

Applying online peer feedback via a peer review application in English academic writing

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ABSTRACT

Writing in English is widely regarded as a challenging skill since most students have found many problems somewhat occupying teachers' time to help them overcome. Peer feedback, where students analyze and suggest revisions to each other's work (Sukumaran & Dass, 2014), is a worthwhile alternative to teacher-based feedback, and its benefits in academic writing have been thoroughly examined. With great convenience, Google Classroom Peer Review (GCPR) recently began to capture teachers' attention as an innovative online peer feedback tool. This study conducted a quasi-experiment to determine the impact of online peer feedback (OPFB) via GCPR on 32 first-year students and their attitudes toward online peer feedback. Three writing exercises as well as a questionnaire were used to gather the information. The findings show that the experimental group significantly improved their vocabulary and grammar usage in writing compared to the 32 students in the control group. The experimental group expressed their positive opinions of OPFB, regarding free selection and assigned-pair feedback. Additionally, the difficulties and recommendations that the study's participants gave have greatly enhanced the use of OPFB. The research is eager to offer valuable recommendations for enhancing learners' academic writing proficiency in further studies because of its practical efficacy.

1. Introduction

In response to the demand for using information technology in tertiary education post-Covid-19 pandemic and engrossing learners to seek new knowledge and skills prevailing in the learner-centered approach (Norman & Spohrer, 1996), there has been an unprecedented increase in the use of technology in every course, especially writing. The challenges of this complicated language form have been affirmed by most English users because it requires learners to indicate and defend a position or viewpoint by conducting suitable evidence (Snow, 2015). Several studies have found students' difficulties in English academic writing related to language use like grammatical mistakes and vocabulary use, coherence, cohesion, idea selection, written tones, academic cultural differences, specific target knowledge, and concern about the writers' emotions and feelings (Al-Fadda, 2012; Al-Badi, 2015; Singh & Kaur, 2016; Yu, 2021). It can be seen that peer feedback or peer review (used interchangeably in this study) has been discovered by many researchers due to its huge benefits to not only the writing teachers but also the students.

Peer feedback (PFB) assists teachers in giving more feedback on their student's work and provides the students with various opportunities to enhance their critical writing skills as well as

knowledge (Bauer, Figl, Derntl, Beran, & Kabicher, 2009; Choi, 2014; Moradi & Karimpour, 2012; Pham & Nguyen, 2014; Trautmann et al., 2003; Yusof, Ab-Manan, & Alias, 2012). The Covid-19 pandemic, however, has been interrupting students to give feedback to each other directly or face-to-face. The pandemic has also been seriously affecting the global economy leading to finding an accessible and free online peer feedback application for all students. The majority of the tools for online peer feedback applied in prior research are convenient and useful as the Workshop module (Sukumaran & Dass, 2014), Wiki in the Blackboard system (Choi, 2014), Turnitin (Huisman, Saab, Van Driel, & Van Den Broek, 2018; Li & Li, 2017), EduTech (Latifi, Noroozi, Hatami, & Biemans, 2021) but charges highly for application; Facebook (Pham & Nguyen, 2021; Wahyudin, 2018) but distracts students from other social media marketing, and Google Docs (Pham, Lin, Vu, & Bui, 2020) but doesn't allow teachers to randomly assign peers. Moreover, according to Liang (2010), asynchronous platforms are best for online peer feedback (OPFB) applications since they may let students fully concentrate on their writing assignments while also improving peer interaction.

With the previous discussion, rare research has explored the use of OPFB via GCPR for teaching English academic writing. In a great effort to find the most applicable and cost-free tool for both teachers and students, the researcher has recently discovered an extension of Google named Google Classroom Peer Review 1.0.2 (GCPR) that enables online assignment submission and automatic peer review assignments. This present study, conducted at Ho Chi Minh City Open University, (i) analyzes the impacts of OPFB on students in a writing classroom and (ii) identifies their attitudes or perspectives towards OPFB. The article thus aims to respond to two research issues that served as the foundation for this investigation:

- (1) To what extent does online peer feedback affect students' English academic writing results?
- (2) What are the participant students' attitudes towards online peer feedback?

The study's findings should inform teachers and students of a greater understanding of applying OPFB via GCPR to improve academic writing competence and encourage school administrators to integrate it into the online Learning Management System (LMS). The remainder of the study includes a summary of related theories, research methodology, crucial findings, and eventually contributions and recommendations for future research.

2. Literature review

2.1. Peer feedback

It could be helpful to define the phrase "*peer feedback*" (PFB) before proceeding further, as it is used in this study. PFB is also known as "*peer review*", "*peer assessment*", or "*peer editing*" in foreign language writing instruction. According to Liu and Edwards (2018), PFB involves students serving as information sources and communicators for their peers by providing comments and critical evaluation of each other's writing papers in both written and oral formats, acting in the role of a formally trained teacher, tutor, or editor. In this relationship, "*reviewers*" provide feedback, while "*receivers*" receive it.

Hence, PFB not only aids writers in improving their writing to the best version but also accelerates the reviewers' knowledge and self-editing skills. This practice involves students in analyzing and revising their peers' writings (Ballantyne, Hughes, & Mylonas, 2002). More importantly, PFB promotes students to adjust their writing to produce the best versions of theirs (Moradi & Karimpour, 2012). As a result, PFB arouses students to be more critical and self-directed learners since they follow feedback criteria skillfully and increase their knowledge of

target writing topics (Sukumaran & Dass, 2014). In other words, thorough use of PFB helps students gain more knowledge and new learning skills.

PFB in writing classrooms provides peer interaction, diverse viewpoints, and exposure to new ideas (Hansen & Liu, 2005). In addition, PFB enables writers to exchange their writing with others, and for that reason, they have raised the awareness of the readers and engaged in revising their works in the ways the writers do (Choi, 2014; Yusof et al., 2012). For example, peer reviewers will unintentionally learn new knowledge or recognize their own mistakes when reading their peer's texts and then self-improve their writing easily.

