



The Effects of Online Peer Feedback on Students' Writing Skills during Corona Virus Pandemic

Oanh Thi Thuy Tran

Corresponding author, University of Foreign Language Studies & The University of Danang, Vietnam, tttoanh@ufl.udn.vn

Vu Phi Ho Pham

Faculty of Foreign Languages, Van Lang University, Vietnam, ho.pvp@vlu.edu.vn

The purpose of this study is to compare the impacts of two different modes of e-peer feedback on the students' writing skills to see which mode should be better used to train the students' writing skills. The current study included 66 first-year students from the University of Foreign Language Studies in Danang City, Vietnam. The quasi-experimental research design was employed in the study. The two groups were taught how to compose a paragraph writing with peer comments in two rounds (1st & 2nd drafts). One group used Moodle (LMS), while the other used Facebook for e-peer feedback. Data collection was from pre-and post-tests for quantitative analysis. The research indicated that both types of e-peer feedback had a significant influence on students' writing abilities. However, the Moodle peer comments had little effect on students' writing length, but the e-peer remark on Facebook had a considerable impact. Post-test comparisons show that students who conducted peer comments on Facebook were considerably more diverse than their peers who conducted them in Moodle.

Keywords: e-peer feedback, writing accuracy, writing fluency, writing skills, students

INTRODUCTION

Like all other sectors of the economy, education has been hit hard by the CoronaVirus (Covid-19). Globally, almost 1.5 billion university students in 185 Asian nations have been confined (Pham & Ho, 2020; Dharmaraj, 2020). Schools, colleges, and universities must continue teaching students through distant learning after returning home. Online learning is becoming more popular in many nations, especially in East and Southeast Asia (Hayashi et al., 2020). The majority of these institutions feel they must move away from conventional classroom teaching toward e-learning. However, the COVID-19 epidemic would undoubtedly affect our notions of operating the sector. The coronavirus (COVID-19) epidemic has driven innovation and the search for alternatives to online learning at most universities, particularly in East and Southeast Asia (Hayashi et al., 2020). Dhawan (2020) sees the Corona Virus outbreak as a chance to shine in a bleak

Citation: Tran, O. T. T., & Pham, V. P. H.,(2023). The effects of online peer feedback on students' writing skills during corona virus pandemic. *International Journal of Instruction*, 16(1), 881-896. <https://doi.org/10.29333/iji.2023.16149a>

scenario. In this difficult scenario, teachers must pick the best alternative and apply it to educate their students.

According to Smith and Hoyer (2010), Facebook was an excellent tool for assisting students in honing their writing skills through the use of peer feedback activities. Writing is viewed as a process of conceptualization, organization, and mechanical precision (Abdullahi & Salisu, 2017; Pham et al., 2021). Writing is one of the most difficult skills to train (Nguyen & Nguyen, 2022a); it requires practical knowledge of grammar and structures. Consequently, many academic teachers have attempted to assist students in overcoming their writing difficulties (Pham & Do, 2021; Pham et al., 2022b; Pham & Bui, 2021; Tran; Vu & Le, 2022). (Nguyen & Nguyen, 2022b). Different instructors obtained diverse viewpoints regarding the teaching of writing skills (Pham & Truong, 2021). Correcting students' flaws and blunders in writing is one of the most practical activities for writing classes (Nguyen & Nguyen, 2022c). According to Ertmer et al. (2007), peer feedback stimulates children to improve their writing skills and encourages them to share their thoughts with peers and teachers. Students and instructors benefit from feedback, according to Walz (1982), Pham et al. (2020a), Pham and Usaha (2016), Pham (2021), Pham et al. (2022b), and Pham et al. (2020b). According to Black (2005), kids today have more opportunity to practice critical thinking through Facebook and other social media platforms. Peer feedback on Facebook is viewed as a technique that could benefit students in developing an effective English writing curriculum.

L2 writing students have been deemed beneficial for peer reviews on social media platforms such as Facebook. To begin, students are encouraged to engage more actively and independently in the knowledge-collecting process via social media, where they may raise questions and lead debates at any time (Warschauer et al., 1996, Pham & Usaha, 2016, Wekerle, Daumiller, & Kollar, 2022). This may be referred to as the technology's essence. Second, social networks broaden interaction options outside the classroom walls and, hence, beyond the time limits of the classroom and the typical narrow circle of pair and group work interlocutors (Carless, 2022, Liu & Hansen, 2005). Thirdly, student conferences are considered to aid in the development of student-centered conversations, the development of a sense of community, the raising of group awareness, and the increase of student involvement as a result of increased opportunities for student-student contact with the teacher acting as a facilitator (Carless, 2022, Mao, & Lee, 2022, and Warschauer, 2002).

Additionally, electronic discussion facilitates audience and communicative objective understanding by providing an audience apart from the instructor (Ware, 2004, Wekerle et al., 2022). Additionally, technology serves as a social facilitator by encouraging cooperation, group work, and interaction among students. According to Ware (2004) and Link et al. (2022), students discussed their opinions of themselves as writers in writing with their online peers (through social media platforms such as Facebook) and with their classroom peers. Sullivan and Pratt (1996), Pham et al. (2020), and Pham and Nguyen (2020) claim that incorporating social media platforms such as Facebook into the classroom improved students' writing quality. The current study is inspired by

Vygotsky's sociocultural theory that the students learn to construct knowledge by themselves and with the help of other students (Jaramillo, 1996). The belief is that when the students provide feedback to one another, they can help their peers to improve their writing skills. Accordingly, they could learn from one another when they are involved in peer feedback activities. As such, the present research investigated whether peer-to-peer feedback on Facebook may be used to aid students in developing their writing talents.

