learning process, such as a bad internet connection, a lack of computer skills, or time constraints, they think these issues may be resolved. In short, the findings from the tests, questionnaires, and interviews all prove that blended writing activities improve students' performance and motivation for learning.

The research has shown ample positive effects on the writing performance of learners from using blended writing activities. So, it is suggested for higher education institutions to establish blended writing courses with the help of LMS such as Moodle. Additionally, a blended teaching approach has brought about a positive attitude of students towards the course. Teachers should benefit from this blended approach since it is a good way to motivate learners. Designing interesting tasks, delivering good topics for discussion, building a cooperative learning environment are the keys.

The results of the study also give certain implications for the students. To begin with, blended learning is heavily based on the theory of constructivism, so it demands that the learners work actively when in the course. With constructive instruction style on Moodle, their writing will be developed through cooperative activities, such as group assignments, conversation exercises, peer feedback. Efforts to self-learn and proper attitudes were necessary conditions for success. In addition, the students should improve their computer skills to work more effectively with a similar future course.

AUTHORS' CONTRIBUTIONS

Nguyen Ngoc Vu, Vo Thi Minh Due, Nguyen The Luong, Nguyen Thi Hong Lien conceived and planned the experiments. Vo Thi Minh Due and Nguyen The Luong carried out the experiment. Nguyen Ngoc Vu, Nguyen Thi Hong Lien took the lead in writing the manuscript. All authors provided critical feedback and helped shape the research, analysis, and manuscript.



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