2.2. Online peer feedback

Information technology has transformed traditional PFB to suit online learning environments, resulting in digital written forms that allow direct commenting and electronic submission to online systems. This kind of online peer feedback (OPFB) offers students a variety of popular feedback forms, for instance, coincident chat system interactions, nonsynchronous email, and bulletin-board postings (Moradi & Karimpour, 2012). Thanks to the emergence of digital technologies, OPFB could help to mitigate the concerns of using traditional written PFB in terms of time-consuming and discomfort of social interaction expected to assuredly occur in peer review (Choi, 2014). Furthermore, OPFB has been proven to be more beneficial than traditional methods for writing students. Students become more devoted and engaged in online PFB tasks, allowing teachers to easily track their progress (DiGiovanni & Nagaswami, 2001, as cited in Choi, 2014). OPFB also promotes critical thinking development and enhances self-reliant learning skills, resulting in better writing outcomes (Guiller, Durndell, & Ross, 2008; Liu, 2005, as cited in Choi, 2014; Milton, 2004). Overall, applying OPFB is more advantageous for both students and teachers, particularly in monitoring progress and achieving significant results.

2.3. English academic writing

English academic writing is seen as an intellectual, formal, and cognitive process that requires attention to content, organization, vocabulary, and grammar when assessing students' writing achievement. First of all, academic writing in English is considered "a mental and cognitive activity" (Al-Fadda, 2012, p. 124) because it is produced by the human mind, and it can be understood if it immerses its perspectives in society. It is meaningless whether the writing is constructed from a single viewpoint. And thence, the content of the writing should be the first criterion to evaluate. Second, being the formal writing style, English academic writing strictly demands careful consideration of tone, perspective, academic vocabulary, grammar rules, and formats contributing to the academic writing products (Yakhontova, 2003). Therefore, assessing students' writing achievement involves evaluating all four criteria.

2.4. Previous studies

2.4.1. The effects of online peer feedback on English academic writing

Most recent studies found that OPFB could enhance the writers' achievement in academic writing and critical thinking. Huisman et al. (2018) found that after nine weeks of using PFB in the virtual learning environment Turnitin, both reviewers, and receivers had relatively equal improvements in writing performance. The results show that the receivers significantly improved their overall writing performance between the draft essay ($M = 6.56$, $SD = 1.38$) and the final essay ($M = 6.99$, $SD = 0.99$, $p = 0.010$, $p < 0.005$) with only three evaluation criteria including content, structure, and style. OPFB has also been found to enhance learners' critical thinking (Wahyudin, 2018) and argumentative essay performance (Latifi et al., 2021) using the EduTech OPFB platform. The latest research by Shang (2022) found that OPFB helped learners improve their

sentence complexity, reduce grammatical mistakes, and produce more types of lexical items. In addition, OPFB is more beneficial to novice writers rather than skillful ones since they could achieve better in composing more sentence lexical items.

Earlier studies have confirmed the positive impact of OPFB on writing achievement, but there are gaps in these studies. Firstly, students were not allowed to give feedback to each other like in Huisman et al.'s (2018) study, resulting in the content of the group received feedback did not improve significantly between the draft essay ($M = 6.46$, $SD = 1.52$) and the final one ($M = 6.31$, $SD = 1.53$). Clearly, the group providing feedback could learn from evaluating their peers, while the receivers were unable to experience their partners' papers, limiting their ability to self-study and revise their own work. This contradicts Yusof et al.'s (2012) and Choi's (2014) theories that receivers should be reviewers to recognize their mistakes and self-improve easily. Secondly, specific measurements were not revealed in some studies. For example, while Wahyudin's (2018) study found that OPFB improved academic writing ability and critical thinking thanks to the 8-week treatment, the measurement of five aspects of writing was not given. The results only showed that the experimental group had a significant difference in writing ability ($M = 82.56$, $SD = 4.31$, $p = 0.003$, $p < 0.05$) as compared with the control group ($M = 79.92$, $SD = 3.47$). Therefore, to obtain practical results, the authors should have allocated the two groups to give feedback to each other and have informed a specific analysis of the five aspects of the research.

The issue of accurate writing assessment remains a significant challenge, proven in a study conducted by Latifi et al. (2021) that employed the EduTech OPFB platform. The authors evaluated participants' written argumentative essays based on eight components related to their position on the topic, claims in favor and against the topic, evidence, and conclusion. While this approach aligned with the criteria of a high-quality argumentative essay in Educational Sciences, it lacked evidence of assessing writing accuracy. Furthermore, there are very few studies utilizing OPFB through GCPR application, especially in Vietnam. Pham and Nguyen (2021) provided some literature reviews demonstrating that OPFB can improve academic writing and critical thinking when utilizing Facebook as a practical instructional medium in the Vietnamese context. To gain a better understanding of using GCPR as a tool for OPFB, further investigations in the Vietnamese context are needed.

2.4.2. Students' attitudes towards online peer feedback

The positive attitudes that students have towards OPFB indicate their recognition and appreciation of its benefits. In the earliest research on students' perspectives towards OPFB, Bauer et al. (2009) found that participants appreciated PFB activities in a computer science course, as evidenced by their passionate engagement and provision of comprehensive, constructive feedback. OPFB and online tools are welcomed by writing students due to the comfort it offers (Li & Li, 2017; Sukumaran & Dass, 2014). Argumentative OPFB has been found to positively influence students' attitudes, as seen in Noroozi and Hatami's (2019) study, where students randomly assigned to OPFB pairs reported positive changes. OPFB can also help learners overcome language barriers when composing and receiving feedback, as observed in a study using the Google Docs application (Pham et al., 2020). Additionally, recent research indicates that students are satisfied with OPFB and positively rate the convenience, clarity, and easily understandable tasks provided by EduTech (Latifi et al., 2021). OPFB is generally well-received by users, as it provides a convenient and time-saving alternative to traditional PFB methods, as noted by both writing teachers and learners, including those who provide and receive feedback (Choi, 2014; Sukumaran & Dass, 2014). However, some users experience connectivity issues when providing feedback to their peers online.

The use of technology in OPFB has been shown to facilitate more effective interactions among peers compared to traditional PFB methods. According to Moradi and Karimpour (2012), OPFB provides writing students with increased opportunities to practice and expand their fluency by communicating with peers. OPFB enables students to interact both synchronously and asynchronously. While synchronous platforms are generally considered more effective for interaction, they can sometimes distract peers with irrelevant topics during a chat, making synchronous OPFB fun but less effective (Liang, 2010). In contrast, asynchronous OPFB allows peers more time to plan their writing, select the best ideas for topics, and revise their drafts more carefully, reducing time pressure and enhancing interactions among peers (Moradi & Karimpour, 2012). As a result, asynchronous OPFB may be the better way to enhance peer interactions and enable students to focus effectively on their writing tasks.