Literature Review

Nowadays, particularly during the CoronaVirus, Facebook is often incorporated into writing lessons (Majid, Stapa, & Keong, 2015; Pham et al., 2020). Numerous specialists from across the globe used Facebook to engage with their classes and students. Additionally, they utilize it as a self-contained learning assistance tool. Le (2018) examined the use of Facebook in the writing classroom with 204 Vietnamese grade 10 students and reported that students had a favorable attitude about utilizing Facebook in the writing classroom. According to Alias et al. (2012), Facebook assisted Malaysian students in improving their learning approach and writing skills. Yunus and Salehi (2012) proved that by incorporating Facebook into the writing classroom, students were able to collaborate on ideas and provide feedback on one another's writing work. Rifai (2010) asserts that Facebook may assist students in improving their writing talents. Rifai discovered that when students were exposed to Facebook during writing sessions, they developed positive attitudes about the site and that Facebook had a noticeable influence on students' writing ability.

At the moment, online social networking sites are being used to assist students in developing their writing abilities. Yusof, Manan, and Alias (2012) explored the potential benefits of Facebook Notes for academic writers. Twenty students, sixteen girls and four boys were recruited from a single intact group for this study. Instructor feedback was solicited. The study's findings indicate that utilizing Facebook Notes for academic writing may have potential advantages. The results indicated that there were more constructive comments than unhelpful ones. Clearly, the feedback activity aided the learning process and boosted learners' skill levels as a consequence of their Facebook usage. As a result of the research, all instructors across the globe should encourage pupils to utilize Facebook to augment their education, especially their writing abilities.

Wichadee (2013) investigated if using Facebook with peer input in groups helped students improve their writing abilities and attitudes about using Facebook to offer peer criticism. Thirty students (9 males and 21 females) from a private college participated in a basic English course in order to submit and receive feedback on their writing talents through Facebook. Data collecting is a parallel method to student writing improvement through first and final draft papers, written comments, an interview, and a questionnaire. The outcome indicated that pupils improved their writing abilities. Additionally, the interview analysis revealed favorable attitudes regarding the use of Facebook for peer evaluation in the English classroom.

The second research, conducted by Alghazo et al. (2009), demonstrates that Facebook has a range of benefits for students and that corrective feedback may assist students in improving their self-correction abilities when writing. Additionally, Liu (2008) reports

that "after feedback, the accuracy of writing to children rises." Facebook may help to a more meaningful learning environment by providing feedback directly to students and preventing them from communicating and sharing ideas on paper. Pham et al. (2020) recently investigated concerns via quasi-experimental research, including Moodle and Facebook groups. Seventy-two indigenous Vietnamese students from two comprehensive courses at the HCMC University of Science participated in the research. Both groups received identical instructions, with the exception that peer assessment on papers was supplied through the social network Facebook. To collect and analyze data using SPSS's t-tests, inter-rater assessments of pre-and post-tests were used. Although both groups' peer comments significantly affected children's writing quality, peer e-comments outperformed traditional peer comments.

In order to explore the students in the research context for e-learning awareness, Oanh and Ho (2021) surveyed 407 students and teachers to learn about their experiences with e-learning issues. The study found that most students were able to use the e-learning successfully and obtained positive attitudes toward e-learning. Moreover, E-learning was found to be flexible and fruitful in terms of learning material and videos for both teachers and students in the learning processes. Also, the teachers were well-prepared to use technological skills to employ them appropriately in their classrooms. Several scholars in Vietnam researched e-learning difficulties during Covid-19. According to Pham and Vo (2021), e-learning in Vietnam is limited by Internet connectivity, technical gadgets, economic situations, and students' perceptions of unwillingness. Furthermore, the authors developed a realistic model for e-learning teaching for individuals who want to execute their e-learning courses properly.

Numerous online tools aid learners in obtaining success in English learning, especially in writing, in order to overcome the 'e-learning' period associated with the Corona Virus pandemic. Using Facebook to help students conduct e-peer feedback has a lot of benefits. Furthermore, many previous research studies compared the differences in peer feedback between the traditional mode vs. electronic mode. None of the students investigated if there were any differences between the two modes of e-peer feedback. The purpose of the study is to fill in this gap. In the present study, writing accuracy was measured by the total scores that the students gained from the inter-raters, and writing fluency was measured by counting the number of words written in each essay.

1. Does Moodle peer feedback and Facebook peer feedback have any impact on the students' writing accuracy?
2. Does Moodle peer feedback and Facebook peer feedback have any impact on the students' writing fluency?
3. Are there any differences between Moodle peer feedback and Facebook peer feedback on the students' writing performances?