Researchers from different countries have studied the effects of using OPFB on students' academic performance and attitudes toward it. Some of these studies used fee-based applications like EduTech, Turnitin, Wiki, and the Blackboard system, while others used free platforms like Microsoft Word or Google Docs. However, these free platforms do not offer many synchronous interactions for writing students. Facebook is a common platform among students, but it is a social media site with distracting advertisements. Therefore, researchers are looking for a free and convenient tool to deliver OPFB. During the Covid-19 pandemic, Google Classroom Peer Review 1.0.2 (GCPR) gained more attention as a peer review tool, but little research has investigated its effects on students' attitudes towards OPFB in English academic writing contexts. With great effort, this research was conducted as the method following aiming to fill this research gap.

3. Methodology

3.1. Setting and participants

As the setting of this study, Ho Chi Minh City Open University is a highly-regarded institution in terms of English education, with 188 mainstream first-year English majors at the Faculty of Foreign Languages. The quasi-experiment and survey for this research were conducted in a Reading-Writing course from February 15 to March 17, 2022, at Nguyen Kiem Campus. The researcher, who was also the teacher for one class, selected 32 first-year students as the Experimental Group (EG) to receive OPFB treatment, while the other 32 students were chosen from a separate class to be the Control Group (CG) who did not receive OPFB. Both groups met the minimum requirement of having at least 30 participants for an experimental study (Fraenkel & Wallen, 2009). Table 1 provides the demographic information of the participants, and the numbers show a strong resemblance in the number of students in the EG and CG.

Table 1

Demographic information of first-year student participants

| Group | Male | Percent (%) | Female | Percent (%) |
|--------------|------|-------------|--------|-------------|
| Experimental | 13 | 40.6 | 19 | 59.4 |
| Control | 9 | 28.1 | 23 | 71.9 |

3.2. Google Classroom Peer Review

Google Classroom Peer Review 1.0.2 is an extension integrated with Google Classroom, which enables the distribution of selected students' work with a single click. This tool facilitates both synchronous and asynchronous peer feedback exchange. Teachers can either assign peer pairs randomly or let students select their peers. Students will feel comfortable and convenient signing

into a Google email and then clicking on Google Classroom (GC). Teachers can create writing tasks with deadlines and manage student assignments from the Classwork section of GC (refer to Figure 1).

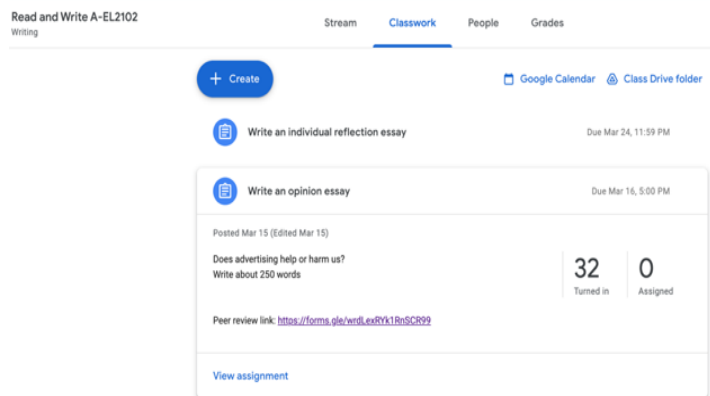


Figure 1. Classwork example

When the task is assigned, teachers can check students' submissions by turning to Stream of GC (as depicted in Figure 2). After the deadlines for the assignments, teachers could click the icon of GCPR (as shown in Figure 3) to redistribute assignments for peers to review. Reviewers have the option to provide feedback on their peers' writing directly, or they can download the writing file to give feedback offline.

3.3. Research design

The research design followed the quasi-experimental procedure proposed by Fraenkel and Wallen (2009). However, both groups consisted of first-year students who had completed the same subjects during the previous semester, which implies that they possessed comparable levels of knowledge and writing proficiency. Therefore, the study involved three writing assignments for each group and encompassed three OPFB tasks along with a questionnaire exclusively for the EG.

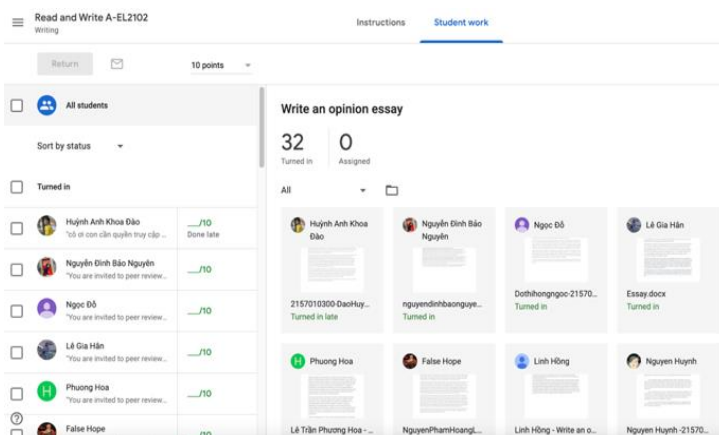


Figure 2. Stream example

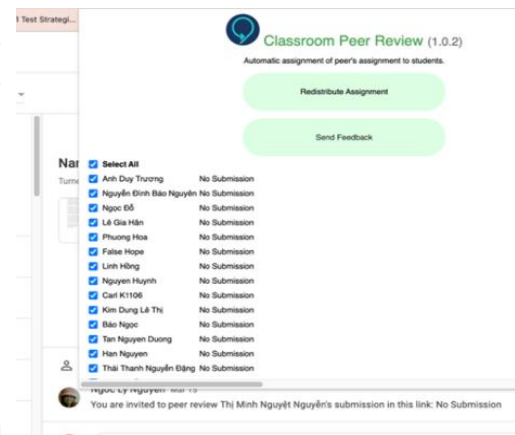


Figure 3. Distributing assignments

The CG was required to compose their writing and then submit it to the teacher via GC for each writing assignment. Nevertheless, the EG followed a four-stage process before their writing was evaluated by the teacher. Firstly, they submitted their writing to GC; then, the teacher would distribute it to a peer to conduct OPFB, requiring the participants to utilize the six questions of the peer review worksheet provided by the coursebook. They were trained carefully to give comments critically but mindfully to their peers and refrain from using overly negative feedback, which could potentially demotivate others from writing. As reported by Sukumaran and Dass (2014), one

participant shared, “I’m scared. They commented very negatively till I lost the motivation to write” (p. 37) due to the excessively negative feedback received, resulting in a loss of motivation to write. Secondly, the reviewers submitted OPFB back to GC, and the recipients revised their writing based on the feedback received. Finally, they resubmitted the revised writing to GC. For the first two assignments, the participants were able to choose their peers; then the teacher randomly paired them for the final one.

Each writing assignment of both CG and EG was assessed by the adapted rating scale with four categories: content, grammar, vocabulary, and organization, which was deduced in the literature, the Unit Assignment Rubric provided by the course book, and also aligned with the writing rubric provided in the course syllabus. Each category had descriptors rated out of 20 marks as follows: not gradable (0 mark), marginal (5 marks), adequate (10 marks), strong (15 marks), and superior (20 marks). The overall score of each writing text is 80 marks. To guarantee the reliability of the results, two raters scored both three writing assignments in the same way. The score marked by two raters was averaged. If the discrepancies between the two raters were over 5.0, the third rater was utilized.

After completing the 03 writing assignments, the EG filled out a survey questionnaire adapted from Sukumaran and Dass’s (2014) survey by adding three multiple-choice question items, removing and adding one open-ended question. The questionnaire contains five main parts as followings: (1) positive attitudes towards PFB (12 items), (2) positive attitudes towards OPFB (05 items), (3) negative attitudes towards PFB and OPFB (02 items), (4) attitudes towards free selection and assigned-pair PFB (03 items), (5) and 04 open-ended questions. The questionnaire was piloted randomly with 20 first-year English majors and revised any ambiguous question items before being distributed to 32 students in the EG through Google Forms. Table 2 summarizes all the main points of the research design.

3.4. Writing assignments

The writing topics were sourced from the 2019 edition of the course book *Q: Skills Reading and Writing 3*, published by Oxford University Press. The first task required students to write a paragraph on how to make a good first impression on others. For the second task, students composed a descriptive paragraph about their preferred dish. In the final assignment, students summarized a reading text in one paragraph and shared their personal responses in a second paragraph. The word count for each paragraph was limited to between 150 and 200 words.

3.5. Data analysis

The data from the three writing assignments and the questionnaire were analyzed using IBM SPSS Statistics 23. Firstly, to determine the effects of OPFB on English academic writing performance, the scores of writing assignments in the two groups were compared using an Independent Samples T-Test which is considered the most appropriate and reliable test to consider whether there are any significant differences in the mean scores between two different groups (Pallant, 2007). Secondly, the first part of the questionnaire included 22 Likert scale items (1 to 4) relating to the use of peer feedback and OPFB with “1” meaning “strongly disagree” and “4” indicating “strongly agree”, and thus 2.5 is considered the neutral value. Muijs (2004) highly appreciated that using the median might be the best way to measure the central tendency of ordinal variables as an average. Accordingly, the data collected from the questionnaire were analysed by working out the median, mean, and percentage of the values to increase the reliability of the results due to the consistency of the average scores of each question with the median. The validity and reliability of the questionnaire were guaranteed in this study. All question items measured what

they were intended to measure as they were arranged in five groups according to their purposes. The reliability of the 22-item questionnaire was also extremely high with $\alpha = .840$ as Pallant (2007) stated that the values above .8 suggest very good reliability for the scale in a Cronbach's Alpha test. Finally, detailed answers to the last part that responded to the four questions were discussed and analyzed by using thematic analysis.

Table 2

Research design

| | Control group | Experimental group |
|------------------------|--|--|
| 1. Participants | First-year students (N = 32) | First-year students (N = 32) |
| 2. Coursebook | “Q: Skills for Success Reading and Writing 3” Authors: Colin S. Ward and Margot F. Gramer | |
| 3. Writing assignments | three writing assignments | |
| 4. Treatment | No treatment | Online peer feedback Follow the course book's peer review worksheet |
| 5. Stages | Submit → Assess | Submit → OPFB → Revise → Submit → Assess |
| 6. Questionnaire | No questionnaire | Questionnaire |

4. Results and discussion

4.1. Results

4.1.1. Results from three writing assignments

Table 3 displays the results of the analysis of data collected from the scores of three assignments. The table compares the overall score of the EG, which includes scores in content, grammar, vocabulary, and organization, with that of the CG. The Independent Samples T-Test indicated statistically significant differences in the overall scores of the three writing assignments between the EG and CG. Specifically, the first, second, and third writing assignments of the EG had significantly higher overall scores than those of the CG, with t-values of 3.53, 3.12, and 3.77, and p-values of 0.00 ($p < 0.05$) for all three comparisons. The means and standard deviations for the overall scores of each assignment are as follows: for the first assignment, the EG $M = 64.52$, $SD = 9.16$, and the CG $M = 57.10$, $SD = 7.28$; for the second assignment, the EG $M = 58.71$, $SD = 7.63$, and CG $M = 50.97$, $SD = 11.51$; and for the third assignment, the EG $M = 64.03$, $SD = 5.23$, and the CG $M = 56.29$, $SD = 10.16$.

According to the Independent Samples T-Test, there were significant discrepancies in grammar and vocabulary between the two groups. The EG demonstrated considerably higher mean scores in grammar ($M = 14.68$, $SD = 4.27$, $t = 3.67$, $p = 0.00$, $p < 0.05$ in the second assignment; $M = 17.90$, $SD = 3.36$, $t = 2.57$, $p = 0.01$, $p < 0.05$ in the third one) and vocabulary ($M = 17.10$, $SD = 3.82$, $t = 3.19$, $p = 0.00$, $p < 0.05$ in the first assignment; $M = 19.9$, $SD = 2.27$, $t = 4.61$, $p = 0.00$, $p < 0.05$ in the third one) than the CG (with grammar, $M = 9.84$, $SD = 5.98$ in the second assignment and $M = 15.32$, $SD = 4.46$ in the third one; with vocabulary, $M = 14.86$, $SD = 1.80$ in the first one and $M = 14.48$, $SD = 4.47$ in the third one). The Independent Samples T-Test in Table 3 also revealed that there were no statistically significant differences in the content and organization of the three writing assignments. The findings show that as compared with the CG,

the EG students achieved better writing performances in terms of grammar and vocabulary, which helped improve their writing efficiency.