METHOD

Research context and participants

The present research was conducted at the University of Foreign Languages, Da Nang University. In the first semester of the school year 2021-2022, the teacher/researcher was allocated two intact classrooms totaling 66 pupils. The research involved sixty

second-year students, ranging in age from 19 to 20, who were enrolled in the subject of Academic writing. The Facebook group consisted of 33 students from one class, whereas the Moodle group consisted of 33 students from the other class. They were all assigned the same textbook by the Faculty of English School. This study followed-up research findings from the previous study conducted by the same authors, who found that most of the students in the current context were aware of the importance of e-learning, as well as some advantages and disadvantages were identified (Oanh & Ho, 2021). According to Kazanidis et al. (2018), students who used Facebook or Moodle as their learning platform shared comparable evaluations of the teaching environment and cognitive presence, while Facebook users outperformed Moodle users in terms of social presence. Similar to this, Petrovic et al. (2014) asserted that Facebook is a more effective educational tool than Moodle in terms of how it influences students' regular learning activities.

The class arrangement was determined prior to the start of the semester. Due to credit constraints, enrolment was determined using a random selection process. The experiment randomly selected two full-time courses among six offered at Da Nang University of Foreign Languages. This is because the remaining four classes had reached the halfway point of the semester and were therefore unable to participate in the experiment.

The quasi-experimental research was employed in this study to train the students in writing academic English. According to Cook (2015), a Quasi-experimental study aimed to test the causal relationship of treatment outside of the laboratory. It was not a semi-experiment as the intervention was by self-selection or administrator judgment. Data collection was from pre-and post-tests for quantitative analysis. The Moodle group (33 students) used Moodle to perform peer feedback. The Facebook group (33 students) used Facebook to perform e-peer feedback. Students were supposed to create a paragraph on this subject. As a result, students were asked to write a pre-test paragraph on the first day of class and a post-test paragraph at the conclusion of the course. The study's writing cycle is shown in Figure 1.

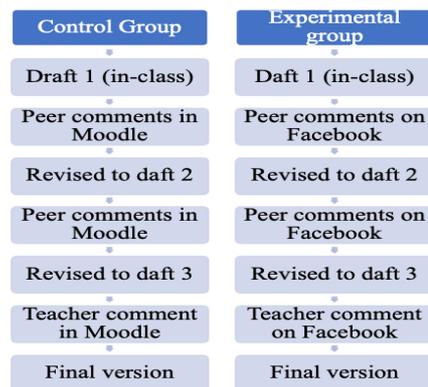


Figure 1
Writing cycle

Students were asked to create three distinct paragraphs during the semester. The subjects were chosen from the textbook. Except for the peer feedback types stated above, the training processes for the two groups were comparable. Two weeks passed throughout the writing cycle. Each week, one commentary round was held. Students might approach the instructor with any queries about the feedback or to ascertain if peer remarks were accurate throughout the discussion exercises. Additionally, the instructor examined random remarks from peers to assist them in learning how to be more effective reviewers (Pham & Usaha, 2016). According to the study's scope, only written papers from pre-and post-tests were analyzed to determine the answers to the research questions. The pre-test required students to "write a paragraph of about 120 words expressing their ideas on the effects of e-learning," while the post-test had them to "write a paragraph of approximately 120 words expressing their opinions about the consequences of CoronaVirus."

Data collection and analysis

The data gathering instrument was pre-and post-tests of students' writing. Two independent raters were used to evaluate the students' papers. One rater was a professor at the University of Foreign Languages, The University of Da Nang, with 12 years of experience teaching students how to write. The other was the lecturer/researcher. Both raters rated students' papers using the Scoring Rubric developed by Jacobs et al. (1981). The standard rating technique for end-of-semester examinations in the research environment. Cronbach's Alpha was used to determine the reliability. We gathered all of the students' written paragraphs and counted the number of words in terms of writing fluency.

FINDINGS AND DISCUSSION

This research gathered 132 works, including 66 writings in the Facebook group and 66 writings in the Moodle group. Independent sample t-tests were used to determine differences between the Moodle and Facebook groups, while paired sample t-tests were employed to determine differences between the pre-and post-test groups. The Facebook group's Cronbach's Alpha for inter-rater reliability on the pre-test was .930, while the Moodle group was .921. The following table compares students' writing fluency and accuracy before and after the treatment.

Table 1
Comparison of students' writing fluency and accuracy of the pre-tests

Variables		N	M	Std. Deviation	Mean Difference	t	df	Sig. (2-tailed)
Pre-test of students' writing fluency	Moodle group	33	116.15	18.27	1.63	.334	64	.740
	Facebook group	33	114.51	21.42				
Pre-test of students' writing accuracy	Moodle group	33	5.12	.64	-.24	-1.755	64	.084
	Facebook group	33	5.36	.47				

* Independent sample t-tests

Table 1 compares the writing fluency and accuracy of the Moodle and Facebook groups prior to treatment to see whether any differences occurred between the two groups. As can be shown, before training, each student in the Moodle group generated an average of 116 words per paragraph ($M=116.15$; $SD=18.27$), compared to 114.52 words per paragraph ($M=114.52$; $SD=21.42$) in the Facebook group. Thus, it looked as if the Facebook group wrote somewhat more words than the Moodle group. However, the independent sample t-test indicated no statistically significant difference between the two groups in terms of writing fluency ($t(64)=.33$; $p=.74$; $p>.05$). That is, the null hypothesis was not shown to be false. The Moodle group had the same level of writing fluency as the Facebook group.

Additionally, the statistics in Table 1 indicate that each student in the Moodle group earned 5.12 points on a 10-point scale for 33 written paragraphs. ($M =5.12$ M ; $SD =.64$). Each article in the Facebook group obtained an average of 5.36 points from the inter-raters ($M=5.36$; $SD=.47$). There was no statistically significant difference in the mean. The p-value for the independent sample t-test ($t(64)=-1.76$; $p=.084$; $p>0.5$) indicates that there was no statistically significant difference in writing accuracy between the two groups during the pre-test. The null hypothesis was not rejected. Thus, the two groups' pupils' proficiencies were similar prior to the study's intervention.

Research question 1: Does Moodle peer feedback and Facebook peer feedback have any impact on the students' writing accuracy?

To address this study topic, we examined the pre-and post-test scores of students in both groups using paired sample t-tests to see if there were any changes after treatment with the two treatments. The correctness of the writing was established by comparing inter-rater rates, whereas the number of written words judged the fluency of the writing. Post-test reliability was .896 for the Facebook group and .973 for the Moodle group. Table 2 contrasts the Moodle and Facebook groups' pre-and post-test results.

Table 2
Comparison of the students' writing accuracy of the pre- vs. post-test

Variables	N	M	SD	t	df	p
Writing accuracy of the Moodle group						
Pre-test	33	5.121	.637	-7.763	32	.000
Post-test	33	6.121	.927			
Writing accuracy of the Facebook group						
Pre-test	33	5.364	.472	-9.736	32	.000
Post-test	33	6.636	.859			

*Paired-sample t-test

Table 2 compares the pre-and post-test writing accuracy scores for the two groups. As seen in Table 2, after Moodle training, students in the Moodle group greatly improved their writing accuracy. Each student got an average of 5.12 points out of ten on the 33 papers in the pre-test ($M=5.12$; $SD=.64$) from the inter-raters on the 10-point scale. However, the students' papers improved significantly during the post-test. Each paper

obtained an average score of 6.12 ($M=6.12$; $SD=.93$). The difference was around one point. The paired-sample t-test result of .00 ($t(32)=-7.76$; $p=.00$; $p<.01$) shows that the post-test findings were statistically significantly different from those of the Moodle group's pre-test. That is, the students in the Moodle group dramatically improved their writing abilities in terms of accuracy. The students' writing abilities improved as a result of the writing process method using Moodle for peer feedback. This demonstrated that the instructor paid close attention to the Moodle group's instruction.

In comparing the pre-and post-test scores of the Facebook students, Table 2 shows that, on average, each student in this group obtained 5.36 inter-rater scores ($M=5.36$; $SD=.47$). Nonetheless, each article obtained an average score of 6.63 ($M=6.63$; $SD=.86$). The paired-sample t-test result ($t(32)=-9.74$, $p=.00$; $p<.01$) indicates that the Facebook students' writing skills significantly improved between the pre-and post-test. In other words, the students in the Facebook group significantly improved their writing accuracy when they used Facebook for peer feedback activities.

The next session will compare students' writing fluency based on the number of words written in each paper.

Research question 2: Does Moodle peer feedback and Facebook peer feedback have any impact on the students' writing fluency?

Table 3

Comparisons of the writing fluency between the pre- vs. post-tests of two groups

Variables	N	M	SD	t	df	p
Writing fluency of the Moodle group						
Pre-test	33	116.15	18.271	-1.773	32	.086
Post-test	33	117.48	17.088			
Writing fluency of the Facebook group						
Pre-test	33	114.52	21.423	-8.134	32	.000
Post-test	33	151.70	17.586			

*Paired-sample t-test

The following table compares the two groups' pre-and post-test scores on writing fluency. The article defined writing fluency as the number of words in each student's paper. The Moodle group showed that each student's paragraph included 116 words ($M=116.15$; $SD=18.27$), but each student's post-test paragraph contained 117 words ($M=117.48$; $SD=17.09$). The Moodle group's paragraphs seem to have the same number of words. The paired sample t-test found no statistically significant difference between the Moodle group's pre-and post-tests with a p-value of .086 ($t(32)=-1.77$, $p=.086$, $p>.05$). This reveals that the peer feedback in Moodle condition did not improve children's writing fluency.

In comparison to the Facebook group that posted e-comments on Facebook, each student's written paragraph in the pre-test included an average of 114 words ($M=114.52$; $SD=17.59$), but each paper in the post-test contained roughly 152 words ($M=151.70$; $SD=17.59$). The post-test paragraph included more words than the pre-test piece. The

paired-samples t-test result was .00 ($t(32)=-8.134$, $p=.00$; $p < .01$), indicating that the post-test vocabulary was significantly larger than the pre-test vocabulary. That is, students in the Facebook group improved their writing fluency as a result of obtaining e-peer feedback on Facebook; they were able to compose longer paragraphs.

The next session will show the analysis in response to study question 3, namely, which treatment condition affects students' writing performances.

Research question 3: Are there any differences between Moodle peer feedback and Facebook peer feedback on the students' writing performances?

To address the research goals, the two groups' post-test writing accuracy and fluency scores were compared. Independent sample t-tests were used to determine if the null hypotheses were rejected. Table 4 compares the students' post-test writing accuracy across the Moodle and Facebook groups.