4.1.2. Results from the questionnaire

The initial part of the questionnaire focuses on (1) positive attitudes towards PFB and includes 12 items (see Table 4). Table 4 displays that the means of all items are from 2.97 to 3.34, with a median is 3 for each item. Moreover, the percentage of participants who indicated “strongly agree” and “agree” is greater than 78% and nearly 97%, respectively.

Table 4 indicates that the students hold positive attitudes toward PFB activities. For example, they generally confirmed that PFB is helpful when it helps enhance their writing performance (81.2%) and self-improve their learning skills in assessing their written work (90.7%). PFB helps them understand more about the requirements of the tasks (90.7%) as well as what their peers think (87.5%). Additionally, PFB activities motivate them to learn to write better (78.2%), increase their interaction with the teacher (87.5%) and classmates (90.7%), build a sense of participation (90.7%), and create meaningful feedback (87.5%). The students considered PFB a useful method for giving feedback to them (84.4%), and thus students needed to take part in developing criteria for PFB activities (87.5%). To help students succeed in giving PFB, it's essential to have a sample essay and sample feedback (96.9%).

The second part of the questionnaire aims to find (2) positive attitudes towards OPFB through 05 question items presented in Table 5. As demonstrated in this table, the means of all items are from 2.8 to 2.9, with a median is 3 for all items, and the percentage of “strongly agree” and “agree” is more than 68% to 75%. This table indicates the students had positive attitudes toward OPFB to some extent. Approximately 72% of the students agreed that OPFB could help them save time. A significant number of students agreed that OPFB could increase classmate interaction (75%) and teacher-student interaction (75%), too. In terms of fairness, OPFB could provide feedback to others with justice (71.9%). Moreover, giving OPFB asynchronously allows them to provide more critical feedback (68.7%).

The third part of the questionnaire includes only two items that aim to identify (3) negative attitudes towards PFB and OPFB (see Table 6). It is evident from Table 6 that students, in general, did not express agreement with negative attitudes towards PFB and OPFB. A majority of the students (59.3%) disagreed with the statement that students lack the responsibility to provide PFB, and a significant number of them (56.2%) disagreed with the notion that OPFB is a waste of time. These results indicate that the participants held positive attitudes towards PFB and OPFB, as reflected in the responses to these two items.

The fourth part of the questionnaire assesses (4) attitudes towards free selection and assigned-pair OPFB through 03 question items displayed in Table 7. The results indicate that the students generally preferred assigned-pair feedback over free-selection PFB because they stated that they could provide more feedback if they were not close to their peers (56.3%) and learned more after receiving assigned-pair PFB (68.7%).

The last part of the questionnaire concludes all responses to (5) 04 open-ended questions. Firstly, their answers for the question item “Q23. How did you feel when you had to assess your peer?” were counted as two contrasting ideas such as “feel positive” and “feel negative” (as illustrated in Figure 4). Most students (27 out of 32) reported positive feelings such as finding it useful (15 times), exciting (8 times), justice (3 times), and motivating (1 time). However, some students (15 out of 32) had negative feelings such as finding it hard (6 times), time-consuming (3 times), awkward (2 times), confused (2 times), uninterested (1 time), and shy (1 time). In short,

while some participants in the EG had a slightly negative experience while providing OPFB, the majority found it to be a source of positive emotions.

Table 3

Scores evaluation of 03 writing assignments of two groups

| Criteria | Group | N | Mean | SD | Mean Difference | t | df | p | Significant difference |
|-----------------|-------|----|-------|-------|-----------------|-------|----|------|------------------------|
| Content 1 | EG | 31 | 13.23 | 3.77 | 1.77 | 1.99 | 60 | 0.05 | NO |
| | CG | 31 | 11.45 | 3.21 | | | | | |
| Grammar 1 | EG | 31 | 17.26 | 4.05 | 1.61 | 1.57 | 60 | 0.12 | NO |
| | CG | 31 | 15.65 | 4.03 | | | | | |
| Vocabulary 1 | EG | 31 | 17.10 | 3.82 | 2.42 | 3.19 | 60 | 0.00 | YES |
| | CG | 31 | 14.68 | 1.80 | | | | | |
| Organization 1 | EG | 31 | 16.94 | 3.80 | 1.61 | 1.82 | 60 | 0.07 | NO |
| | CG | 31 | 15.32 | 3.15 | | | | | |
| Overall score 1 | EG | 31 | 64.52 | 9.16 | 7.42 | 3.53 | 60 | 0.00 | YES |
| | CG | 31 | 57.10 | 7.28 | | | | | |
| Content 2 | EG | 31 | 13.39 | 3.74 | 1.94 | 1.94 | 60 | 0.06 | NO |
| | CG | 31 | 11.45 | 4.12 | | | | | |
| Grammar 2 | EG | 31 | 14.68 | 4.27 | 4.84 | 3.67 | 60 | 0.00 | YES |
| | CG | 31 | 9.84 | 5.98 | | | | | |
| Vocabulary 2 | EG | 31 | 16.29 | 3.41 | 1.77 | 1.84 | 60 | 0.07 | NO |
| | CG | 31 | 14.52 | 4.15 | | | | | |
| Organization 2 | EG | 31 | 14.35 | 4.23 | -0.81 | -0.77 | 60 | 0.44 | NO |
| | CG | 31 | 15.16 | 3.98 | | | | | |
| Overall score 2 | EG | 31 | 58.71 | 7.63 | 7.74 | 3.12 | 60 | 0.00 | YES |
| | CG | 31 | 50.97 | 11.51 | | | | | |
| Content 3 | EG | 31 | 13.06 | 3.34 | 1.45 | 1.56 | 60 | 0.12 | NO |
| | CG | 31 | 11.61 | 3.96 | | | | | |
| Grammar 3 | EG | 31 | 17.90 | 3.36 | 2.58 | 2.57 | 60 | 0.01 | YES |
| | CG | 31 | 15.32 | 4.46 | | | | | |
| Vocabulary 3 | EG | 31 | 19.19 | 2.27 | 4.35 | 4.61 | 60 | 0.00 | YES |
| | CG | 31 | 14.84 | 4.74 | | | | | |
| Organization 3 | EG | 31 | 13.87 | 2.80 | -0.65 | -0.88 | 60 | 0.38 | NO |
| | CG | 31 | 14.52 | 2.99 | | | | | |
| Overall score 3 | EG | 31 | 64.03 | 5.23 | 7.74 | 3.77 | 60 | 0.00 | YES |
| | CG | 31 | 56.29 | 10.16 | | | | | |