Table 4

Comparison of the writing accuracy of the post-tests between the two groups

Writing accuracy between the two groups							
Variables	N	M	SD	MD	<i>t</i>	<i>df</i>	<i>p</i>
Post-test of the Moodle group	33	6.121	.927	-.5152	-2.341	64	.022
Post-test of the Facebook group	33	6.636	.859				

* Independent sample t-test

Table 4 compares the accuracy of post-test writing in the Moodle and Facebook groups. Each paper in the Moodle group averaged 6.12 ($M=6.12$; $SD=.93$), while each paper in the Facebook group averaged 6.64 ($M=6.64$; $SD=.86$). The mean difference was .52; the Facebook group's average score seemed to be somewhat higher than the Moodle group's average score. The independent sample t-test indicated a statistically significant difference in post-test outcomes between the two groups ($t(64)=-2.341$, $p=.02$; $p < .05$). As a result, the null hypothesis was shown to be erroneous. In other words, when peer comments were finished on papers, the Facebook group's writing accuracy was much higher than the Moodle group's. The outcomes of this study corroborated previous studies by Pham et al. (2020) and Wang et al. (2012), showing using Facebook in teaching strategies improves students' grades, participation, and overall experience with their university education. The following table compares students' writing fluency on post-tests administered to the two groups in order to evaluate if the null hypothesis was rejected.

Table 5

Comparison of the writing fluency between the post-tests of the two groups

Writing fluency between the two groups							
Variables	N	M	SD	MD	<i>t</i>	<i>df</i>	<i>p</i>
Post-test of the Moodle group	33	117.485	17.088	-34.212	-8.015	64	.000
Post-test of the Facebook group	33	151.697	17.586				

* Independent sample t-test

Table 5 compares the students' writing fluency between the Moodle and Facebook groups regarding the number of words written in each paragraph. As shown in the table, each paragraph in the Moodle group had 117 words ($M=117.49$; $SD=17.09$). By contrast, the paragraphs in the Facebook group averaged 152 words ($M=151.70$; $SD=17.59$). The mean difference between the two groups was -34.21. In other words, each paragraph of the Facebook group's post-test had 34 more words. Independent sample t-test results ($t(64)=-8.02$, $p=.00$; $p<.01$) indicate a statistically significant difference in post-test outcomes between the two groups. That is, after a sixteen-week semester of peer commenting on Facebook, the Facebook group's students authored lengthier paragraphs. Their writing talents were much better than those of kids in the Moodle group who took part in peer commenting activities on Moodle platform.

DISCUSSION

First, data analysis demonstrated that peer comments in two distinct contexts of technology, one with e-peer feedback in Moodle and another with e-peer comments on Facebook, significantly impacted students' writing accuracy. Regardless of treatment settings, students in both the Moodle and Facebook groups improved their writing techniques for correctness. That is, the writing technique and peer feedback activities benefited the students significantly. Second, while e-peer feedback in Moodle had no impact on students' writing fluency, e-peer feedback on Facebook greatly affected the Facebook group's writing fluency. Social media (Facebook) was used in this example to engage students in discussions and later to assist them in writing longer paragraphs for post-tests. This might explain the reasons why other university lecturers incorporated Facebook in their writing lessons (Yusof et al., 2012; Majid, Stapa, & Keong, 2015; Pham et al., 2020). The results of the current study supported by Alias et al. (2012), Rifai (2010), Wichadee (2013), and Pham et al. (2020) that using Facebook for writing activities helped improve their writing skills.

Finally, the data analyses demonstrated that the three peer commentary modalities significantly impacted the students' writing performances. While peer input on paper and pencil helps students improve their writing accuracy, peer feedback on Facebook may be more effective. In other words, the Facebook group's writing quality significantly outpaced that of the Moodle group. Students in the Facebook group were able to write longer, higher-quality paragraphs than students in the Moodle group in terms of writing fluency. Though fluency alone could not fully explain the writing outcomes, writing accuracy significantly influenced the students' improvement as writers. The current study's findings strengthen Le's (2018) and Pham and Nguyen's (2020) that the Vietnamese students obtained positive attitudes as the teacher utilized Facebook in the writing classrooms. Yunus and Salehi (2012) claimed that applying Facebook in the writing activities helped students collaborate ideas to compose a better writing product.

As indicated, the present study's findings corroborated prior research showing that Facebook provided several advantages for learning and teaching English, particularly writing (Solomon & Schrum, 2007; Susanto et al. (2020). According to Shih (2011), Facebook taught learners how to organize their thoughts, enhance their content, expand their vocabulary, and self-correct errors. Additionally, Shih (2011) found that Facebook

encouraged students to study English. Yusof et al. (2012) asserted that writing with the Facebook platform encouraged students to provide feedback to one another to help improve their writing skills.