Table 4

Positive attitudes toward peer feedback

| | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 |
|------------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| N | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| Mean | 3.06 | 3.25 | 3.22 | 3.00 | 3.06 | 3.13 | 3.22 | 2.97 | 3.13 | 3.03 | 3.06 | 3.34 |
| Median | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| SD | 0.76 | 0.62 | 0.61 | 0.67 | 0.67 | 0.55 | 0.61 | 0.74 | 0.71 | 0.54 | 0.67 | 0.55 |
| Strongly agree and agree (%) | 81.2 | 90.7 | 90.7 | 78.2 | 87.5 | 90.7 | 90.7 | 84.4 | 87.5 | 87.5 | 87.5 | 96.9 |
| Strongly disagree and disagree (%) | 18.8 | 9.3 | 9.3 | 21.8 | 12.5 | 9.3 | 9.3 | 15.6 | 12.5 | 12.5 | 12.5 | 3.1 |

- Note: Q1. Peer feedback is helpful in improving the quality of my written work.
 Q2. Peer feedback makes me understand more about the teacher’s requirement for written work.
 Q3. Providing feedback to others can improve my skills in assessing my own written work.
 Q4. Peer feedback activities motivate me to learn to write better.
 Q5. Peer feedback activities increase the interaction between my teacher and me.
 Q6. Peer feedback helps me develop a sense of participation in my writing class.
 Q7. Peer feedback activities increase the interaction between my classmates and me.
 Q8. I think using peer feedback is a useful method for providing feedback to students.
 Q9. Peer feedback activities help me understand what other classmates think.
 Q10. Having criteria for peer feedback helps me to construct meaningful feedback.
 Q11. Students should participate in the development of criteria for peer feedback activities.
 Q12. There should be a sample essay and sample feedback given to help with the peer feedback process.

Table 5

Positive attitudes toward online peer feedback

| | Q13 | Q14 | Q15 | Q16 | Q17 |
|------------------------------------|------|------|------|------|------|
| N | 32 | 32 | 32 | 32 | 32 |
| Mean | 2.8 | 2.9 | 2.9 | 2.9 | 2.8 |
| Median | 3 | 3 | 3 | 3 | 3 |
| SD | 0.83 | 0.76 | 0.64 | 0,83 | 0.79 |
| Strongly agree and agree (%) | 71.9 | 75 | 75 | 71.9 | 68,7 |
| Strongly disagree and disagree (%) | 28.1 | 25 | 25 | 28.1 | 31.3 |

- Note: Q13. Online peer feedback activities can be time-saving.
 Q14. Online peer feedback activities can increase interaction among classmates.
 Q15. Online peer feedback activities can increase the interaction between the teacher and students.
 Q16. Online peer feedback activities are a fair method when used to provide feedback to students.
 Q17. The aspect of asynchronism in online peer feedback activities enables me to provide more critical feedback.

Table 6

Negative attitudes toward peer feedback and online peer feedback

| | Q18 | Q19 |
|------------------------------------|------------|------------|
| N | 32 | 32 |
| Mean | 2.31 | 2.59 |
| Median | 2 | 2 |
| Std. Deviation | 0.82 | 0.84 |
| trongly agree and agree (%) | 40.7 | 43.8 |
| Strongly disagree and disagree (%) | 59.3 | 56.2 |

Note: Q18. I think students should not be responsible for providing feedback on peers' written work.
Q19. Online peer feedback is time-consuming.

Table 7

Attitudes toward free selection and assigned-pair online peer feedback

| | Q20 | Q21 | Q22 |
|------------------------------------|------------|------------|------------|
| N | 32 | 32 | 32 |
| Mean | 2.59 | 2.38 | 2.91 |
| Median | 3 | 3 | 3 |
| Std. Deviation | 0.98 | 0.79 | 0.89 |
| Strongly agree and agree (%) | 56.3 | 56.3 | 68.7 |
| Strongly disagree and disagree (%) | 43.7 | 43.7 | 31.3 |

Note: Q20. I prefer providing a partner randomly by the teacher (Assigned-pair peer feedback) to choosing my own partner (free-selection peer feedback).

Q21. Assigned-pair peer feedback allows me to give more comments than free-selection peer feedback.

Q22. I learn more after receiving assigned-pair peer feedback.

The last part of the questionnaire concludes all responses to (5) 04 open-ended questions. Firstly, their answers for the question item "Q23. How did you feel when you had to assess your peer?" were counted as two contrasting ideas such as "feel positive" and "feel negative" (as illustrated in Figure 4). Most students (27 out of 32) reported positive feelings such as finding it useful (15 times), exciting (8 times), justice (3 times), and motivating (1 time). However, some students (15 out of 32) had negative feelings such as finding it hard (6 times), time-consuming (3 times), awkward (2 times), confused (2 times), uninterested (1 time), and shy (1 time). In short, while some participants in the EG had a slightly negative experience while providing OPFB, the majority found it to be a source of positive emotions.

The subsequent question, which is "Q24. Why do you think peer review has been placed in this course?" aims to examine their perspectives on the importance of PFB. The responses went beyond the researcher's expectations, as the majority of the respondents recognized the crucial role of PFB and provided their own insights. They acknowledged that PFB could enhance writing skills, construct more interaction, generate new ideas, enable the identification and correction of mistakes, and ultimately save time.

In response to “Q25. Do you have any concerns regarding the use of online peer feedback?”, seven students suggested revising the feedback questions in the coursebook worksheet to allow more feedback on grammar and other errors since the current questions restricted their creativity in using vocabulary outside the coursebook. Additionally, two of the students recommended receiving feedback from the teacher would be better for their writing.

The final item, “Q26. What is your general view regarding using assigned-pair peer feedback in an online Google classroom compared to normal online peer feedback?” reveals that most students (28 students) find assigned-pair feedback to be convenient, fair, interactive, interesting, and informative. However, a few students (02 students) shared that they were afraid to share feedback, and another two mentioned being anxious about potentially missing the submission deadline if they didn’t know their partner.