CONCLUSION

The purpose of this research was to determine if the Moodle peer feedback and Facebook peer feedback had any effect on students' writing accuracy and fluency, and if so, how the results varied. To begin, the study's results reveal that Moodle and Facebook peer assessment significantly influenced students' ability to write accurately. However, students working in a Moodle learning environment were unable to improve their writing fluency, but those working on Facebook considerably boosted their written word count. That is if, in the context of a coronavirus pandemic in Moodle classroom activities, peer feedback activities in both settings improved students' writing accuracy, but only the Facebook feedback environment improved students' writing fluency. Second, the response to the second research question revealed that, when comparing the effects of the two peer feedback environments on students' writing performances, the students who participated in Facebook peer feedback improved significantly more than those who participated in Moodle peer feedback. One of the explanations for the findings was that Facebook, a social media which was used widely by the students, encouraged students to be employed every for their personal purposes with a feel at ease, while Moodle is a website platform provided by the university, and the students need to log in every time they wished to do their assignments. It seemed somehow inconvenient for their uses.

In general, peer feedback could help students improve their writing skills (Alias et al., 2012; Rifai, 2010; Wichadee, 2013; and Pham et al., 2020; Pham & Nguyen, 2020). However, when comparing the platforms for utilizing peer feedback in the classrooms, the outcomes of this study imply that Facebook, a social networking platform, helps students improve their writing skills with regards to both accuracy and fluency. In contrast, Moodle platform only helps with writing accuracy.

The current study is limited in the scope of the sample size. Further research could test with a more significant number of students in the university teaching contexts. Also, the students' writing accuracy was measured by the scores rated by the two lecturers. Future research needs to go deeper into the students' text analysis to see how much the students enhance their writing performances.

ACKNOWLEDGEMENT

This research is funded by Funds for Science and Technology Development of the University of Danang under project number B2020-DN05-32.

REFERENCES

Abdullahi, M. S., & Salisu, M. (2017). Evaluation of Essay Writing among Senior Secondary School Arabic Students in Kwara State, Nigeria. *Anatolian Journal of Education*, 2(2), 1-7.

- Alghazo, K., Bani Abdelrahman, M., & Abu Qbeitah, A. (2009). The effect of teachers' error feedback on Al-Hussein Bin Talal University students' self-correction ability. *European Journal of Social Sciences*, 12(1), 142-156.
- Alias, A. A., Manan, N. A. A., Yusof, J., & Pandian, A. (2012). The use of Facebook as a language learning strategy (LLS) training tool on college students' LLS use and academic writing performance. *Procedia-Social and Behavioral Sciences*, 67, 36-48. <https://doi.org/10.1016/j.sbspro.2012.11.305>
- Black, G. S. (2005). Predictors of consumer trust: likelihood to pay online. *Marketing Intelligence & Planning*, 23(7), 648-58. <https://doi.org/10.1108/02634500510630186>
- Carless, D. (2022). From teacher transmission of information to student feedback literacy: Activating the learner role in feedback processes. *Active Learning in Higher Education*, 23(2), 143-153. <https://doi.org/10.1177/1469787420945845>
- Cook, T.D. (2015). Quasi-Experimental Design. In Wiley Encyclopedia of Management (eds C.L. Cooper, P.C. Flood and Y. Freeney). <https://doi.org/10.1002/9781118785317.weom110227>
- Dharmaraj, S. (19 March 2020). E-learning platforms in Vietnam grow amid COVID-19 breakout. Retrieved on 7 Jan 2021 from <https://opengovasia.com/e-learning-platforms-in-vietnam-grow-amid-covid-19-breakout/>.
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of COVID-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5-22. <https://doi.org/10.1177/0047239520934018>
- Ertmer, P. A., Richardson, J. C., Belland, B., Camin, D., Connolly, P., Coulthard, G.,... & Mong, C. (2007). Using peer feedback to enhance the quality of student online postings: An exploratory study. *Journal of Computer-Mediated Communication*, 12(2), 412-433. <https://doi.org/10.1111/j.1083-6101.2007.00331.x>
- Hayashi, R., Garcia, M., & Maddawin, A. (2020). Online Learning in Sri Lanka's Higher Education Institutions during the COVID-19 Pandemic. Retrieved on 19 June 2021 from <https://www.adb.org/sites/default/files/publication/635911/online-learning-sri-lanka-during-covid-19.pdf>
- Jacobs, H. L. (1981). *Testing ESL Composition: A Practical Approach. English Composition Program*. Newbury House Publishers, Inc., Rowley, MA 01969.
- Jaramillo, J. A. (1996). Vygotsky's sociocultural theory and contributions to the development of constructivist curricula. *Education*, 117(1), 133-141.
- Kazanidis, I., Pellas, N., Fotaris, P., & Tsinakos, A. (2018). Facebook and Moodle integration into instructional media design courses: A comparative analysis of students' learning experiences using the Community of Inquiry (CoI) model. *International Journal of Human-Computer Interaction*, 34(10), 932-942. <https://doi.org/10.1080/10447318.2018.1471574>