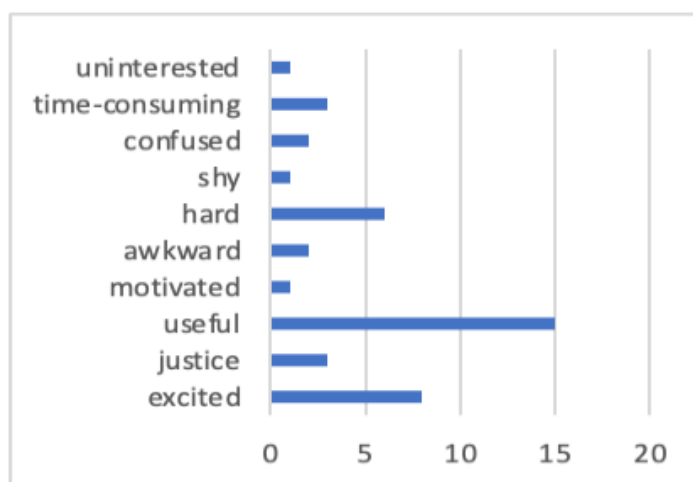


Figure 4. Students’ feelings when assessing their peers

4.2. Discussion

4.2.1. The effects of online peer feedback on English academic writing

This study aims to investigate whether applying OPFB via GCPR influenced learners’ academic writing performances, in terms of content, grammar, vocabulary, and organization; and also examined the participants’ attitudes towards OPFB. The findings revealed that OPFB significantly improved students’ English academic writing skills, particularly in grammar and vocabulary, as shown in Table 3. This outcome aligns with previous research on the benefits of OPFB (Huisman et al., 2018; Latifi et al., 2021; Shang, 2022; Yudi-Wahyudin, 2018) indicating that the more students engage in providing feedback to one another, the better their writing performance becomes. The Reviewers not only assist their peers in revising their writing, but they also improve their own writing skills by exchanging viewpoints and interacting with one another, as supported by previous studies (Choi, 2014; Hansen & Liu, 2005; Moradi & Karimpour, 2012; Yusof et al., 2012).

While the use of OPFB significantly improved the vocabulary and grammar points of the student’s writing, the content and organization did not improve as much as expected. This may be because they are first-year students with limited experience in academic writing. As noted by Shang (2022), OPFB is particularly beneficial for novice writers as it can help reduce grammatical errors and increase their use of vocabulary. Moreover, the current study’s finding is also consistent with Huisman et al.’s (2018) research, which showed that the content of their writing did not improve after revising the draft essay.

4.2.2. Students' attitudes towards online peer feedback

The study found that the participants had positive attitudes toward both PFB and OPFB, which is consistent with previous research (Bauer et al., 2009; Choi, 2014; Latifi et al., 2021; Li & Li, 2017; Moradi & Karimpour, 2012; Pham et al., 2020; Sukumaran & Dass, 2014). First of all, PFB was highly appreciated due to its huge benefits such as motivation, increased interaction, and improved work quality. However, the internet connection in the classroom was an obstacle, resulting in some students evaluating OPFB via GCPR as time-consuming. Choi (2014) and Sukumaran and Dass (2014) also revealed internet connection could interrupt the OPFB process. Despite this, this is still a minor problem that could be resolved easily. OPFB could enhance students' critical thinking, especially when it was assigned-pair thanks to its convenience, fairness, interaction, interest, and knowledge. This finding is different from the previous research and contributes to the related literature (Pham & Nguyen, 2021; Sukumaran & Dass, 2014; Yudi-Wahyudin, 2018).

The students' responses indicated that they recognized the potential for OPFB to help them become self-directed learners by allowing them to identify and correct their mistakes. This could contribute to previous studies, such as Pham and Nguyen's (2014), Yusof et al.'s (2012), and Choi's (2014) findings. They also appreciated the opportunities for interaction that OPFB provided, both synchronously and asynchronously, through GCPR. However, some students expressed concern about not knowing their peer partner, which led to worries and time wastage while waiting for feedback. This present finding could contribute to the dearth of findings from several researchers (Choi, 2014; Sukumaran & Dass, 2014). They also suggested two crucial ways to improve the application of OPFB. First, PFB requirements should be expanded to allow students to provide more feedback beyond simply answering given questions. Second, students should be informed in advance about who will be responsible for providing feedback on their assignments, so that they can easily reach out to them for timely feedback.

Eventually, the study revealed that the participants strongly valued the convenience and usefulness of the Google Classroom Peer Review 1.0.2 extension. This result is significant as it supports the recommendation of GCPR for future use in enhancing students' writing and reducing writing process obstacles. It is noteworthy that this finding differs from previous studies as it identifies a cost-effective and more accessible tool for improving English academic writing, which could relieve the financial burden on the government's education budget.

5. Conclusion

The primary objective of this study was to examine the impact of OPFB via GCPR on students' English academic writing and to assess their attitudes toward this approach. The detailed analysis of data and discussion of results above have pointed out several advantages of OPFB through GCPR application. The first research finding has demonstrated that OPFB could help improve students' academic writing performance, especially vocabulary, and grammar, which contributes impressively to further understanding of applying online PFB tools in academic writing. Furthermore, the study shows that students generally have positive attitudes towards OPFB application via GCPR. The students highly appreciated the tool due to its convenience and efficiency in their writing performance. Thanks to the convenience of GCPR, OPFB could help to enhance students' motivation in English academic learning, interactions, critical thinking, and self-directed learning.

The results of this study provide significant contributions to the existing literature on teaching and learning academic writing in English, particularly in the context of Vietnamese

tertiary education. This study stands out as one of the pioneering works that investigate the impact of OPFB utilizing the GCPR application. Moreover, the study offers empirical evidence that supports the assertion that using OPFB offers numerous benefits to learners.

The results of this study provide important insights into the positive effects of OPFB on the English academic writing performance of first-year mainstream students. Based on these findings, several implications for administrators, teachers, and students can be drawn. Firstly, administrators are recommended to make OPFB via GCPR a formal requirement in writing courses, thereby providing students with cost-free opportunities to improve their writing skills. Secondly, teachers could assign experienced students to provide PFB to inexperienced students to enhance the content and organization of their writing. Additionally, teachers should adjust the PFB questions and requirements to allow students to be creative in their writing. Assigned-pair PFB could be used to ensure fairness in assessment, but students should be informed of their peers' contact information to avoid anxiety about meeting submission deadlines. Eventually, students studying in pairs or groups could take advantage of OPFB through GCPR as a tool to improve their English academic writing conveniently and effortlessly.