- Le, T. V. (2018). Social media in learning English in Vietnam. Doctoral thesis of University of Canterbury. Retrieved on 19 June 2022. <http://dx.doi.org/10.26021/9441>
- Link, S., Mehrzad, M., & Rahimi, M. (2022). Impact of automated writing evaluation on teacher feedback, student revision, and writing improvement. *Computer Assisted Language Learning*, 35(4), 605-634. <https://doi.org/10.1080/09588221.2020.1743323>
- Liu, J. & Hansen, G. J. (2005). *Peer Response in Second Language Writing Classroom*. U.S.A: The University of Michigan Press.
- Majid, A. H., Stapa, S. H., & Keong, Y. C. (2015). Blended scaffolding strategies through Facebook for learning and improving the writing process and writing performance. *e-Bangi – Journal of Social Sciences and Humanities*, 12(4), 31-39.
- Mao, Z., & Lee, I. (2022). Researching L2 student engagement with written feedback: Insights from sociocultural theory. *TESOL Quarterly*, 56(2), 788-798. <https://doi.org/10.1002/tesq.3071>
- Nguyen, T. P. U., & Nguyen, P. T. U. (2022a). Pre-Service Teacher Performance and High-School Student Uptake of Oral Corrective Feedback in EFL Classes in Da Nang. *International Journal of TESOL & Education*, 2(2), 119–141. <https://doi.org/10.54855/ijte.22227>
- Nguyen, H. N., & Nguyen, D. K. (2022b). Vietnamese Learners' Performance in The IELTS Writing Task 2: Problems, Causes, and Suggestions. *International Journal of TESOL & Education*, 2(1), 170–189. <https://doi.org/10.54855/ijte.222111>
- Nguyen, T. H. N., & Nguyen, T. T. H. (2022c). Use of Google Docs in Teaching and Learning English Online to Improve Students' Writing Performance. *International Journal of TESOL & Education*, 2(2), 186–200. <https://doi.org/10.54855/ijte.222210>
- Nguyen, H. M. P. (2022). Using Scaffolding to Improve Online Group Presentation in English Literature Classes: An Action Study at Van Lang University. *International Journal of TESOL & Education*, 2(4), 21–31. <https://doi.org/10.54855/ijte.22242>
- Oanh, T. T. T., & Ho, P. V. P. (2021). Experiences of the e-learning environment of students at the University of Danang-University of Foreign Language Studies. *Journal of Science and Technology – Da Nang University*, 19(12.2), 41-46. <https://doi.org/10.31130/ud-jst2021-017E>
- Petrovic, N., Jeremic, V., Cirovic, M., Radojicic, Z., & Milenkovic, N. (2014). Facebook versus Moodle in practice. *American Journal of Distance Education*, 28(2), 117-125. DOI: <https://doi.org/10.1080/08923647.2014.896581>
- Pham, V. P. H., Hong, T. C., & Nguyen, N. H. V. (2021). The Effects of Task-Based Instruction on High School Students' Writing Outcomes. *International Journal of Cyber Behavior, Psychology and Learning (IJCBL)*, 11(4), 1-12. <https://doi.org/10.4018/IJCBL.288499>

- Pham, V. P. H., & Vo, N. D. T. (2021). CALL in Asia During Covid-19 and Models of E-Learning. *Proceedings of the 17th International Conference of the Asia Association of Computer-Assisted Language Learning (AsiaCALL 2021)*. Vol. 533, pp. 1-10. Amsterdam: Atlantis Press. ISBN: 978-94-6239-343-1; ISSN: 2352-5398. <https://doi.org/10.2991/assehr.k.210226.001>
- Pham, V. P. H., & Bui, T. K. L. (2021). Genre-based Approach to Writing in EFL Contexts. *World Journal of English Language*, 11(2), pp. 95-106. <https://doi.org/10.5430/wjel.v11n2p95>
- Pham, H. H., & Ho, T. T. H. (2020). Toward a 'new normal' with e-learning in Vietnamese higher education during the post COVID-19 pandemic. *Higher Education Research and Development*, 39(7), 1327-1331. <https://doi.org/10.1080/07294360.2020.1823945>
- Pham, V. P. H., Le, T. C., Phan, T. H., & Nguyen, N. H. V. (2022a). The Effects of Trained Peer Feedback for High School Students. *World Journal of English Language*, 12(1), pp. 27-39. <https://doi.org/10.5430/wjel.v12n1p27>
- Pham, V. P. H., Tran, T. T. T., & Nguyen, N. H. V. (2022b). The Effects of Extensive Journal Writing on the Vietnamese High-School Students' Writing Accuracy and Fluency. *Journal of Language and Education*, 8(1), 116-129. <https://doi.org/10.17323/jle.2022.12361>
- Pham, V. P. H. (2021). The Effects of Lecturer's Model e-comments on Graduate Students' Peer e-comments and Writing Revision. *Computer Assisted Language Learning*, 34(3), pp. 324-357. <https://doi.org/10.1080/09588221.2019.1609521>
- Pham, V. P. H., & Truong, M. H. (2021). Teaching Writing in Vietnam's Secondary and High Schools. *Education Sciences*, 11(10), 632. <https://doi.org/10.3390/educsci11100632>
- Pham, V. P. H., & Do, T. H. (2021). The Impacts of Task-based Instruction on Students' Grammatical Performances in Speaking and Writing Skills: A quasi-experimental study. *International Journal of Instruction*, 14(2), pp. 969-986. <https://doi.org/10.29333/iji.2021.14255a>
- Pham, V. P. H., & Nguyen, N. H. V. (2020). Blogging for Collaborative Learning in the Writing Classroom. *International Journal of Cyber Behavior, Psychology and Learning (IJCPL)*, 10 (3), pp. 1-11. <https://doi.org/10.4018/IJCPL.2020070101>
- Pham, V. P. H., Luong, T. K. P., Tran, T. T. O., Nguyen, Q. G. (2020a). Should Peer E-Comments Replace Traditional Peer Comments? *International Journal of Instruction*, 13(1), pp. 295-314. <https://doi.org/10.29333/iji.2020.13120a>
- Pham, V. P. H., Huyen, L. H., & Nguyen, M. T. (2020b). The incorporation of quality peer feedback into writing revision. *Asian Journal of Applied Linguistics*, 7(1), 45-59. Retrieved from <https://caes.hku.hk/ajal/index.php/ajal/article/view/732>

- Pham, V. P. H., & Usaha, S. (2016). Blog-based Peer Response for L2 Writing Revision. *Computer Assisted Language Learning*, 29(4), 724-748. <https://doi.org/10.1080/09588221.2015.1026355>.
- Ramadhani, P. (2013). The Use of Facebook Group as Media in Teaching Writing Narrative text to the Eleventh Grade Students of SMA Negeri 2 Kota Mojokerto. *RETAIN*, 1(3), 1-11.
- Rifai, N. A. (2010). Attitude, motivation, and difficulties involved in learning the English language and factors that affect motivation in learning it. *Procedia-Social and Behavioral Sciences*, 2(2), 5216-5227. <https://doi.org/10.1016/j.sbspro.2010.03.849>
- Shih, R. C. (2011). Can Web 2.0 technology assist college students in learning English writing? Integrating Facebook and peer assessment with blended learning. *Australasian Journal of Educational Technology*, 27(5), 829-845
- Smith, NA & Hoyer, JR. (2010). *Teaching: A Facebook for Lesson-Sharing*. White Plains, NY: Pearson
- Solomon, G., & Schrum, L. (2007). *Web 2.0 new tools, new schools*. Washington, D.C.: International Society for Technology in Education.
- Stelter, B. (2008). MySpace might have friends, but it wants ad money. (Business/Financial Desk). *The New York Times*, 157(54343), C4.
- Sullivan, N. & Pratt, E. (1996). A comparative study of two ESL writing environments: A computer-assisted classroom and a traditional oral classroom. *System*, 24 (4), 491-501. [https://doi.org/10.1016/S0346-251X\(96\)00044-9](https://doi.org/10.1016/S0346-251X(96)00044-9)
- Susanto, Arifani, Y., Khaja, F. N. M., & Paulina. (2020). Facebook Aided Lesson Study Design: Investigating Its Potentials on EFL Students' Literature Review Writing Skill. *International Journal of Instruction*, 13(4), 47-64. <https://doi.org/10.29333/iji.2021.1414a>
- Tran, T. T. M. (2021). Use of Self-regulated Learning Strategies in Paragraph Writing at Van Lang University. *International Journal of TESOL & Education*, 1(3), 1-13. Retrieved from <https://i-jte.org/index.php/journal/article/view/80>
- Tawfik, M. (2022). Complexity and Interaction across Oral, Written and Online Discourse. *International Journal of TESOL & Education*, 2(1), 272-295. <https://doi.org/10.54855/ijte.222117>
- Vu, P. H. N., & Le, T. H. (2022). Understanding students' opportunities and challenges in a curriculum vitae writing process: Activity system as an analytical tool. *International Journal of TESOL & Education*, 2(2), 66-81. <https://doi.org/10.54855/ijte.22224>
- Walz, J. C. (1982). *Error Correction Techniques for the Foreign Language Classroom. Language in Education: Theory and Practice, No. 50*. Center for Applied Linguistics, PO Box 4866, Hampden Station, Baltimore, MD 21211.

- Wang, J., Lin, C., Yu, W. & Wu, E. (2012). Meaningful engagement in Facebook learning environments: Merging social and academic lives. *Turkish Online Journal of Distance Education*, 14(1), 302-322.
- Ware, P. (2004). Confidence and competition online: ESL student perspectives on web-based discussions in the classroom. *Computers and Composition*, 21 (4), 451-468.
- Warschauer, M. (2002). Networking into Academic Discourse. *Journal of English for Academic Purposes*, 1 (1), 45-58.
- Warschauer, M. (1996). *Computer Assisted Language Learning: an Introduction*. Retrieved on June 4, 2007 from <http://www.ict4lt.org/en/warschauer.htm>.
- Wekerle, C., Daumiller, M., & Kollar, I. (2022). Using digital technology to promote higher education learning: The importance of different learning activities and their relations to learning outcomes. *Journal of Research on Technology in Education*, 54(1), 1-17. <https://doi.org/10.1080/15391523.2020.1799455>
- Wichadee, S. (2013). Peer feedback on Facebook: The use of social networking websites to develop writing ability of undergraduate students. *Turkish Online Journal of Distance Education*, 14(4), 260-270.
- Yunus, M. M., & Salehi, H. (2012). The effectiveness of Facebook groups on teaching and improving writing: Students' perceptions. *International journal of education and information Technologies*, 1(6), 87-96.
- Yusof, J., Manan, N. A. A., & Alias, A. A. (2012). Guided peer feedback on academic writing tasks using Facebook notes: An exploratory study. *Procedia-Social and Behavioral Sciences*, 67, 216-228. <https://doi.org/10.1016/j.sbspro.2012.11.324>