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References

- Al-Badi, I. A. (2015). Academic writing difficulties of ESL learners. *In The 2015 WEI International Academic Conference Proceedings*, 1(1), 65-78.
- Al-Fadda, H. (2012). Difficulties in academic writing: From the perspective of King Saud University postgraduate students. *English Language Teaching*, 5(3), 123-130.
- Ballantyne, R., Hughes, K., & Mylonas, A. (2002). Developing procedures for implementing peer assessment in large classes using an action research process. *Assessment & Evaluation in Higher Education*, 27(5), 427-441.
- Bauer, C., Figl, K., Derntl, M., Beran, P. P., & Kabicher, S. (2009, July). The student view on online peer reviews. *In Proceedings of the 14th annual ACM SIGCSE conference on Innovation and technology in computer science education (pp. 26-30)*. New York, NY: Association for Computing Machinery.
- Choi, J. (2014). Online peer discourse in a writing classroom. *International Journal of Teaching and Learning in Higher Education*, 26(2), 217-231.
- Fraenkel, J. R., & Wallen, N. E. (2009). *How to design and evaluate research in education*. New York, NY: McGraw-Hill.
- Guiller, J., Durndell, A., & Ross, A. (2008). Peer interaction and critical thinking: Face-to-face or online discussion? *Learning and Instruction*, 18(2), 187-200.
- Hansen, J. G., & Liu, J. (2005). Guiding principles for effective peer response. *ELT Journal*, 59(1), 31-38.
- Huisman, B., Saab, N., Van Driel, J., & Van Den Broek, P. (2018). Peer feedback on academic writing: Undergraduate students' peer feedback role, peer feedback perceptions and essay performance. *Assessment & Evaluation in Higher Education*, 43(6), 955-968.

- Latifi, S., Noroozi, O., Hatami, J., & Biemans, H. J. (2021). How does online peer feedback improve argumentative essay writing and learning? *Innovations in Education and Teaching International*, 58(2), 195-206.
- Li, M., & Li, J. (2017). Online peer review using Turnitin in first-year writing classes. *Computers and Composition*, 46(3), 21-38. doi:10.1016/j.compcom.2017.09.001
- Liang, M. Y. (2010). Using synchronous online peer response groups in EFL writing: Revision-related discourse. *Language Learning & Technology*, 14(1), 45-64.
- Liu, J., & Edwards, J. G. H. (2018). *Peer response in second language writing classrooms*. Ann Arbor, MI: University of Michigan Press.
- Milton, J. (2004). From parrots to puppet masters: Fostering creative and authentic language use with online tools. In B. S. Holmberg (Ed.), *Distance education and languages: Evolution and change*. Clevedon, UK: Multilingual Matters.
- Moradi, M. R., & Karimpour, Z. (2012). The effect of online peer feedback on the academic writing ability of Iranian EFL learners. *International Education Studies*, 5(2), 113-117.
- Muijs, D. (2004). *Doing quantitative research in education with SPSS*. London, UK: Sage Publications.
- Norman, D. A., & Spohrer, J. C. (1996). Learner-centered education. *Communications of the ACM*, 39(4), 24-27.
- Noroozi, O., & Hatami, J. (2019). The effects of online peer feedback and epistemic beliefs on students' argumentation-based learning. *Innovations in Education and Teaching International*, 56(5), 548-557.
- Pallant, J. (2007). *SPSS Survival manual a step by step guide to data analysis using SPSS for Windows* (3rd ed.). Maidenhead, UK: Open University Press.
- Pham, H. V. P., & Nguyen, A. T. H. (2021, March). A study of facebook-based peer comments on L2 writing. *The 17th international conference of the Asia Association of Computer-assisted Language Learning (AsiaCALL 2021)*, 533(14), 114-120.
- Pham, H. V. P., & Nguyen, D. T. T. (2014). The effectiveness of peer feedback on graduate academic writing at Ho Chi Minh City Open University. *Ho Chi Minh City Open University Journal of Science-Social Sciences*, 4(1), 11-24.
- Pham, T. N., Lin, M., Vu, T. Q., & Bui, L. T. P. (2020). Electronic peer feedback, EFL academic writing and reflective thinking: Evidence from a Confucian context. *Sage Open*, 10(1), 1-20.
- Shang, H. F. (2022). Exploring online peer feedback and automated corrective feedback on EFL writing performance. *Interactive Learning Environments*, 30(1), 4-16.
- Singh, M. K. M., & Kaur, M. (2016). An emic perspective on academic writing difficulties among international graduate students in Malaysia. *GEMA Online® Journal of Language Studies*, 16(3), 83-97.
- Snow, A. (2015). The many challenges of academic writing for ESL. In M. F. Gramer (Ed.), *Q:skills for Success Reading and Writing 3*. Oxford, UK: Oxford University Press.
- Sukumaran, K., & Dass, R. (2014). Students' perspectives on the use of peer feedback in an English as a second language writing class. *Journal for Interdisciplinary Research in Education (JIRE)*, 4(1), 1-14.

- Trautmann, N. M., Carlsen, W. G., Eick, C. J., Gardner, F. E., Jr., Kenyon, L., Moscovici, H., ... West, S. (2003, May). Online peer review learning science as it's practiced. *Journal of College Science Teaching*, 32(7), 443-447.
- Wahyudin, A. Y. (2018). The impact of online peer feedback on EFL students writing at a tertiary level. *BAHTERA: Jurnal Pendidikan Bahasa Dan Sastra*, 17(1), 1-10.
- Yakhontova, T. V. (2003). *English academic writing for students and researchers*. Retrieved April 10, 2022, from https://jetiq.vntu.edu.ua/fm/fdb/1080/Yakhontova_textbook.pdf
- Yu, S. (2021). Giving genre-based peer feedback in academic writing: Sources of knowledge and skills, difficulties and challenges. *Assessment & Evaluation in Higher Education*, 46(1), 36-53.
- Yudi-Wahyudin, A. (2018). The impact of online peer feedback on EFL students writing at tertiary level. *BAHTERA: Jurnal Pendidikan Bahasa Dan Sastra*, 17(1), 1-10. doi:10.21009/BAHTERA.171.1
- Yusof, J., Ab Manan, N. 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.

